



October 22, 2024

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

RE: Deferral Request  
Incident ID: nAPP2415754364  
Carbon Valley 25 Fed #007H  
Project ID: 20130416-murchison-carbonValley25\_7H

NMOCD:

McNabb Partners submits this deferral request on behalf of 3R Operating, LLC. This document describes site assessment, soil sample analysis and deferral request for Carbon Valley 25 Fed #007H (Site)

On June 05, 2024; NMOCD notified the operator at the time, Murchison Oil and Gas, to submit a Notification of Release (NOR) for the subject legacy release first identified on an April 16, 2013, Google Earth aerial image. The cause of release is unknown. Prior to all site assessment activities, all impacted gravel was hand-shoveled and hauled off to the approved disposal facility. The release consisted of 5.7 barrels (bbls) of crude oil. The attached volume calculation is based on actual gravel volume removed and hauled to R360 for proper disposal.

## 1. Characterization

The following sections address items as described in 19.15.29.11.A, paragraphs 1- 4. Please refer to the characterization table below for additional setback criteria and Plats 2-9 for verification.

### 1.1. Site Map

The horizontal extent of the release was determined by the extent of hydrocarbon impacted gravel removed within the tank battery containment. Plate 1 shows the release extent relative to Carbon Valley 25 Federal Com #007H site pad. The suspected source of the release is located at 32.898370, -104.239685 (Lat, Long; NAD83).

Carbon Valley 25 Fed #007H  
nAPP2415754364

Site Characterization	
What is the shallowest depth to groundwater (ft bgs) <b>Plate 2</b>	<50 ft bgs (Unknown)
What measure was used to determine this?	N/A
Did this release impact ground or surface water?	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
<ul style="list-style-type: none"> <li>A continuously flowing watercourse or any other significant watercourse. <b>Plate 4</b></li> </ul>	3,100 ft E (Wetland)
<ul style="list-style-type: none"> <li>Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark). <b>Plate 4</b></li> </ul>	>0.5 mile
<ul style="list-style-type: none"> <li>An occupied permanent residence, school, hospital, institution or church. <b>Plate 5</b></li> </ul>	>0.5 mile
<ul style="list-style-type: none"> <li>A spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes. <b>Plate 3</b></li> </ul>	>1 mile SE (Livestock watering well)
<ul style="list-style-type: none"> <li>Any other fresh water well or spring. <b>Plate 3</b></li> </ul>	>1 mile ft SE (Livestock watering well)
<ul style="list-style-type: none"> <li>Incorporated municipal boundaries or a defined municipal fresh water well field. <b>Plate 3</b></li> </ul>	>0.5 mile
<ul style="list-style-type: none"> <li>A wetland. <b>Plate 6</b></li> </ul>	3,100 ft E
<ul style="list-style-type: none"> <li>A subsurface mine. <b>Plate 7</b></li> </ul>	>0.5 mile
<ul style="list-style-type: none"> <li>A (non-karst) unstable area.</li> </ul>	Within High Karst
<ul style="list-style-type: none"> <li>Categorize the risk of this well/site being in a karst geology. <b>Plate 8</b></li> </ul>	High Karst
<ul style="list-style-type: none"> <li>A 100-year floodplain. <b>Plate 9</b></li> </ul>	2,800 ft SE
<ul style="list-style-type: none"> <li>Did the release impact areas not on an exploration, development, production, or storage site?</li> </ul>	No



## **1.2. Depth to Ground Water**

Based on a review of the USGS and NMOSE groundwater databases, there are no known groundwater sources within ½-mile of the Site. The nearest identified boring RA 12455 POD1 is located more than 1 mile southeast of the release extent and was drilled in 2016 to 200 ft below ground surface. Groundwater was first encountered at 55 feet below ground surface. The well is used for livestock watering purposes. The boring is identified on Plate 2 according to the OSE File Number (RA-12455 (POD1)). The driller log is located in Appendix B.

## **1.3. Wellhead Protection Area**

Plate 3 shows that the release extent is:

- Not within incorporated municipal boundaries or within a defined municipal fresh water well field.
- Not within ½-mile of any documented water sources (wells and springs).
- Not 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.
- Not within 1000 feet of any other freshwater well or spring.

## **1.4. Distance to Nearest Significant Water Course**

Plate 4 shows that the release extent is:

- Within ½ mile of a significant water course (lake/pond).
- Not within 300 feet of a continuously flowing watercourse or any other significant watercourse.
- Not within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

Plate 6 shows that the release extent is:

- Within a ½ mile of a significant water course (freshwater emergent wetland).
- Not within 300 feet of a continuously flowing watercourse or any other significant watercourse.

## **1.5. Soil/Waste Characteristics**

The USDA Natural Resources Conservation Service (NRCS) soil survey<sup>1</sup> describes the upper 5-feet of lithology as a mixture of Gypsum land-Cottonwood complex and Reeves-Gypsum land complex:

- Gypsum land-Cottonwood complex (57.3% of area)
  - Slope: 0 to 3 percent

---

<sup>1</sup> NRCS Field Guide and the NRCS web survey tool (<https://websoilsurvey.nrcs.usda.gov/app/>)

- Typical profile
  - ✓ H1 - 0 to 8 inches: loam
  - ✓ H2 - 8 to 60 inches: bedrock
- Reeves-Gypsum land complex (42.7% of area)
  - Slope: 0 to 3 percent
  - Typical profile
    - ✓ H1 - 0 to 8 inches: loam
    - ✓ H2 - 8 to 32 inches: sandy loam
    - ✓ H2 - 32 to 60 inches: gypsiferous material

The lithology as described by the NRCS is consistent with professional observations during hand auger borehole activities during characterization sampling.

### 1.6. Initial Liner Inspection and Repairs

Prior to liner inspection, approximately 32 cubic yards of hydrocarbon impacted gravel was removed off-site for proper disposal. The gravel was removed by hand shoveling and broom sweeping.

On June 24<sup>th</sup>, 2024, McNabb Partners were on site to perform an initial liner inspection. Notifications of sampling and liner inspections are located in Appendix A. During the initial liner inspection, one (1) significant breach and several minorly stressed areas of the were identified within the lined containment was identified within the lined tank battery. Following the initial sampling event and liner inspection, the liner has been patched and repaired accordingly. Figures 1 through 4 show the condition of the liner during initial inspection and Figure 5 and 6 shows soil sample from the hole in the liner.

### 1.7. Closure Criteria

Closure Criteria as listed in Table 1 of 19.15.29 NMAC, where the Karst potential is high is undetermined, is defined as:

High Karst Potential	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)
NMOCD Closure Criteria	600	--	100	10	50

## 2. Site Assessment and Characterization Sampling

During the liner inspection on June 24<sup>th</sup>, 2024, one grab characterization sample (CS-01) was collected from the breach in the liner at depths of 0-2 ft and 2-4 below ground surface. All samples were analyzed for BTEX, Benzene, TPH and Chloride by Cardinal Laboratories. Analytical results indicated that all samples met closure criteria for the site.

On August 13<sup>th</sup>, 2024, McNabb Partners were on site to complete lateral delineation of the impacts directly outside of the lined tank battery. 4 characterization sample points (i.e., CS-02 through CS-05) were installed with GeoProbe. Grab soil samples were collected at depths of 0.5, 2 and 4 ft bgs. All samples were analyzed for BTEX, TPH and Chloride by Cardinal Laboratories. Analytical





results indicated that sample point CS-04 exceeded closure criteria at 0.5 ft bgs. All other samples met closure criteria for the site. To complete a lateral delineation around the lined tank battery, sample CS-04A was collected on September 19<sup>th</sup>, 2024, at the depth of 0.5 ft bgs. A sample was analyzed for BTEX, TPH and met closure criteria for the site.

Following a conversation with NMOCD, McNabb Partners returned to the site on September 19<sup>th</sup>, 2024, to cut a 5x5 ft hole for a composite sample in every area where liner has been patched and repaired. Composite samples were to be collected from 5x5 holes at the surface depth (0 ft bgs) under the liner and analyzed for TPH, BTEX and chloride by a certified laboratory. A composite sample CS-01 was collected around the hole in the liner (previously sampled as a grab CS-01 on 6/24/2024). During the site visit, it was noted that cutting multiple 5x5 ft holes in the liner would compromise its integrity, making it impossible to repair effectively after. Therefore, the liner would not be able to contain any future releases. After a conversation with NMOCD and Murchison Oil and Gas, the impacted areas of the liner were to be removed completely and sampled accordingly. The conditions of the soil under the liner are shown in Figures 7 through 11.

On October 4<sup>th</sup>, 2024, after all impacted areas of the liner have been cut out and removed, McNabb Partners collected 11 composite surface samples (i.e., FS-01 through FS-11), each representing an area no greater than 200 sq ft. All samples were analyzed for BTEX, TPH and chloride concentrations. Samples FS-01 and FS-08 through FS-11 exceeded closure criteria concentrations for TPH. On October 7<sup>th</sup>, 2024, 4 grab vertical delineation samples (i.e., G-1 through G-4) were collected in the areas with highest field chloride concentrations and most visually impacted areas showing saturated stains and/or salt precipitate crusting. Samples were collected with a geotechnical hand auger at depths ranging from 0.5 to 4 ft bgs. All samples were analyzed for BTEX, TPH and chloride concentrations. Complete vertical delineation was obtained for all sample points G-1 through G-4 at various depths.

### 3. Remediation Activities and Confirmation Sampling

Remediation activities and confirmation sampling event were conducted on October 8<sup>th</sup>, 2024. An impacted area east of the lined containment, represented by sample point CS-04 at 0.5 ft bgs, was excavated to a depth of 1 ft bgs (Figures 17 and 18).

The confirmation soil samples (5-point composite) were collected from areas not greater than 200 square feet (or less) from the excavation bases and sidewalls and analyzed for TPH, BTEX and chloride by a certified laboratory.

1 confirmation sample was collected from the base of the excavation (i.e., BS-01 at 1 ft bgs) and 4 confirmation samples were collected from the walls of the excavation (i.e., WS-01 through WS-04). Analytical results indicate that all confirmation samples met NMOCD closure criteria for chloride concentrations listed in Table I (19.15.29 NMAC).

- Plate 1 shows a site map of the entire Carbon Valley 25 Fed 7 well pad.
- Plates 2 through 9 provide complete site characterization information.
- Plates 10, 11 & 12 show all site characterization, surface composite and grab delineation samples respectively.

Carbon Valley 25 Fed #007H  
nAPP2415754364

- Plate 13 shows the final excavation extent and confirmation sample locations.
- Table A shows the summary of all laboratory data for each sample collected at Site
- All sampling notifications and communications are included in Appendix A.
- Well driller log is included in Appendix B.
- Laboratory Reports and Chains of Custodies for all samples are included in Appendix C.
- Figures 1 through 18 show the photolog of various activities on Site.

#### 4. Deferral Request

Deferral Requests Only	
Requesting a deferral of the remediation closure due date with approval of this submission?	Yes
Have the lateral and vertical extents of the contamination been fully delineated?	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction?	Yes
What is the remaining surface area (in sq ft) that will still need to be remediated if deferral is granted?	2050
What is the remaining volume (in cubic yards) what still needs to be remediated if the deferral is granted?	152
Enter the facility ID on which this deferral should be granted	
Enter the well API on which this deferral should be granted	30-015-38060
Contamination does not cause an imminent risk to human health, the environment or groundwater.	Yes

McNabb Partners on behalf of 3R Operating, LLC respectfully ask NMOCD for deferral of remediation around active production equipment due to multiple storage tanks and surface pipelines within the containment area. The contamination is fully delineated in sample points G-1 through G-4 at depths between 0.5 and 4 ft bgs and does not cause an imminent risk to human health, the environment, or ground water. The remaining affected soil is confined to the space directly beneath the lined containment and production equipment, where remediation would cause significant deconstruction of the facility.

The remaining soil impacts at the surface (i.e., sample points FS-01 through FS-11) and at the depth (i.e., sample points G-1 through G-4) will be addressed during the facility decommissioning phase in accordance with 19.15.29.12 and 19.15.29.13 NMAC, once the site is no longer being used for oil and gas operations. If the deferral request is approved, a new liner material will be installed and backfilled with a clean gravel layer on top, in the areas where liner has been previously removed. Upon NMOCD request, before the liner installation, a Micro-Blaze solution can be applied to the impacted areas to degrade hydrocarbons present in soil while the facility is still in use.

An action report detailing the final remediation and reclamation efforts and following confirmation sampling activities will be submitted to NMOCD upon the completion of the future work.

Carbon Valley 25 Fed #007H  
nAPP2415754364

Please contact me with any questions at 917-497-6890.

Sincerely,



Dimitry Nikanorov  
Project Manager  
McNabb Partners  
(917) 497-6890



Copy: Brad Grandstaff, 3R Operating, LLC  
Bureau of Land Management  
Murchison Oil and Gas



Carbon Valley 25 Fed #007H  
nAPP2415754364

Figure 1. Initial Liner Inspection.



Figure 2. Initial Liner Inspection.



Figure 3. Initial Liner Inspection.



Figure 4. Initial Liner Inspection.



Figure 5. Hole in the liner (CS-01)



Figure 6. Sampling activities (CS-01 – grab)



Carbon Valley 25 Fed #007H  
nAPP2415754364

Figure 7. Soil conditions after liner removal



Figure 8. Soil conditions after liner removal



Figure 9. Soil conditions after liner removal.

