Osborn Heirs Company

Mattie Price Tank Battery
Section 06, Township 17S, Range 38E
Lea County, New Mexico

Deferral Request
NAPP 2118332198 (1R-421)
NAPP 2118730210 (1RP-2047)
NRM1926758725 (1RP-5686)

March 29, 2024
(revised August 7, 2024)

Prepared for:

Osborn Heirs Company
PO Box 17968
San Antonio, TX 78217

By:

Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240
(575) 397-0510

I. Company Contacts

Representative	Company	Telephone	E-mail
Gary Cunningham	Osborn Heirs Co.	210-826-0700	garyc@osbornheirs.com
Bob Allen	Safety & Environmental Solutions, Inc.	575-397-0510	ballen@sesi-nm.com

II. Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was engaged by Osborn Heirs Company representatives, to assess site impacts with the open NMOCD permit of **1RP-421**, an open remediation permit assigned number **1RP-2047**, as well as a more recent spill event that has been assigned **1RP-5686.**

The location of the battery is shown in Document 1: Vicinity Map. The GPS location of the battery is 32.867865 N, -103.179849 W. The BLM Cave Karst Map is provided in Document 2; the purple coloration of the overlay shows BLM's evaluation of the area as having a low potential for underlying karst sediments.

NAPP 2118332198 (1R-421)

According to the site investigation report dated March 2005 and submitted to the NMOCD, Kane Environmental Engineering, Inc. was consulted by Osborn Heirs Company to assess and delineate for historical impact to this site.

NAPP 2118730210 (1RP-2047)

According to a subsequent C-141 and spill notification to the NMOCD dated December 25, 2008: The cone shaped bottom of an oil production tank ruptured without any warning. Upon discovery of the release, production was switched to another tank and a vacuum truck was mobilized. When the tank bottom gave way, oil, paraffin and sludge traversed the facility location. Some fluid was absorbed into the soil, while soil-paraffin and sludge formed a crust at the surface. Approximately 5 barrels of fluid was picked up by the vacuum truck and transported to a certified disposal center. No oil or other material impacted the pasture area. The affected area measured approximately 100 ft. X 25 ft.

NRM1926758725 (1RP-5686)

According to the event that occurred on April 05, 2019 as was reported on the C-141, an inactive Mattie Price well began flowing, thereby causing the stock tank to overflow. The release was completely contained in the secondary containment area. Approximately 98 square yards of surface area was impacted.

The revision to the March 29, 2024 closure report (renamed as a request for deferral) includes additional soil borings to determine vertical extent of hydrocarbon releases at the location and response to other NMOCD comments regarding sampling. NMOCD comments were provided to Osborn Heir's representative via email on May 28, 2024.

III. Soils, Surface and Ground Water

Soils in this area are characterized as a Kimbrough-Lea association: Nearly level and gently sloping, gravelly and loamy soils that are very shallow to moderately deep to indurated caliche. The soils in this association are used as range, wildlife habitat and recreational areas. They are also a source of caliche for construction.

No surface water or springs are present in the vicinity of the Mattie Price Battery. Ground water information is provided by the New Mexico Office of the State Engineer. Depth to groundwater records were researched for Sections 5 and 6, Township 17S, and Range 38E The nearest Section 6 POD number, L 00904, is located approximately 1 mile from the Mattie Price Battery. Depth to water in 1972 was recorded as 75 feet. The nearest

Section 5 POD number, L-00709, was drilled in 1951 with a depth to water of 40 feet and is located approximately 1,340 from the battery. POD information is included in Document 3: OSE Information.

On May 17, 2023, SESI personnel were onsite at the windmill owned by Mr. Phillip Berry with his permission to determine the top of groundwater in the well. Staff gained access to the well and, using a 100 foot water level meter, attempted to determine the top of the groundwater. The tape was fully extended to 101 feet below ground surface and no water was encountered at that level in the well. The well is located 900 feet south-southwest of the battery and is shown on the Vicinity Map (Document 1). The memorandum and photographs documenting the visit and the lack of water at 101 feet are provided in Document 4: TOW Determination Memo.

IV. Characterization

Table I
Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

*Or other test methods approved by the division.
**Numerical limits or natural background level, whichever is greater.
***This applies to releases of produced