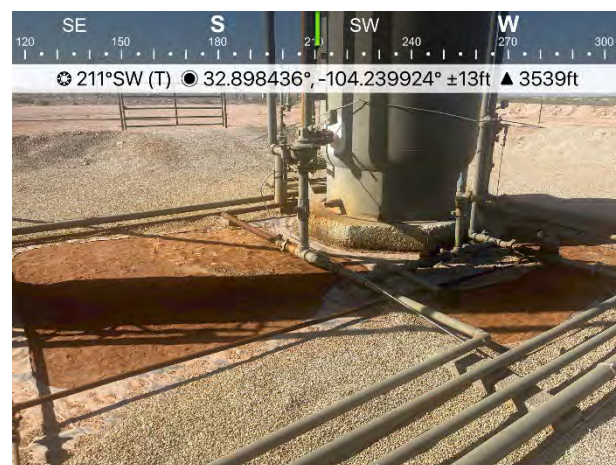


Figure 10. Soil conditions after liner removal.



Figure 11. Soil conditions after liner removal.



Figure 12. Surface composite sample (FS-03).



Carbon Valley 25 Fed #007H  
nAPP2415754364

Fig. 13. Surface composite sample (FS-01).



Fig. 14. Surface composite sample (FS-11).



Figure 15. Vertical Delineation Sampling (G-1).

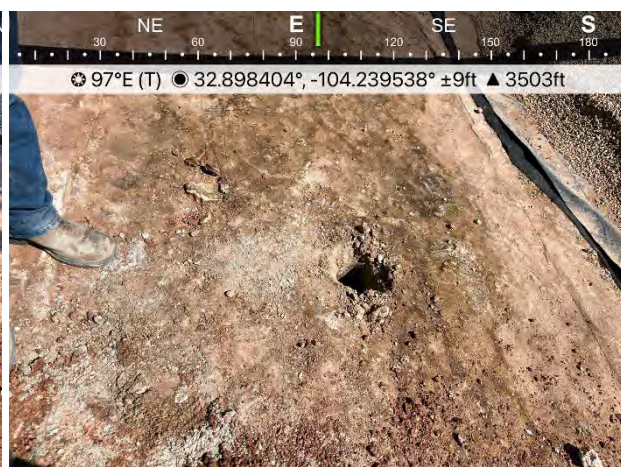


Figure 16. Vertical Delineation Sampling (G-3).



Figure 17. 1 ft Excavation.

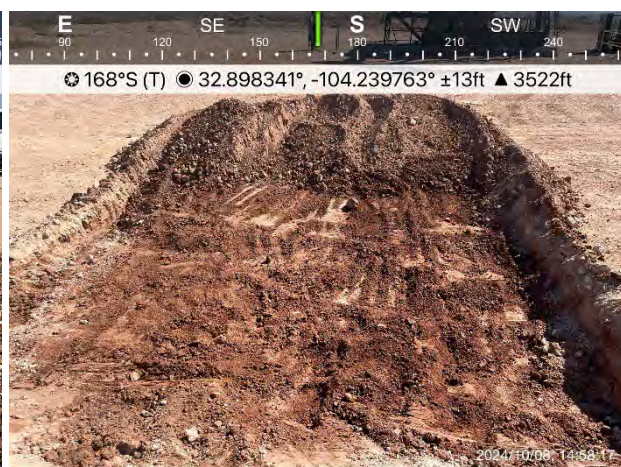


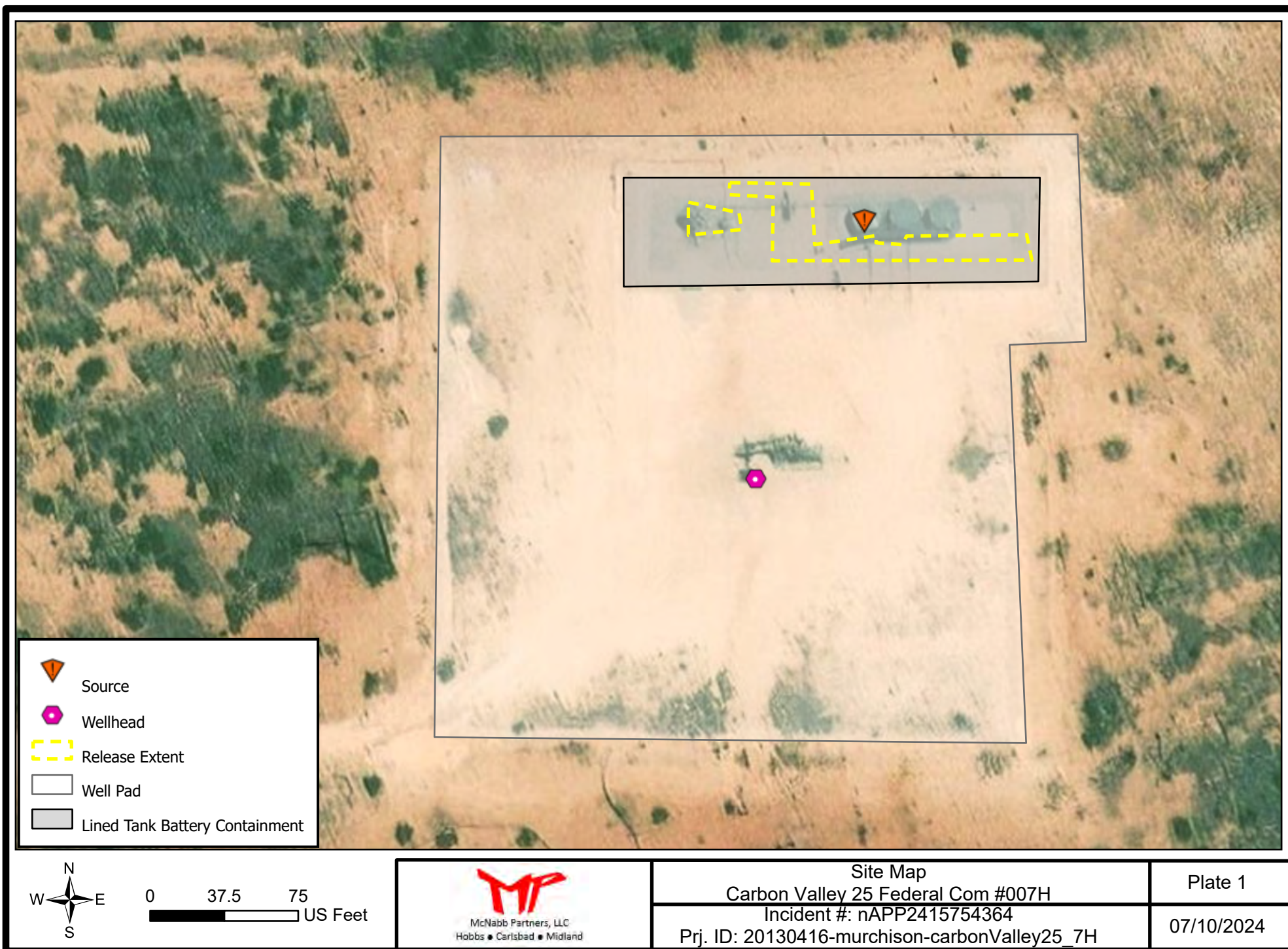
Figure 18. 1 ft Excavation.

# Plates

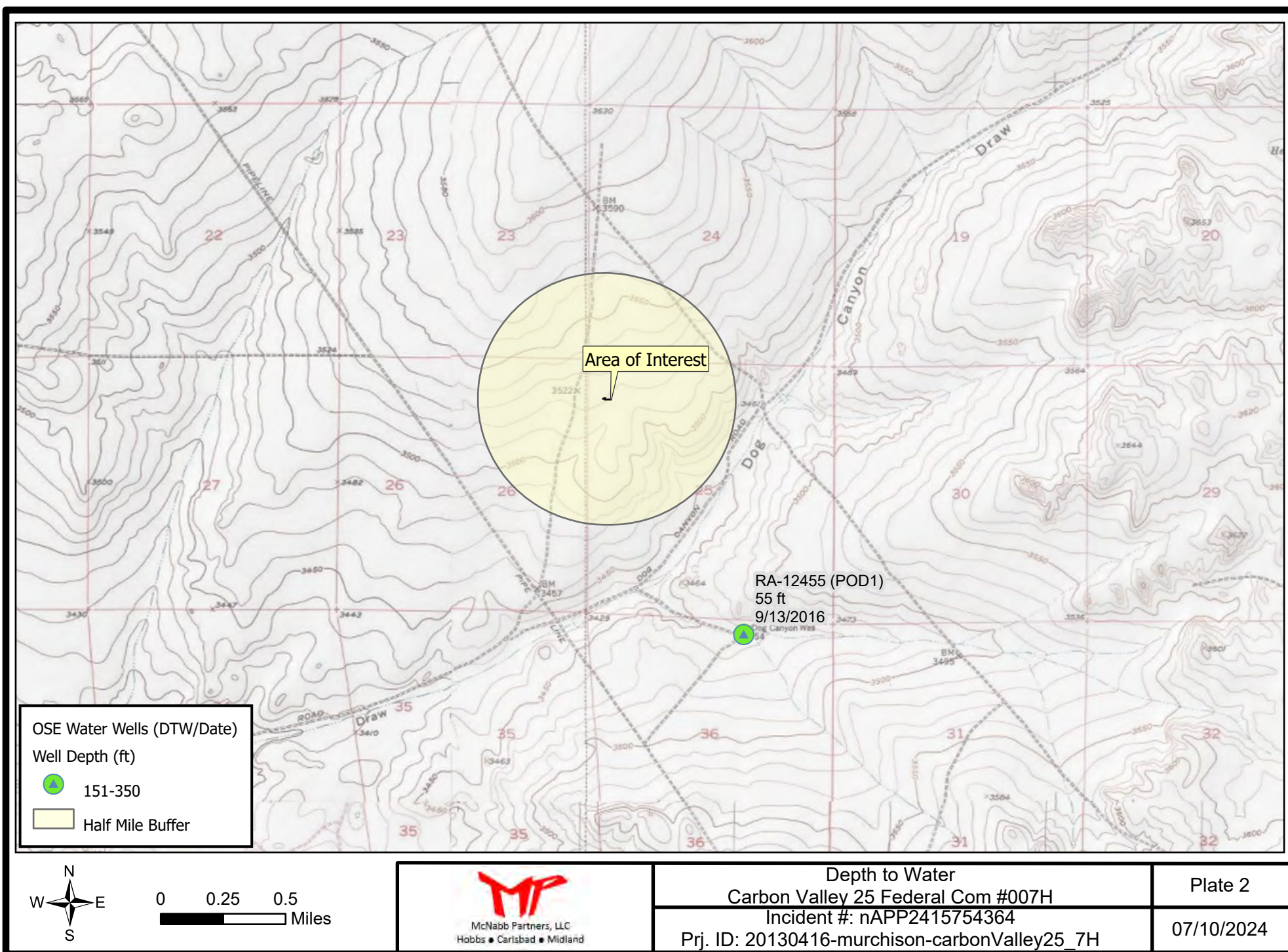


McNabb Partners, LLC  
Hobbs • Carlsbad • Midland

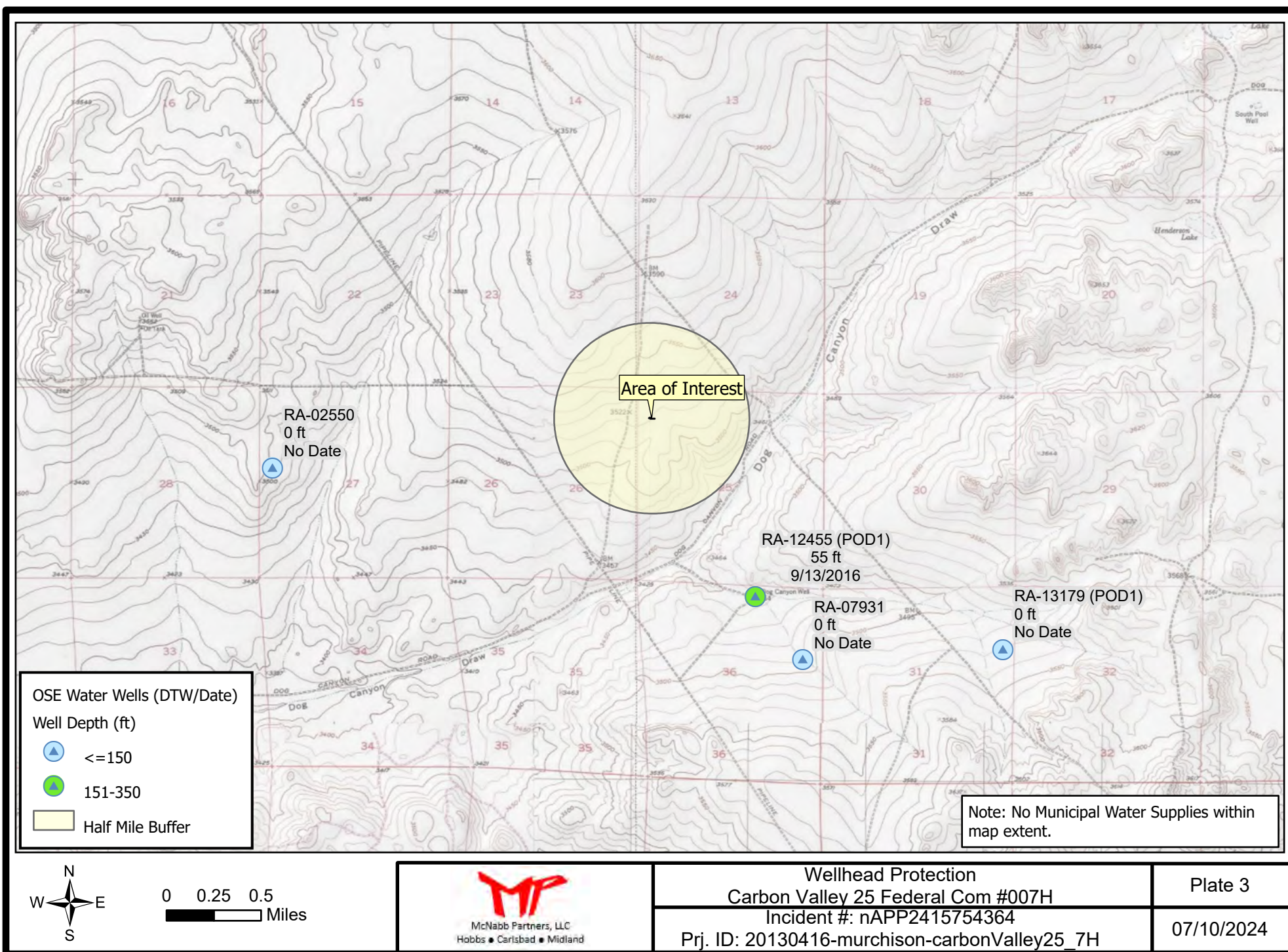




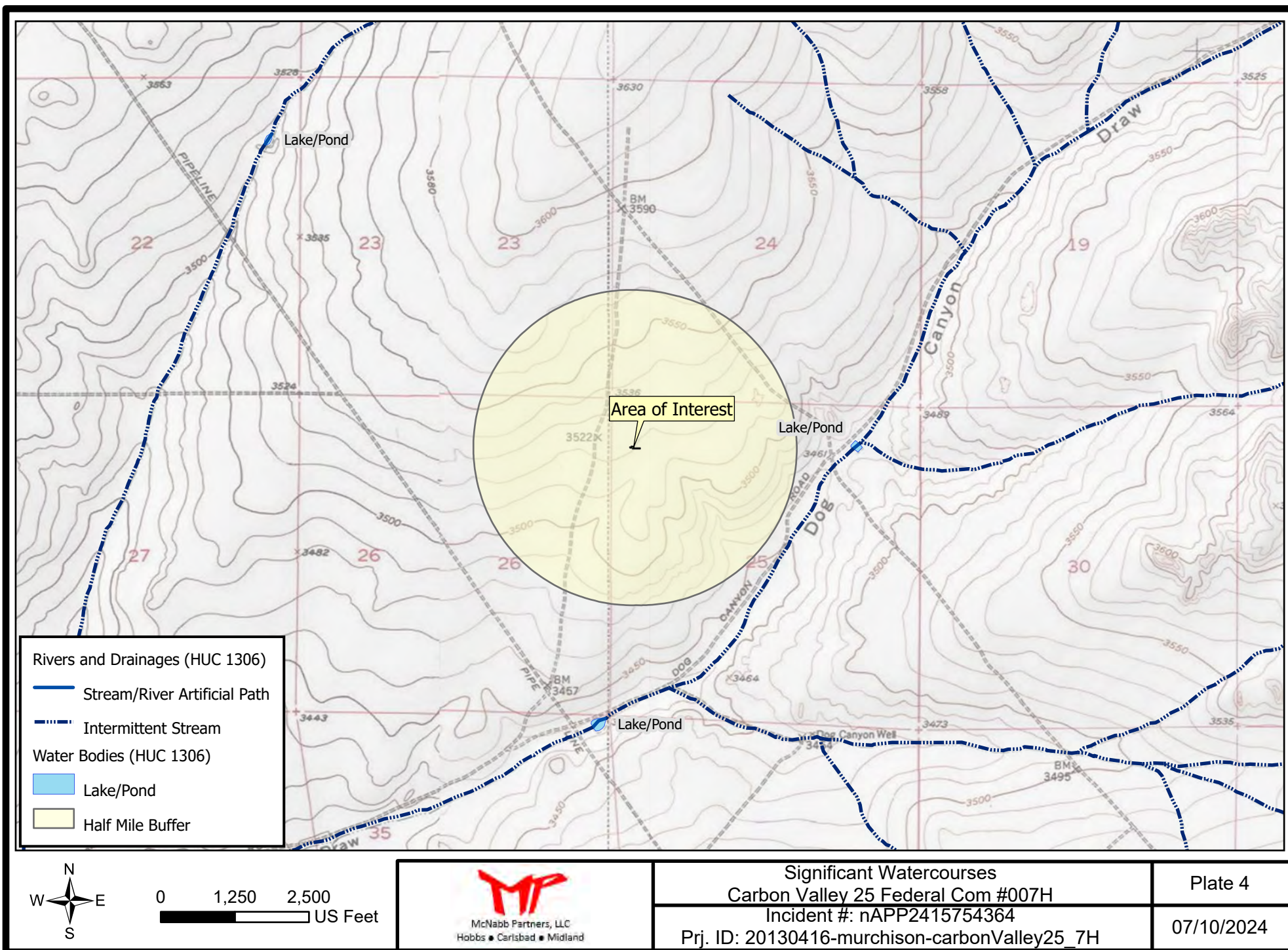




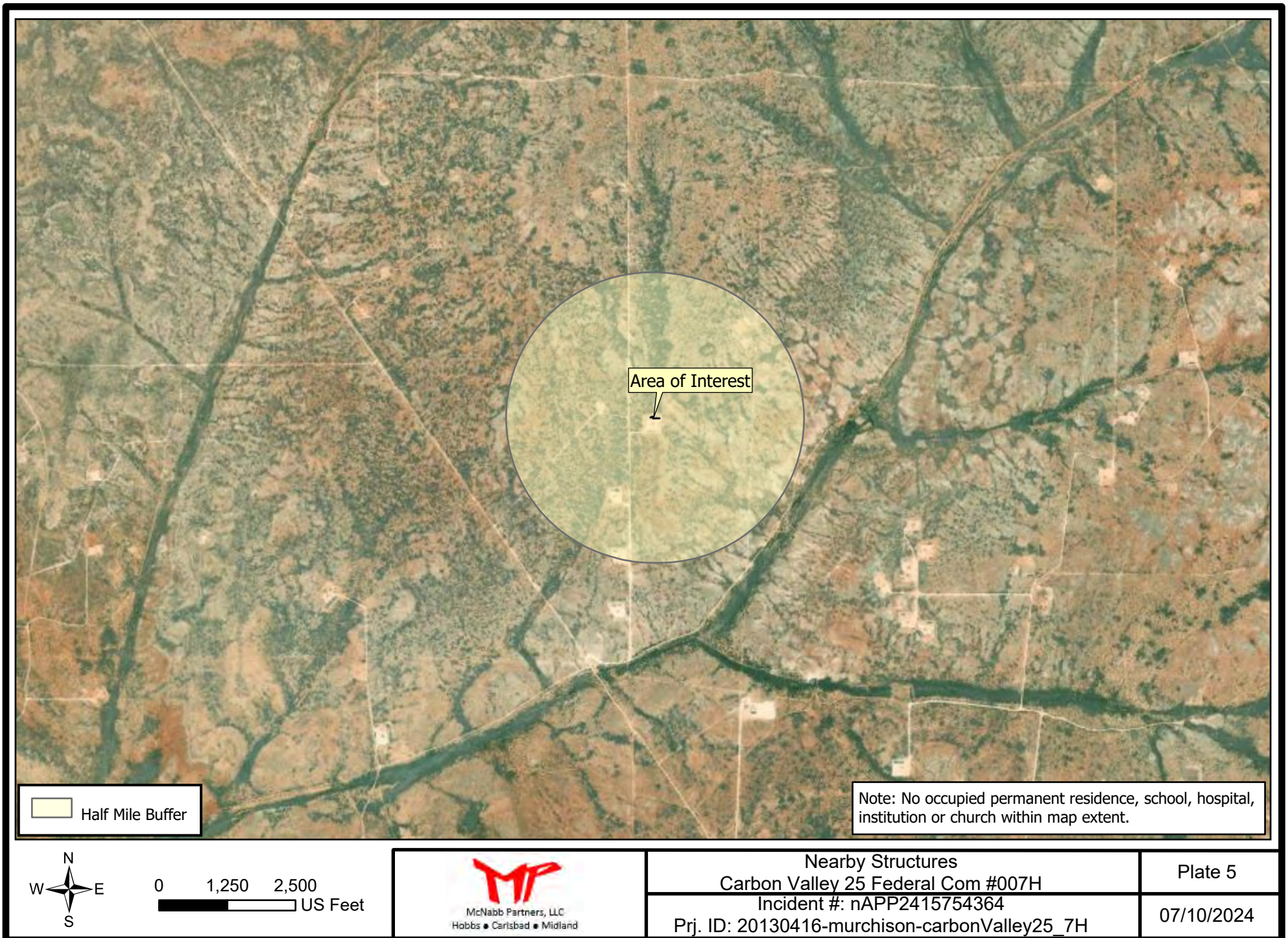




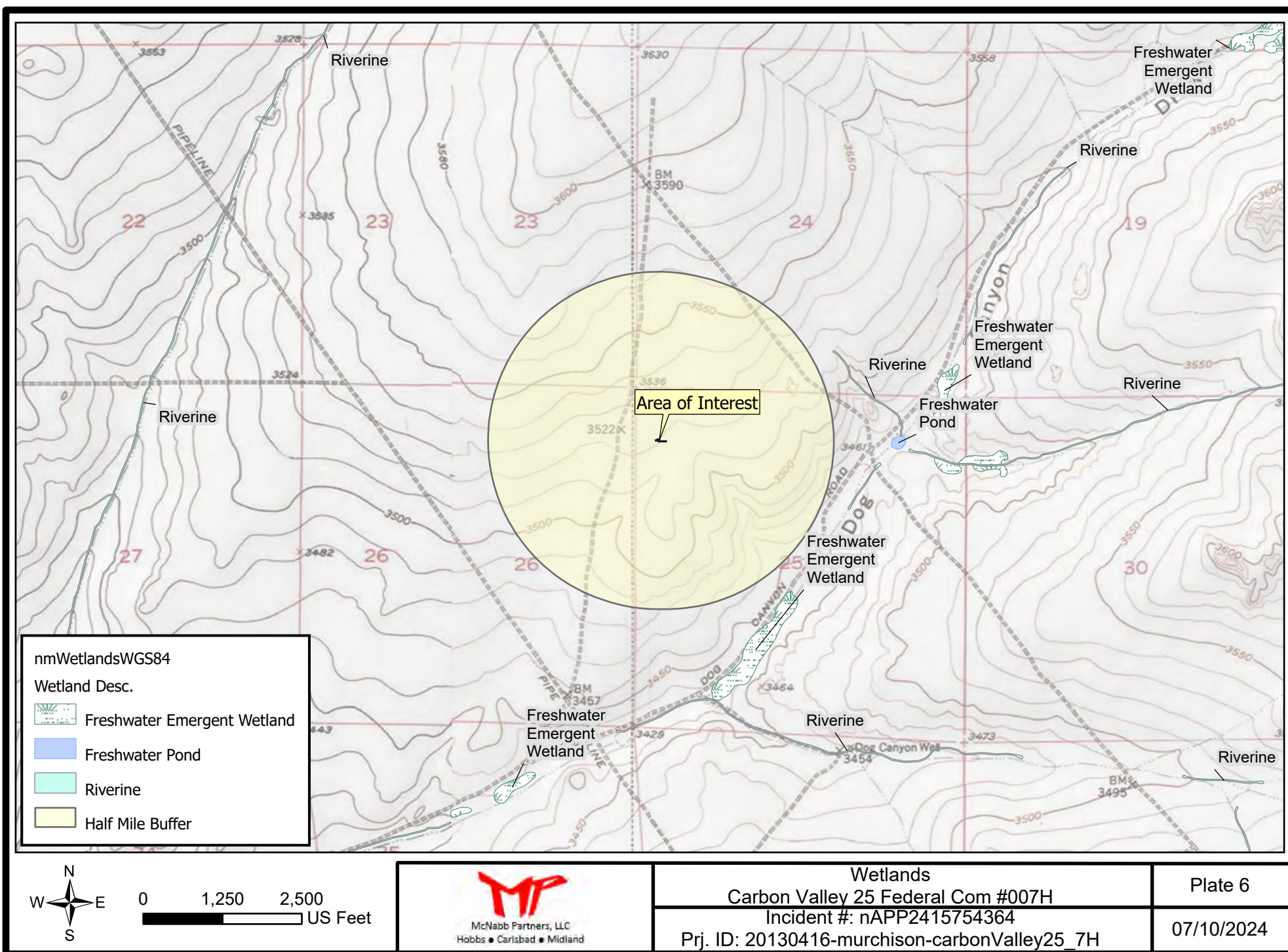




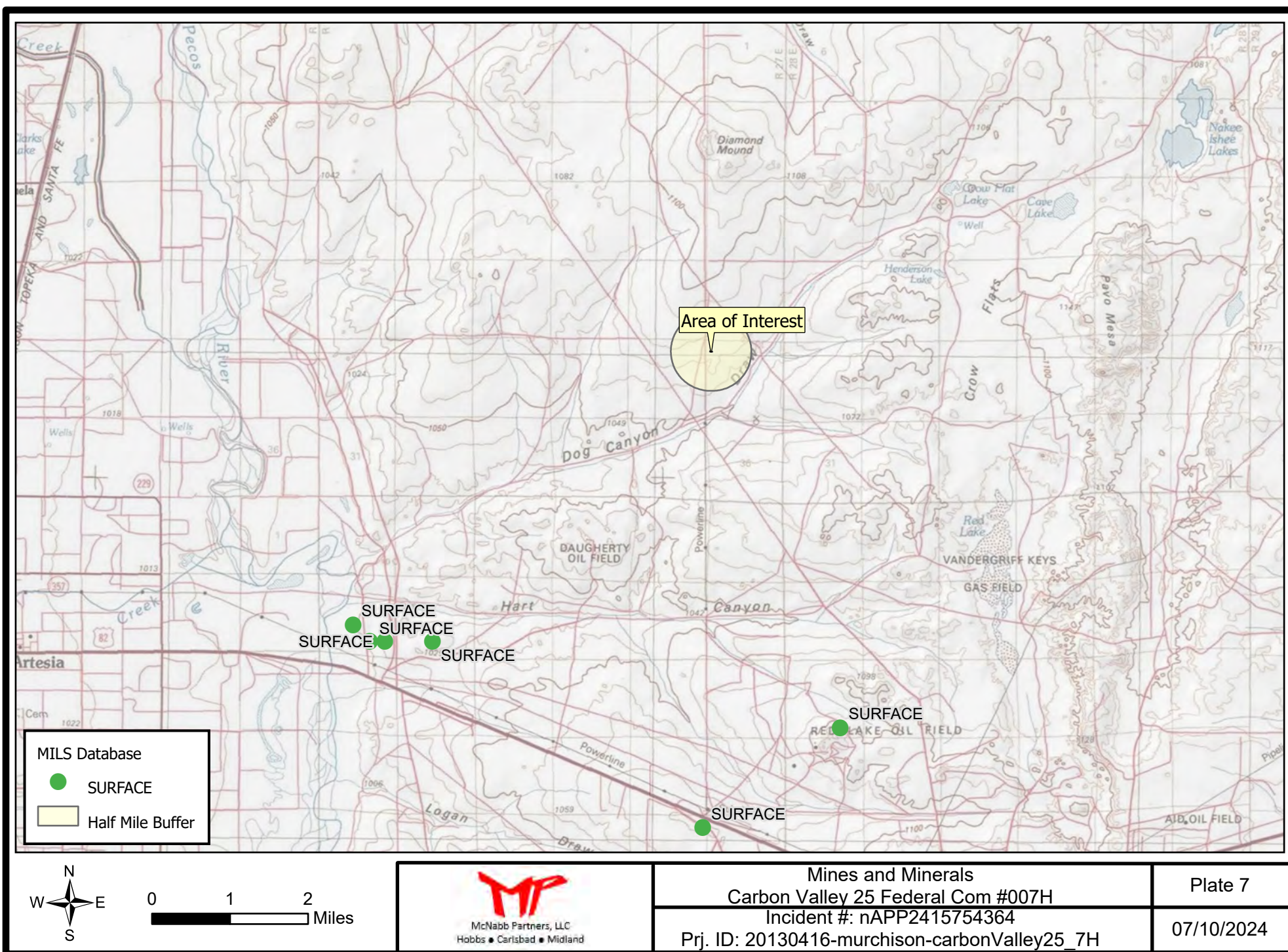




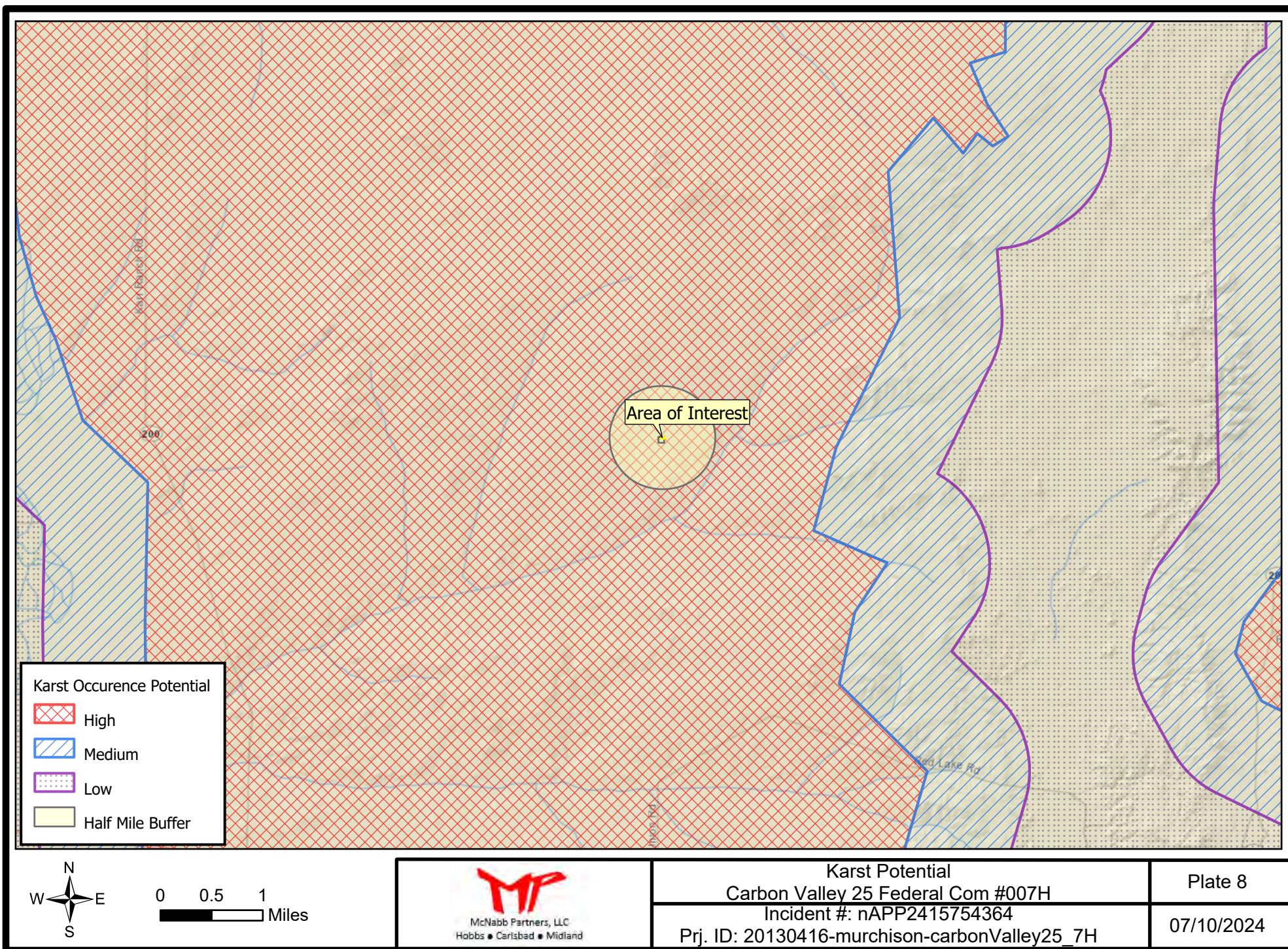




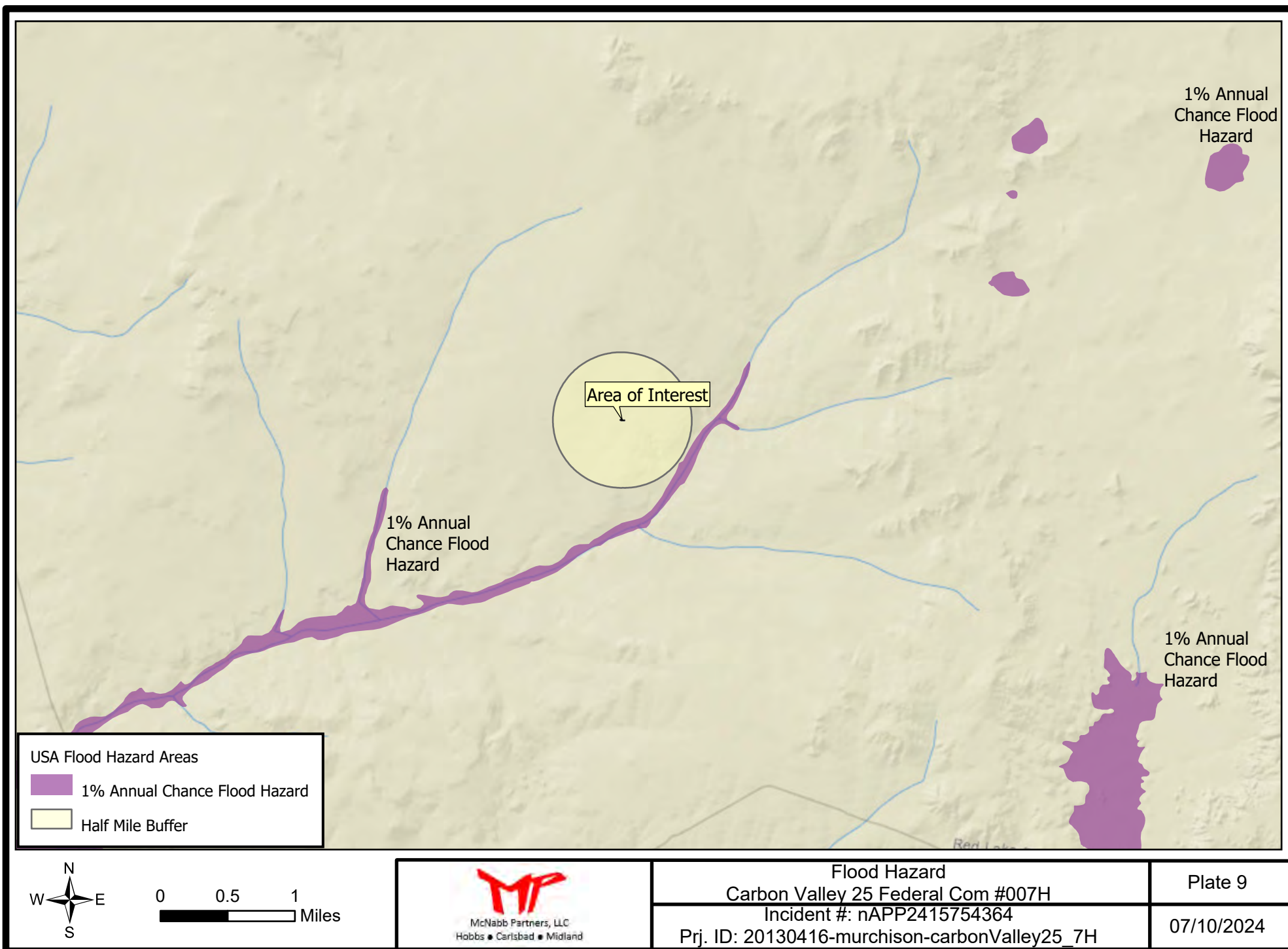






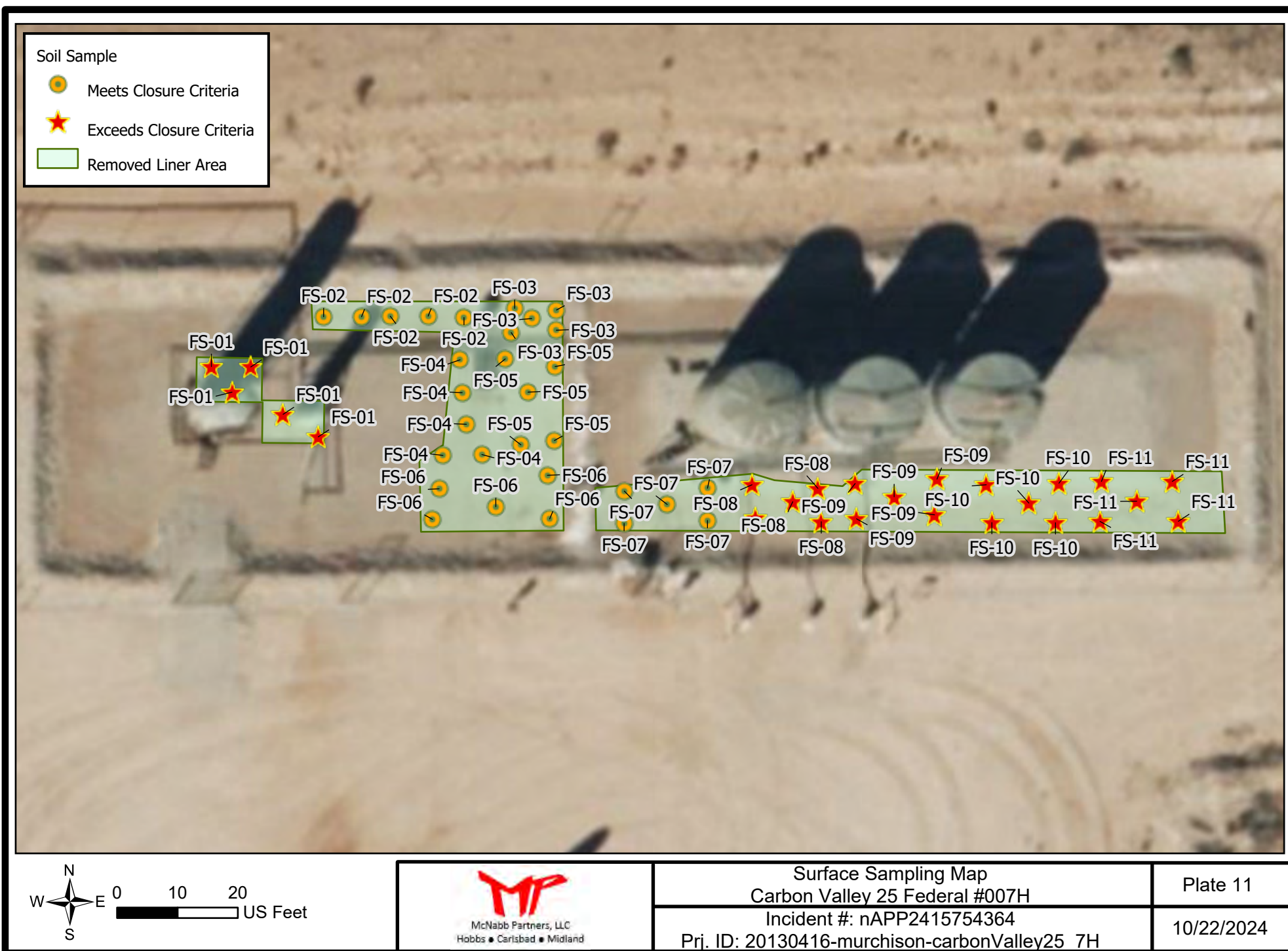






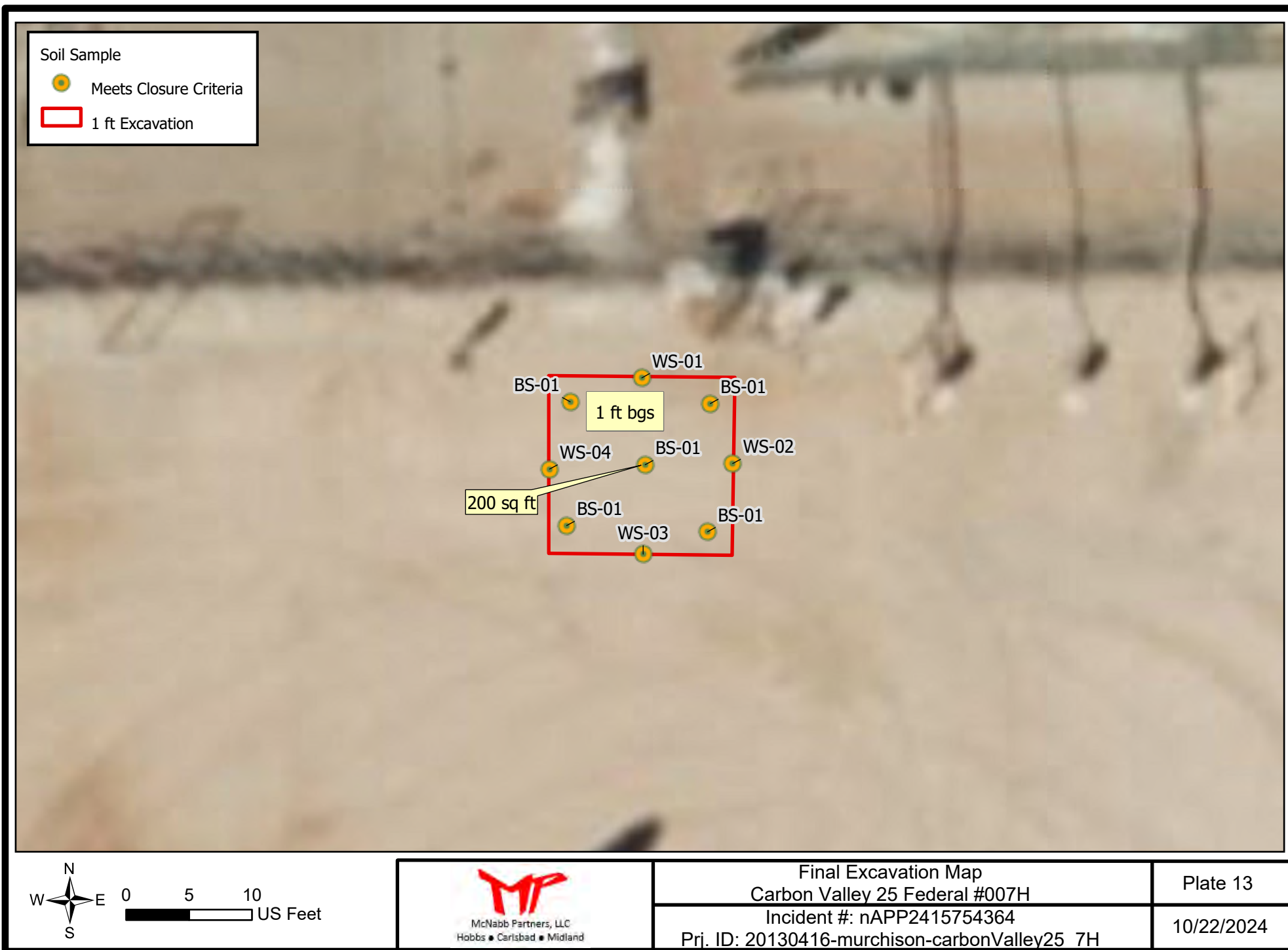












# Tables



McNabb Partners, LLC  
Hobbs • Carlsbad • Midland

Table A. Analytical Summary  
Carbon Valley 25 Fed #007

Sample ID	Date	Depth (Feet)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	GRO+DRO (mg/kg)	MRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Lab (Hall/Cardinal)	Lab #
NMOCD Closure Criteria			600	--	--	--	--	100	10	50		
Surface Composite Samples												
CS-01	9/19/2024	0	144	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H245736-01
FS-01	10/4/2024	0	208	<10.0	664	664	209	873	<0.050	<0.300	Cardinal	H246076-01
FS-02	10/4/2024	0	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-02
FS-03	10/4/2024	0	128	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-03
FS-04	10/4/2024	0	32	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-04
FS-05	10/4/2024	0	400	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-05
FS-06	10/4/2024	0	96	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-06
FS-07	10/4/2024	0	544	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246076-07
FS-08	10/4/2024	0	48	<10.0	183	183	137	320	<0.050	<0.300	Cardinal	H246076-08
FS-09	10/4/2024	0	80	<10.0	2760	2760	1550	4310	<0.050	<0.300	Cardinal	H246076-09
FS-10	10/4/2024	0	64	<10.0	736	736	314	1050	<0.050	<0.300	Cardinal	H246076-10
FS-11	10/4/2024	0	304	<10.0	2170	2170	886	3056	<0.050	<0.300	Cardinal	H246076-11
Vertical Delineation Grab Samples												
CS-01	6/24/2024	0-2	160	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H243779-01
CS-01	6/24/2024	2-4	336	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H243779-02
G-1	10/7/2024	0.5	160	<10.0	1910	1910	1100	3010	<0.050	<0.300	Cardinal	H246092-01
G-1	10/7/2024	2	576	<10.0	<10.0	<20.0	19.9	19.9	<0.050	<0.300	Cardinal	H246092-02
G-1	10/7/2024	4	384	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246092-03
G-2	10/7/2024	0.5	160	<10.0	2760	2760	1030	3790	<0.050	<0.300	Cardinal	H246092-04
G-2	10/7/2024	2	208	<10.0	39.1	39.1	30.6	69.7	<0.050	<0.300	Cardinal	H246092-05
G-2	10/7/2024	4	352	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246092-06
G-3	10/7/2024	0.5	48	<10.0	23.0	23.0	<10.0	23.0	<0.050	<0.300	Cardinal	H246092-07
G-3	10/7/2024	2	864	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246092-08
G-3	10/7/2024	4	96	<10.0	29.8	29.8	<10.0	29.8	<0.050	<0.300	Cardinal	H246092-09
G-4	10/7/2024	0.5	544	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246092-10
G-4	10/7/2024	2	112	<10.0	26.9	26.9	<10.0	26.9	<0.050	<0.300	Cardinal	H246092-11
G-4	10/7/2024	4	352	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246092-12
Horizontal Delineation Grab Samples												
CS-02	8/13/2024	0.5	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-01
CS-02	8/13/2024	2	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-02
CS-02	8/13/2024	4	32	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-03
CS-03	8/13/2024	0.5	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-04
CS-03	8/13/2024	2	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-05
CS-03	8/13/2024	4	48	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-06
CS-04	8/13/2024	0.5	1120	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-07
CS-04	8/13/2024	2	400	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-08
CS-04	8/13/2024	4	464	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-09
CS-04A	9/19/2024	0.5	240	<10.0	22.6	22.6	<10.0	22.6	<0.050	<0.300	Cardinal	H245736-02
CS-05	8/13/2024	0.5	80	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-10

Table A. Analytical Summary  
Carbon Valley 25 Fed #007

Sample ID	Date	Depth (Feet)	Chloride (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	GRO+DRO (mg/kg)	MRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Lab	Lab #
											(Hall/Cardinal)	
NMOCD Closure Criteria			600	--	--	--	--	100	10	50		
CS-05	8/13/2024	2	64	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-11
CS-05	8/13/2024	4	32	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H244990-12
Excavation Confirmation Samples												
BS-01 (base sample)	10/8/2024	1	256	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246130-01
WS-01 (side wall)	10/8/2024	0-1	176	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246130-02
WS-02 (side wall)	10/8/2024	0-1	576	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246130-03
WS-03 (side wall)	10/8/2024	0-1	336	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246130-04
WS-04 (side wall)	10/8/2024	0-1	80	<10.0	<10.0	<20.0	<10.0	<30.0	<0.050	<0.300	Cardinal	H246130-05
Legend:												
Sample exceeds NMOCD Closure Criteria												
Sample point has been excavated												

# Appendix A

## Communications



McNabb Partners, LLC  
Hobbs • Carlsbad • Midland



**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 355956

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 355956
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

**Location of Release Source**

Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

**Liner Inspection Event Information***Please answer all the questions in this group.*

What is the liner inspection surface area in square feet	10,000
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	06/24/2024
Time liner inspection will commence	02:00 PM
Please provide any information necessary for observers to liner inspection	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to liner inspection site	GPS coordinates: 32.8983695, -104.239828

**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 355956

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 355956
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	6/19/2024

**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

Action 355957

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 355957
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	10,000
What is the estimated number of samples that will be gathered	3
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/24/2024
Time sampling will commence	02:00 PM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.8983695, -104.239828

**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 355957

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 355957
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkernp	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.	6/19/2024

**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

Action 362371

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 362371
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

**Location of Release Source**

Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

**Liner Inspection Event Information***Please answer all the questions in this group.*

What is the liner inspection surface area in square feet	10,000
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	07/12/2024
Time liner inspection will commence	09:30 AM
Please provide any information necessary for observers to liner inspection	Please contact dimitry@mcnabbpartners.com if needed. 917-497~6890
Please provide any information necessary for navigation to liner inspection site	GPS coordinates: 32.8983695, -104.239828

**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 362371

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 362371
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	7/9/2024

**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

Action 372130

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 372130
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	800
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/13/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.8983695, -104.239828

**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 372130

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 372130
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	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.	8/8/2024



**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

Action 383787

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383787
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	2,000
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/19/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.8983695, -104.239828

**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 383787

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383787
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkernp	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.	9/16/2024

**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

Action 383782

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383782
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

**Location of Release Source**

Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

**Liner Inspection Event Information***Please answer all the questions in this group.*

What is the liner inspection surface area in square feet	2,000
Have all the impacted materials been removed from the liner	Yes
Liner inspection date pursuant to Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC	09/19/2024
Time liner inspection will commence	09:00 AM
Please provide any information necessary for observers to liner inspection	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to liner inspection site	GPS coordinates: 32.8983695, -104.239828

**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 383782

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383782
	Action Type: [NOTIFY] Notification Of Liner Inspection (C-141L)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.	9/16/2024

**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

Action 389295

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 389295
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	2,050
What is the estimated number of samples that will be gathered	11
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/04/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sampling plan was sent to Brittany.Hall@emnrd.nm.gov as requested. Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.898379, -104.239750

**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 389295

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 389295
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	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.	10/2/2024

**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

Action 389301

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 389301
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	2,050
What is the estimated number of samples that will be gathered	11
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/07/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Sampling plan was sent to Brittany.Hall@emnrd.nm.gov as requested. Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.898379, -104.239750



**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 389301

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 389301
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkernp	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.	10/2/2024

**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

Action 390097

**QUESTIONS**

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 390097
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Initial C-141 Approved
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	5
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/08/2024
Time sampling will commence	11:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS coordinates: 32.898267, -104.239746

**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 390097

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 390097
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
ccottrell	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.	10/4/2024



Outlook

---

**RE: [EXTERNAL] Carbon Valley Sampling Plans**

---

**From** Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>

**Date** Wed 10/2/2024 2:48 PM

**To** Cindy Cottrell <ccottrell@jdmii.com>

**Cc** Dmitry Nikanorov <Dimitry@mcnabbpartners.com>; Greg Boans <gboans@jdmii.com>; Luke Pumphrey <lpumphrey@jdmii.com>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>

Cindy,

The sampling plans for the Carbon Valley 25 Federal Com #007 (nAPP2415754364), Carbon Valley 31 Federal Com #001H (nAPP2415757870), and Carbon Valley 26 Federal Com #001H (nAPP2415757665) are approved with the following conditions:

- All aliquots of the 5-point composite samples must be collected from areas where the liner has been removed. Any aliquots collected from soil that is still underneath portions of the liner that remains in place will not be accepted nor will the composite samples that contain those aliquots will not be accepted.
- Site maps must illustrate where the aliquots for each 5-point composite sample were collected from.
- Horizontal delineation must be completed.
- Any deferral requests will be reviewed on a case-by-case basis and must meet the requirements of a deferral pursuant to 19.15.29.12 C.(2) NMAC.

Do you anticipate the sampling taking both days to complete? The sampling notifications were submitted for the same times for each site on 10/4 and 10/7.

Thank you,

**Brittany Hall** • Environmental Specialist

Environmental Bureau Projects Group

EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87110

505.517.5333 | [Brittany.Hall@emnrd.nm.gov](mailto:Brittany.Hall@emnrd.nm.gov)

<http://www.emnrd.nm.gov/ocd/>

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

---

**From:** Cindy Cottrell <ccottrell@jdmii.com>

**Sent:** Wednesday, October 2, 2024 11:09 AM

**To:** Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>

**Cc:** Dmitry Nikanorov <Dimitry@mcnabbpartners.com>; Greg Boans <gboans@jdmii.com>; Luke Pumphrey <lpumphrey@jdmii.com>

**Subject:** [EXTERNAL] Carbon Valley Sampling Plans

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

Hi Brittany,

The sampling plans for the Carbon Valley 25-7, 31-1 and 26-1 are attached for your review and approval. If everything looks good to you, we will send sampling notifications for Friday or next Monday.

Thank you,



Cindy Cottrell  
Regulatory Coordinator & Corporate Secretary  
7250 Dallas Parkway, Suite 1400  
Plano, TX 75024  
Direct Line: 469-573-6413

# Appendix B

## Well Log



McNabb Partners, LLC  
Hobbs • Carlsbad • Midland



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

					OSE FILE NUMBER(S) RA 12455		
WELL OWNER NAME(S) KEY LIVESTOCK, LLC					PHONE (OPTIONAL)		
WELL OWNER MAILING ADDRESS 1012 E 2ND ST					CITY ROSWELL	STATE NM	ZIP 88201
WELL LOCATION (FROM GPS)	DEGREES		MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
	LATITUDE	32	53	04.88			
	LONGITUDE	104	13	49.001	W		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							

LICENSE NUMBER WD-1058		NAME OF LICENSED DRILLER DON KUEHN III		NAME OF WELL DRILLING COMPANY KEYS DRILLING & PUMP SERVICE INC.			
DRILLING STARTED 09-12-16		DRILLING ENDED 09-13-16		DEPTH OF COMPLETED WELL (FT) 200	BORE HOLE DEPTH (FT) 200	DEPTH WATER FIRST ENCOUNTERED (FT) 55	
COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 55			
DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							

DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM	TO						
-2	20	12-3/4	STEEL		8"	1/4"	
-2	160	7-7/8"	PVC	SPLINE	4-1/2"	SCH40	
160	200	7-7/8"	PVC	SPLINE	4-1/2"	SCH40	.030

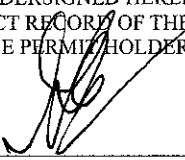
DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
FROM	TO				
0	20	12-3/4"	CEMENT		HAND
20	200	7-7/8"	VEALMORE PEA GRAVEL		HAND

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER	RA-12455	POD NUMBER	1	TRN NUMBER	592288
LOCATION	16S-27E-36		2.1.2	Don	PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	20	20	SURFACE	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	20	40	20	BROWN CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	40	50	10	GYPSON	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	50	55	5	SAND ZONE	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	55	65	10	GREY SANDSTONE	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	65	70	5	SAND & GREY CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	70	80	10	SANDY BROWN CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	80	90	10	GYPSON	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
	90	130	40	RED SANDY CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	130	150	20	GYPSON	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	150	160	10	BROWN SANDY CLAY	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	160	200	40	GYPSON	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="checkbox"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm): 17	
<input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION:					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: DON KUEHN III					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:					
	 GARY KEY				09-27-16	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE	

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER	RA-12455	POD NUMBER	TRN NUMBER	592288
LOCATION	16S-27E-36	2-1-2	20m	PAGE 2 OF 2

# Appendix C

## Laboratory Reports and Chain-Of-Custody Documents



McNabb Partners, LLC  
Hobbs • Carlsbad • Midland



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

July 01, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 06/25/24 13:22.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: CS - 01 0-2 (H243779-01)**

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	06/30/2024	ND	1.97	98.3	2.00	5.13	
Toluene*	<0.050	0.050	06/30/2024	ND	1.93	96.3	2.00	4.90	
Ethylbenzene*	<0.050	0.050	06/30/2024	ND	1.96	98.0	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2024	ND	5.76	95.9	6.00	4.69	
Total BTEX	<0.300	0.300	06/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.3 % 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	160	16.0	06/28/2024	ND	400	100	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	06/28/2024	ND	202	101	200	1.22	
DRO >C10-C28*	<10.0	10.0	06/28/2024	ND	184	92.0	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND					

Surrogate: 1-Chlorooctane 83.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.8 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 06/25/2024  
 Reported: 07/01/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 06/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 01 2-4 (H243779-02)**

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	06/30/2024	ND	1.97	98.3	2.00	5.13	
Toluene*	<0.050	0.050	06/30/2024	ND	1.93	96.3	2.00	4.90	
Ethylbenzene*	<0.050	0.050	06/30/2024	ND	1.96	98.0	2.00	4.81	
Total Xylenes*	<0.150	0.150	06/30/2024	ND	5.76	95.9	6.00	4.69	
Total BTEX	<0.300	0.300	06/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 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	336	16.0	06/28/2024	ND	400	100	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	06/28/2024	ND	202	101	200	1.22	
DRO >C10-C28*	<10.0	10.0	06/28/2024	ND	184	92.0	200	8.60	
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND					

Surrogate: 1-Chlorooctane 88.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.7 % 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



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

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

[illegible]



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

---

August 20, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 08/16/24 12:05.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	08/16/2024	Sampling Date:	08/13/2024
Reported:	08/20/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: CS - 02 (0-5') (H244990-01)**

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	08/19/2024	ND	1.98	99.0	2.00	2.33	
Toluene*	<0.050	0.050	08/19/2024	ND	1.90	94.8	2.00	2.46	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	1.99	99.7	2.00	2.41	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	5.91	98.5	6.00	2.61	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	48.0	16.0	08/19/2024	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	08/19/2024	ND	220	110	200	0.445	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	205	103	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 73.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.5 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 02 (2') (H244990-02)**

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	08/19/2024	ND	1.98	99.0	2.00	2.33		
Toluene*	<0.050	0.050	08/19/2024	ND	1.90	94.8	2.00	2.46		
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	1.99	99.7	2.00	2.41		
Total Xylenes*	<0.150	0.150	08/19/2024	ND	5.91	98.5	6.00	2.61		
Total BTEX	<0.300	0.300	08/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 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	48.0	16.0	08/19/2024	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	08/19/2024	ND	220	110	200	0.445	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	205	103	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 82.0 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 02 (4') (H244990-03)**

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	08/19/2024	ND	1.98	99.0	2.00	2.33		
Toluene*	<0.050	0.050	08/19/2024	ND	1.90	94.8	2.00	2.46		
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	1.99	99.7	2.00	2.41		
Total Xylenes*	<0.150	0.150	08/19/2024	ND	5.91	98.5	6.00	2.61		
Total BTEX	<0.300	0.300	08/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	32.0	16.0	08/19/2024	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	08/19/2024	ND	220	110	200	0.445	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	205	103	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 83.0 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 03 (0-5') (H244990-04)**

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	08/19/2024	ND	1.98	99.0	2.00	2.33		
Toluene*	<0.050	0.050	08/19/2024	ND	1.90	94.8	2.00	2.46		
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	1.99	99.7	2.00	2.41		
Total Xylenes*	<0.150	0.150	08/19/2024	ND	5.91	98.5	6.00	2.61		
Total BTEX	<0.300	0.300	08/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 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	48.0	16.0	08/19/2024	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	08/19/2024	ND	220	110	200	0.445	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	205	103	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 81.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.8 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 03 (2') (H244990-05)**

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	08/19/2024	ND	1.98	99.0	2.00	2.33	
Toluene*	<0.050	0.050	08/19/2024	ND	1.90	94.8	2.00	2.46	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	1.99	99.7	2.00	2.41	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	5.91	98.5	6.00	2.61	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	48.0	16.0	08/19/2024	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	08/19/2024	ND	220	110	200	0.445	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	205	103	200	1.81	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 81.4 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 03 (4') (H244990-06)**

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	08/19/2024	ND	2.21	111	2.00	6.41		
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14		
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14		
Total BTEx	<0.300	0.300	08/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	48.0	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 81.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.1 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 04 (0-5') (H244990-07)**

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	08/19/2024	ND	2.21	111	2.00	6.41		
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14		
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93		
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14		
Total BTEX	<0.300	0.300	08/19/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	1120	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 72.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.2 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 04 (2') (H244990-08)**

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	08/19/2024	ND	2.21	111	2.00	6.41	
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	400	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 79.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.2 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 04 (4') (H244990-09)**

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	08/19/2024	ND	2.21	111	2.00	6.41	
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	464	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 76.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 05 (0-5') (H244990-10)**

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	08/19/2024	ND	2.21	111	2.00	6.41	
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	80.0	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 80.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.2 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 05 (2') (H244990-11)**

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	08/19/2024	ND	2.21	111	2.00	6.41	
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14	
Total BTEX	<0.300	0.300	08/19/2024	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	64.0	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 68.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 08/16/2024  
 Reported: 08/20/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 08/13/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: CS - 05 (4') (H244990-12)**

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	08/19/2024	ND	2.21	111	2.00	6.41	
Toluene*	<0.050	0.050	08/19/2024	ND	2.33	116	2.00	4.14	
Ethylbenzene*	<0.050	0.050	08/19/2024	ND	2.44	122	2.00	1.93	
Total Xylenes*	<0.150	0.150	08/19/2024	ND	7.38	123	6.00	1.14	
Total BTEX	<0.300	0.300	08/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	32.0	16.0	08/19/2024	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	08/19/2024	ND	214	107	200	3.07	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	221	110	200	2.77	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 79.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 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

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

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@calumnaideas.com](mailto:celey.keene@calumnaideas.com).



ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinalalabnsnm.com](mailto:celey.keene@cardinalalabnsnm.com)





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

September 24, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 09/20/24 12:48.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager





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

**Analytical Results For:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	09/20/2024	Sampling Date:	09/19/2024
Reported:	09/24/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: CS - 01 0 FT (H245736-01)**

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	09/20/2024	ND	2.09	105	2.00	2.25	
Toluene*	<0.050	0.050	09/20/2024	ND	2.04	102	2.00	2.32	
Ethylbenzene*	<0.050	0.050	09/20/2024	ND	2.11	106	2.00	2.51	
Total Xylenes*	<0.150	0.150	09/20/2024	ND	6.33	105	6.00	2.57	
Total BTX	<0.300	0.300	09/20/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	144	16.0	09/23/2024	ND	416	104	400	0.00	

TPH 8015M			mg/kg		Analyzed By: MS				
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/20/2024	ND	220	110	200	2.49	
DRO >C10-C28*	<10.0	10.0	09/20/2024	ND	218	109	200	2.01	
EXT DRO >C28-C36	<10.0	10.0	09/20/2024	ND					

Surrogate: 1-Chlorooctane 93.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 09/20/2024  
 Reported: 09/24/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 09/19/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: CS - 04 0.5 FT (H245736-02)**

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	09/20/2024	ND	2.09	105	2.00	2.25		
Toluene*	<0.050	0.050	09/20/2024	ND	2.04	102	2.00	2.32		
Ethylbenzene*	<0.050	0.050	09/20/2024	ND	2.11	106	2.00	2.51		
Total Xylenes*	<0.150	0.150	09/20/2024	ND	6.33	105	6.00	2.57		
Total BTEx	<0.300	0.300	09/20/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	240	16.0	09/23/2024	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/20/2024	ND	220	110	200	2.49	
DRO >C10-C28*	22.6	10.0	09/20/2024	ND	218	109	200	2.01	
EXT DRO >C28-C36	<10.0	10.0	09/20/2024	ND					

Surrogate: 1-Chlorooctane 94.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 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

Page 5 of 5



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

---

October 18, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 10/04/24 16:14.

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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS-01 0'	H246076-01	Soil	04-Oct-24 08:50	04-Oct-24 16:14
FS-02 0'	H246076-02	Soil	04-Oct-24 08:52	04-Oct-24 16:14
FS-03 0'	H246076-03	Soil	04-Oct-24 09:08	04-Oct-24 16:14
FS-04 0'	H246076-04	Soil	04-Oct-24 09:15	04-Oct-24 16:14
FS-05 0'	H246076-05	Soil	04-Oct-24 09:09	04-Oct-24 16:14
FS-06 0'	H246076-06	Soil	04-Oct-24 09:24	04-Oct-24 16:14
FS-07 0'	H246076-07	Soil	04-Oct-24 09:36	04-Oct-24 16:14
FS-08 0'	H246076-08	Soil	04-Oct-24 09:43	04-Oct-24 16:14
FS-09 0'	H246076-09	Soil	04-Oct-24 09:50	04-Oct-24 16:14
FS-10 0'	H246076-10	Soil	04-Oct-24 10:02	04-Oct-24 16:14
FS-11 0'	H246076-11	Soil	04-Oct-24 10:02	04-Oct-24 16:14

10/18/24 - Client changed depths on all samples (see COC). This is the revised report and will replace the one sent on 10/10/24.

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-01 0'**  
**H246076-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134 4100504 JH 07-Oct-24 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>664</b>		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>209</b>		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane 92.1 % 48.2-134 4100508 MS 07-Oct-24 8015B

Surrogate: 1-Chlorooctadecane 99.5 % 49.1-148 4100508 MS 07-Oct-24 8015B

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-02 0'**  
**H246076-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	48.0		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			103 %	71.5-134		4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			88.5 %	48.2-134		4100508	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			75.2 %	49.1-148		4100508	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-03 0'**  
**H246076-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
----------	-----	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			104 %		71.5-134	4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100508	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			87.4 %		48.2-134	4100508	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			75.0 %		49.1-148	4100508	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-04 0'**  
**H246076-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			88.3 %	48.2-134		4100718	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			81.4 %	49.1-148		4100718	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-05 0'**  
**H246076-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>400</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			103 %	71.5-134		4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			92.7 %	48.2-134		4100718	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			87.1 %	49.1-148		4100718	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-06 0'**  
**H246076-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>96.0</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			104 %	71.5-134		4100504	JH	07-Oct-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			87.5 %	48.2-134		4100718	MS	07-Oct-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			81.6 %	49.1-148		4100718	MS	07-Oct-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-07 0'**  
**H246076-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>544</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	
<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			99.0 %	71.5-134		4100504	JH	07-Oct-24	8021B	

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
<i>Surrogate: 1-Chlorooctane</i>			86.8 %	48.2-134		4100718	MS	07-Oct-24	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			82.7 %	49.1-148		4100718	MS	07-Oct-24	8015B	

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-08 0'**  
**H246076-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>48.0</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			104 %		71.5-134	4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	--	----------	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>183</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>137</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			87.1 %		48.2-134	4100718	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			84.4 %		49.1-148	4100718	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	--	----------	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-09 0'**  
**H246076-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134 4100504 JH 07-Oct-24 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>2760</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>1550</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane 92.1 % 48.2-134 4100718 MS 07-Oct-24 8015B

Surrogate: 1-Chlorooctadecane 129 % 49.1-148 4100718 MS 07-Oct-24 8015B

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-10 0'**  
**H246076-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>64.0</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			107 %	71.5-134		4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	<b>736</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	<b>314</b>		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane			95.6 %	48.2-134		4100718	MS	07-Oct-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			98.7 %	49.1-148		4100718	MS	07-Oct-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**FS-11 0'**  
**H246076-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>304</b>		16.0	mg/kg	4	4100731	HM	07-Oct-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4100504	JH	07-Oct-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4100504	JH	07-Oct-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		106 %		71.5-134		4100504	JH	07-Oct-24	8021B	
---------------------------------------	--	-------	--	----------	--	---------	----	-----------	-------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
DRO >C10-C28*	2170		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	
EXT DRO >C28-C36	886		10.0	mg/kg	1	4100718	MS	07-Oct-24	8015B	

Surrogate: 1-Chlorooctane		92.6 %		48.2-134		4100718	MS	07-Oct-24	8015B	
---------------------------	--	--------	--	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane		122 %		49.1-148		4100718	MS	07-Oct-24	8015B	
-------------------------------	--	-------	--	----------	--	---------	----	-----------	-------	--

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4100731 - 1:4 DI Water</b>									
<b>Blank (4100731-BLK1)</b>					Prepared & Analyzed: 07-Oct-24				
Chloride	ND	16.0	mg/kg						
<b>LCS (4100731-BS1)</b>					Prepared & Analyzed: 07-Oct-24				
Chloride	432	16.0	mg/kg	400	108	80-120			
<b>LCS Dup (4100731-BSD1)</b>					Prepared & Analyzed: 07-Oct-24				
Chloride	432	16.0	mg/kg	400	108	80-120	0.00	20	

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 4100504 - Volatiles****Blank (4100504-BLK1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0542		mg/kg	0.0500		108	71.5-134			

**LCS (4100504-BS1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

Benzene	2.05	0.050	mg/kg	2.00		102	82.8-130			
Toluene	2.06	0.050	mg/kg	2.00		103	86-128			
Ethylbenzene	2.12	0.050	mg/kg	2.00		106	85.9-128			
m,p-Xylene	4.15	0.100	mg/kg	4.00		104	89-129			
o-Xylene	2.07	0.050	mg/kg	2.00		104	86.1-125			
Total Xylenes	6.22	0.150	mg/kg	6.00		104	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0490		mg/kg	0.0500		98.1	71.5-134			

**LCS Dup (4100504-BSD1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

Benzene	2.09	0.050	mg/kg	2.00		105	82.8-130	2.15	15.8	
Toluene	2.10	0.050	mg/kg	2.00		105	86-128	2.04	15.9	
Ethylbenzene	2.18	0.050	mg/kg	2.00		109	85.9-128	2.98	16	
m,p-Xylene	4.29	0.100	mg/kg	4.00		107	89-129	3.36	16.2	
o-Xylene	2.15	0.050	mg/kg	2.00		108	86.1-125	3.71	16.7	
Total Xylenes	6.45	0.150	mg/kg	6.00		107	88.2-128	3.48	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0496		mg/kg	0.0500		99.2	71.5-134			

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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch 4100508 - General Prep - Organics****Blank (4100508-BLK1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	44.4		mg/kg	50.0		88.8	48.2-134		
Surrogate: 1-Chlorooctadecane	37.7		mg/kg	50.0		75.4	49.1-148		

**LCS (4100508-BS1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

GRO C6-C10	150	10.0	mg/kg	200		75.1	66.4-123		
DRO >C10-C28	184	10.0	mg/kg	200		92.2	66.5-118		
Total TPH C6-C28	335	10.0	mg/kg	400		83.6	77.6-123		
Surrogate: 1-Chlorooctane	44.3		mg/kg	50.0		88.7	48.2-134		
Surrogate: 1-Chlorooctadecane	44.7		mg/kg	50.0		89.5	49.1-148		

**LCS Dup (4100508-BS1)**

Prepared: 05-Oct-24 Analyzed: 07-Oct-24

GRO C6-C10	182	10.0	mg/kg	200		91.1	66.4-123	19.3	17.7	QR-04
DRO >C10-C28	183	10.0	mg/kg	200		91.7	66.5-118	0.523	21	
Total TPH C6-C28	366	10.0	mg/kg	400		91.4	77.6-123	8.87	18.5	
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		99.9	48.2-134			
Surrogate: 1-Chlorooctadecane	42.6		mg/kg	50.0		85.3	49.1-148			

**Batch 4100718 - General Prep - Organics****Blank (4100718-BLK1)**

Prepared &amp; Analyzed: 07-Oct-24

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	47.8		mg/kg	50.0		95.5	48.2-134			
Surrogate: 1-Chlorooctadecane	44.8		mg/kg	50.0		89.7	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 or 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 damage 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:**

MC NABB SERVICES  
P. O. BOX 5753  
HOBBS NM, 88240

Project: CARBON VALLEY 25-7  
Project Number: 20130416-MURCHINSON- CARBON  
Project Manager: DIMITRY NIKANOROV  
Fax To: (575) 391-8484

Reported:  
18-Oct-24 16:54

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

**Batch 4100718 - General Prep - Organics****LCS (4100718-BS1)**

Prepared &amp; Analyzed: 07-Oct-24

GRO C6-C10	211	10.0	mg/kg	200		106	66.4-123			
DRO >C10-C28	205	10.0	mg/kg	200		103	66.5-118			
Total TPH C6-C28	416	10.0	mg/kg	400		104	77.6-123			
Surrogate: 1-Chlorooctane	52.2		mg/kg	50.0		104	48.2-134			
Surrogate: 1-Chlorooctadecane	47.7		mg/kg	50.0		95.3	49.1-148			

**LCS Dup (4100718-BS1)**

Prepared &amp; Analyzed: 07-Oct-24

GRO C6-C10	208	10.0	mg/kg	200		104	66.4-123	1.34	17.7	
DRO >C10-C28	202	10.0	mg/kg	200		101	66.5-118	1.52	21	
Total TPH C6-C28	410	10.0	mg/kg	400		103	77.6-123	1.43	18.5	
Surrogate: 1-Chlorooctane	52.1		mg/kg	50.0		104	48.2-134			
Surrogate: 1-Chlorooctadecane	47.6		mg/kg	50.0		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 or 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 damage 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

QR-04	The RPD for the BS/BSD was outside of historical limits.
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 or 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 damage 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 cursive script, appearing to read "Celey 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

BILL TO

ANALYSIS REQUEST

P.O. # 2430416 - 2430416 - 2430416 - 714

Company: McNabb Partners

Attn: Dinitry N. Kaurava

Address:

City:

State:

Zip:

Phone #:

Fax #:

Company Name: McNabb Partners

Project Manager: Dinitry N. Kaurava

Address: On-File

City: State: Zip:

Phone #: Fax #:

Project #:

Project Name: 2013416 - 2430416 - 2430416 - 714

Project Location: Carbon Valley 25-7

Sample Name: Christopher Turner

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	ANALYSIS REQUEST									
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :												
FS-01	FS-01	C	1			X				10/04	8:50	X	Chloride								
FS-03	FS-03	C	1							10/04	8:52	X	TPH (GRODROTHMRO)								
FS-03	FS-03	C	1							10/04	9:08	X	BTEX (Benzene)								
FS-04	FS-04	C	1							10/04	9:15										
FS-05	FS-05	C	1							10/04	9:09										
FS-06	FS-06	C	1							10/04	9:24										
FS-07	FS-07	C	1							10/04	9:36										
FS-08	FS-08	C	1							10/04	9:43										
FS-09	FS-09	C	1							10/04	9:50										
FS-10	FS-10	C	1							10/04	10:02										

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's retention 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 in contract, tort, or any other cause of action.

Relinquished By: *[Signature]* Date: 10-4-24 Time: 10:14 Received By: *[Signature]* Date: 10-4-24 Time: 10:14

Relinquished By: *[Signature]* Date: 10-4-24 Time: 10:14 Received By: *[Signature]* Date: 10-4-24 Time: 10:14

Delivered By: (Circle One) Observed Temp. °C 17°C Sample Condition Cool Intact ☒ Yes ☐ No Checked BY: *[Signature]* (Initials)

Sampler - UPS - Bus - Other: Corrected Temp. °C 11°C ☐ Yes ☒ No

Thermometer ID #140 Correction Factor, °C -0.10°C ☐ Yes ☒ No

Turnaround Time: Standard ☒ Rush ☐ Bacteria (only) Sample Condition Cool Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

REMARKS: \* Customer requested Depth Change. 10-10-24

Verbal Result: ☐ Yes ☐ No Add'l Phone #: All Results are emailed. Please provide Email address:





† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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

---

October 10, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 10/08/24 10:50.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	10/08/2024	Sampling Date:	10/07/2024
Reported:	10/10/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: G - 1 ( 0.5' ) (H246092-01)**

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	10/08/2024	ND	2.18	109	2.00	2.09	
Toluene*	<0.050	0.050	10/08/2024	ND	2.09	105	2.00	2.77	
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.11	106	2.00	3.59	
Total Xylenes*	<0.150	0.150	10/08/2024	ND	6.28	105	6.00	3.61	
Total BTEX	<0.300	0.300	10/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	160	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	1910	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	1100	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 107 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 1 ( 2' ) (H246092-02)**

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	10/08/2024	ND	2.18	109	2.00	2.09		
Toluene*	<0.050	0.050	10/08/2024	ND	2.09	105	2.00	2.77		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.11	106	2.00	3.59		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	6.28	105	6.00	3.61		
Total BTEX	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	576	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	19.9	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.6 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 1 ( 4') (H246092-03)**

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	10/08/2024	ND	2.18	109	2.00	2.09		
Toluene*	<0.050	0.050	10/08/2024	ND	2.09	105	2.00	2.77		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.11	106	2.00	3.59		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	6.28	105	6.00	3.61		
Total BTEX	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 88.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 2 ( 0.5' ) (H246092-04)**

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	10/08/2024	ND	2.18	109	2.00	2.09	
Toluene*	<0.050	0.050	10/08/2024	ND	2.09	105	2.00	2.77	
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.11	106	2.00	3.59	
Total Xylenes*	<0.150	0.150	10/08/2024	ND	6.28	105	6.00	3.61	
Total BTEX	<0.300	0.300	10/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.6 % 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	160	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	2760	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	1030	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 136 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 2 ( 2' ) (H246092-05)**

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	10/08/2024	ND	2.18	109	2.00	2.09	
Toluene*	<0.050	0.050	10/08/2024	ND	2.09	105	2.00	2.77	
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.11	106	2.00	3.59	
Total Xylenes*	<0.150	0.150	10/08/2024	ND	6.28	105	6.00	3.61	
Total BTEX	<0.300	0.300	10/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 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	208	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	39.1	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	30.6	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 97.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.1 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 2 ( 4' ) (H246092-06)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	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	352	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 3 ( 0.5' ) (H246092-07)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEx	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	48.0	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	23.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 110 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 3 ( 2' ) (H246092-08)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	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	864	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.4 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 3 ( 4' ) (H246092-09)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	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	96.0	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	29.8	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 4 ( 0.5' ) (H246092-10)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	544	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/08/2024  
 Reported: 10/10/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/07/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: G - 4 ( 2' ) (H246092-11)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 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	112	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	26.9	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 99.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	10/08/2024	Sampling Date:	10/07/2024
Reported:	10/10/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: G - 4 ( 4' ) (H246092-12)**

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	10/08/2024	ND	1.96	97.9	2.00	5.33		
Toluene*	<0.050	0.050	10/08/2024	ND	2.00	99.9	2.00	5.78		
Ethylbenzene*	<0.050	0.050	10/08/2024	ND	2.01	100	2.00	5.74		
Total Xylenes*	<0.150	0.150	10/08/2024	ND	5.99	99.8	6.00	6.04		
Total BTEX	<0.300	0.300	10/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 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	352	16.0	10/08/2024	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	10/08/2024	ND	216	108	200	1.28	
DRO >C10-C28*	<10.0	10.0	10/08/2024	ND	219	109	200	3.05	
EXT DRO >C28-C36	<10.0	10.0	10/08/2024	ND					

Surrogate: 1-Chlorooctane 97.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.4 % 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

---

### 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 "C. 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

<b>Company Name:</b> McLab Partners				<b>BILL TO</b>				<b>P.O. #:</b>															
<b>Project Manager:</b> Dmitry Nikanorov				<b>Company:</b> Murchison Oil & Gas																			
<b>Address:</b> 5014 W Carlsbad Hwy				<b>Attn:</b> Greg Boans																			
<b>City:</b> Hobbs				<b>State:</b> NM <b>Zip:</b> 88240																			
<b>Phone #:</b> 917-497-6890				<b>Fax #:</b>				<b>Address:</b> 5325 Sierra Vista Dr.															
<b>Project #:</b>				<b>Project Owner:</b> Murchison Oil&Gas				<b>City:</b> Carlsbad															
<b>Project Name:</b> Carbon Valley 25-7				<b>State:</b> NM <b>Zip:</b> 88220																			
<b>Project Location:</b> Eddy Co. NM				<b>Phone #:</b> 575-706-0667																			
<b>Sampler Name:</b> Dmitry Nikanorov, Auden Escalada				<b>Fax #:</b>																			
FOR LAB USE ONLY		LAB I.D.		Sample I.D.		(G)RAB OR (C)OMP		# CONTAINERS		MATRIX		PRESERV		SAMPLING									
H246092	G-1	(0.5)	G 1	X		X																	
1	G-1	(2)	G 1			X																	
2	G-1	(4)	G 1			X																	
3	G-2	(0.5)	G 1	X																			
4	G-2	(2)	G 1	X																			
5	G-2	(4)	G 1	X																			
6	G-3	(0.5)	G 1	X																			
7	G-3	(2)	G 1	X																			
8	G-3	(4)	G 1	X																			
9	G-3	(0.5)	G 1	X																			
10	G-4	(0.5)	G 1	X																			

**PLEASE NOTE:** Liability and Damages. Contractor's liability and client's warranties are limited by any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the services. All claims, including those for negligence and any other cause whatsoever shall be observed without limitation, business interruption, loss of lease or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Contractor, regardless of whether such claim is based upon any of the above stated theories or otherwise.

In no event shall Contractor be liable for incidental or consequential damages, including without limitation, business interruption, loss of lease or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Contractor, regardless of whether such claim is based upon any of the above stated theories or otherwise.

**Reinquinshed By:** [Signature] Date: 10-8-24 Received By: [Signature] Verbal Result: ☐ Yes ☒ No Add'l Phone #: \_\_\_\_\_  
**Time:** 10:50 AM  
**Date:** 10-8-24 Resolved By: [Signature]  
**Remarks:** \_\_\_\_\_

**Delivered By:** (Circle One)  
☒ Standard Bacteria (only) Sample Condition Cool Intact Observed Temp.: °C Corrected Temp.: °C  
☐ Other Thermometer ID #140 Correction Factor -0.5°C



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> McNabb Partners <b>Project Manager:</b> Dmitry Nikanorov <b>Address:</b> 5014 W Carlsbad Hwy <b>City:</b> Hobbs <b>Phone #:</b> 917-497-6890 <b>Project #:</b> <b>Project Name:</b> Carbon Valley 25-7 <b>Project Location:</b> Eddy Co. NM <b>Sample Name:</b> Dmitry Nikanorov, Auden Escalada		<b>P.O. #:</b> <b>Company:</b> Murchison Oil & Gas <b>Attn:</b> Greg Boans <b>Address:</b> 5325 Sierra Vista Dr. <b>City:</b> Carlsbad <b>State:</b> NM <b>Zip:</b> 88220 <b>Phone #:</b> 575-708-0667 <b>Fax #:</b>	
<b>FOR LAB USE ONLY</b>		<b>BILL TO</b>	
<b>Lab I.D.</b> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <b>Sample I.D.</b>  <div style="display: flex; justify-content: space-between;"> <div>           10/14/02            11            12         </div> <div>           G-4 (2)            G-4 (4)         </div> <div>           G 1            G 1         </div> </div> </div>		<div style="display: flex; justify-content: space-between;"> <div>           (G)RAB OR (C)OMP            # CONTAINERS            GROUNDWATER            WASTEWATER            SOIL            OIL            SLUDGE            OTHER            ACID/BASE            ICE / COOL            OTHER         </div> <div>           DATE            10/7/24            10/7/24         </div> <div>           TIME            12:30            12:35         </div> </div>	
<b>MATRIX</b>		<b>PRESERV</b>	
<b>SAMPLING</b>		<b>TPH</b> Chloride BTEX	
<b>DELIVERED BY:</b> (Circle One) Sampler - UPS - Bus - Other:		<b>Observed Temp. °C:</b> 5.9 <b>Corrected Temp. °C:</b> 5.3 <b>Sample Condition:</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>REMARKS:</b>	
<b>PLEASE NOTE:</b> Liability and Damages. Cardholder's liability and clients' insurance coverage 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 Cardholder be liable for incidental or consequential damages, including without limitation, business interruption, 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 Cardholder, regardless of whether such claim is based upon any of the above stated matters or otherwise.		<b>Standard</b> <input checked="" type="checkbox"/> <b>Add'l Phone #:</b>	
<b>DELIVERED BY:</b> (Circle One) Sampler - UPS - Bus - Other:		<b>Observed Temp. °C:</b> 5.9 <b>Corrected Temp. °C:</b> 5.3 <b>Sample Condition:</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>REMARKS:</b>	
<b>DELIVERED BY:</b> (Circle One) Sampler - UPS - Bus - Other:		<b>Observed Temp. °C:</b> 5.9 <b>Corrected Temp. °C:</b> 5.3 <b>Sample Condition:</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>Verbal Result:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:	
<b>Reinquinished By:</b> Date: 10-8-24 Time: 10:50 Received By: [Signature]		<b>REMARKS:</b>	





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

---

October 11, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: CARBON VALLEY 25-7

Enclosed are the results of analyses for samples received by the laboratory on 10/09/24 11:40.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received:	10/09/2024	Sampling Date:	10/08/2024
Reported:	10/11/2024	Sampling Type:	Soil
Project Name:	CARBON VALLEY 25-7	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON EDDY CO, NM		

**Sample ID: BS - 01 ( 1' ) (H246130-01)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.11	106	2.00	2.19	
Toluene*	<0.050	0.050	10/09/2024	ND	2.14	107	2.00	2.40	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.13	107	2.00	3.21	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.36	106	6.00	3.52	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	10/09/2024	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	10/09/2024	ND	218	109	200	1.38	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	226	113	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 122 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/09/2024  
 Reported: 10/11/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/08/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS - 01 ( 0-1' ) (H246130-02)**

BTEx 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.11	106	2.00	2.19	
Toluene*	<0.050	0.050	10/09/2024	ND	2.14	107	2.00	2.40	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.13	107	2.00	3.21	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.36	106	6.00	3.52	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 77.5-125

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	10/09/2024	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	10/09/2024	ND	218	109	200	1.38	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	226	113	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 128 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/09/2024  
 Reported: 10/11/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/08/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS - 02 ( 0-1' ) (H246130-03)**

BTEx 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.11	106	2.00	2.19	
Toluene*	<0.050	0.050	10/09/2024	ND	2.14	107	2.00	2.40	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.13	107	2.00	3.21	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.36	106	6.00	3.52	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	10/09/2024	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	10/09/2024	ND	218	109	200	1.38	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	226	113	200	1.82	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.5 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/09/2024  
 Reported: 10/11/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/08/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS - 03 ( 0-1' ) (H246130-04)**

BTEx 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.11	106	2.00	2.19	
Toluene*	<0.050	0.050	10/09/2024	ND	2.14	107	2.00	2.40	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.13	107	2.00	3.21	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.36	106	6.00	3.52	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

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	10/09/2024	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	10/09/2024	ND	219	109	200	3.44	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	232	116	200	5.26	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 103 % 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:**

MC NABB SERVICES  
 DIMITRY NIKANOROV  
 P. O. BOX 5753  
 HOBBS NM, 88240  
 Fax To: (575) 391-8484

Received: 10/09/2024  
 Reported: 10/11/2024  
 Project Name: CARBON VALLEY 25-7  
 Project Number: NONE GIVEN  
 Project Location: MURCHISON EDDY CO, NM

Sampling Date: 10/08/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS - 04 ( 0-1' ) (H246130-05)**

BTEx 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/09/2024	ND	2.11	106	2.00	2.19	
Toluene*	<0.050	0.050	10/09/2024	ND	2.14	107	2.00	2.40	
Ethylbenzene*	<0.050	0.050	10/09/2024	ND	2.13	107	2.00	3.21	
Total Xylenes*	<0.150	0.150	10/09/2024	ND	6.36	106	6.00	3.52	
Total BTEX	<0.300	0.300	10/09/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/09/2024	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	10/09/2024	ND	219	109	200	3.44	
DRO >C10-C28*	<10.0	10.0	10/09/2024	ND	232	116	200	5.26	
EXT DRO >C28-C36	<10.0	10.0	10/09/2024	ND					

Surrogate: 1-Chlorooctane 107 % 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

---

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

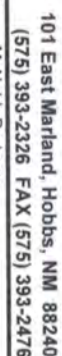
\*=Accredited Analyte

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



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

<b>Company Name:</b> McNabb Partners				<b>P.O. #:</b>				<b>ANALYSIS REQUEST</b>			
<b>Project Manager:</b> Dmitry Nikanorov				<b>Company:</b> Murchison Oil & Gas							
<b>Address:</b> 5014 W Carlsbad Hwy				<b>Attn:</b> Greg Boans							
<b>City:</b> Hobbs				<b>State:</b> NM <b>Zip:</b> 88240							
<b>Phone #:</b> 917-497-6890				<b>Fax #:</b>				<b>Address:</b> 5325 Sierra Vista Dr.			
<b>Project #:</b>				<b>City:</b> Carlsbad							
<b>Project Name:</b> Carbon Valley 25-7				<b>State:</b> NM <b>Zip:</b> 88220							
<b>Project Location:</b> Eddy Co, NM				<b>Phone #:</b> 575-706-0667							
<b>Sample Name:</b> Dmitry Nikanorov				<b>Fax #:</b>							

FOR LAB USE ONLY			MATRIX			PRESERV	SAMPLING										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	TPH	Chloride	BTEX
H24130	BS-01	(1)	C 1	X									10/8/24	14:00	X	X	X
	WS-01	(0-1)	C 1	X									10/8/24	14:05	X	X	X
	WS-02	(0-1)	C 1	X									10/8/24	14:10	X	X	X
	WS-03	(0-1)	C 1	X									10/8/24	14:15	X	X	X
	WS-04	(0-1)	C 1	X									10/8/24	14:20	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal liability and clients 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 interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors acting 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.

<b>Reinquished By:</b> [Signature]		<b>Date:</b> 10-9-24		<b>Received By:</b> [Signature]		<b>Date:</b> 10-9-24	
<b>Time:</b> 11:40		<b>Time:</b>		<b>Time:</b>		<b>Time:</b>	
<b>Relinquished By:</b> [Signature]		<b>Date:</b>		<b>Received By:</b> [Signature]		<b>Date:</b>	
<b>Time:</b>		<b>Time:</b>		<b>Time:</b>		<b>Time:</b>	

**REMARKS:**

Tuparound Time: 48 hours    Standard Kiosk    Bacteria (only) Sample Condition Cool Intact Yes No Observed Temp. °C

Thermometer ID #140    Correction Factor -0.5°C

Verbal Result: ☐ Yes    ☒ No    Add'l Phone #: \_\_\_\_\_  
All Results are emailed. Please provide Email address: \_\_\_\_\_

**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 394780

QUESTIONS

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID: 331569
	Action Number: 394780
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2415754364
Incident Name	NAPP2415754364 CARBON VALLEY 25 FEDERAL COM #007H @ 30-015-38060
Incident Type	Other
Incident Status	Deferral Request Received
Incident Well	[30-015-38060] CARBON VALLEY 25 FEDERAL COM #007H

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Carbon Valley 25 Federal Com #007H
Date Release Discovered	04/16/2013
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Other
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	Cause: Normal Operations   Unknown   Crude Oil   Released: 0 BBL (Unknown Released Amount)   Recovered: 0 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
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)	C-141 requested by OCD for area of impact identified in Google Earth aerial photo. Date of photo used in lieu of unknown release date. Environmental consultant obtained to investigate indicated area of approximately 770 sq. ft. located inside lined tank battery containment. Stained caliche being removed and disposed of at OCD approved facility. Preparing for liner inspection.

**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 394780

QUESTIONS (continued)

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:
	331569
	Action Number:
	394780
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

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: Cindy Cottrell Title: Regulatory Coordinator Email: ccottrell@jdmii.com Date: 06/17/2024
--	---

**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 394780

**QUESTIONS (continued)**

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:
	331569
	Action Number:
	394780
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between ½ and 1 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Between ½ and 1 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	Yes
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.	
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)	1120
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	4310
GRO+DRO	(EPA SW-846 Method 8015M)	2760
BTEX	(EPA SW-846 Method 8021B or 8260B)	0.1
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.3

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

On what estimated date will the remediation commence	06/24/2024
On what date will (or did) the final sampling or liner inspection occur	10/08/2024
On what date will (or was) the remediation complete(d)	10/24/2024
What is the estimated surface area (in square feet) that will be reclaimed	200
What is the estimated volume (in cubic yards) that will be reclaimed	7.4
What is the estimated surface area (in square feet) that will be remediated	200
What is the estimated volume (in cubic yards) that will be remediated	7.4

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.



**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 394780

**QUESTIONS (continued)**

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:	331569
	Action Number:	394780
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<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>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	OWL LANDFILL JAL [fJEG1635837366]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<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: Dmitry Nikanorov Email: dimitry@mcnabbpartners.com Date: 10/22/2024
<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 394780

**QUESTIONS (continued)**

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:	331569
	Action Number:	394780
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Storage tank and associated flowlines
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	2050
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	152
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	Not answered.
Enter the well API (30-) on which this deferral should be granted	30-015-38060 CARBON VALLEY 25 FEDERAL COM #007H
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<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: Dmitry Nikanorov Email: dimitry@mcnabbpartners.com Date: 10/22/2024

**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 6  
  
Action 394780

QUESTIONS (continued)

Operator:  3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:	331569
	Action Number:	394780
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	390097
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	10/08/2024
What was the (estimated) number of samples that were to be gathered	5
What was the sampling surface area in square feet	200

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	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**

CONDITIONS

Action 394780

**CONDITIONS**

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:	331569
	Action Number:	394780
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**CONDITIONS**

Created By	Condition	Condition Date
bhall	Deferral request approved.	10/25/2024
bhall	Contamination that is left in place must be remediated when the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	10/25/2024
bhall	An application of a Micro-Blaze solution is NOT approved to be applied to the impacted areas to degrade hydrocarbons present in soil while the facility is still in use. Micro-Blaze requires water and oxygen to remediate. Water and oxygen in the soil will be reduced in the compacted soils beneath the liner. Micro-Blaze also is not an approved remediation technique for chlorides and the chloride contamination at G-3 at 2' must be addressed. The excavation and disposal (dig and haul) of the contamination has been approved in the Remediation Plan section of the C-141 and must be completed at time of facility deconstruction or plugging and abandonment, whichever comes first.	10/25/2024
bhall	The site must also be reclaimed when it is no longer reasonably needed for production or subsequent drilling activities. A reclamation report will not be accepted until reclamation of the release area 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.	10/25/2024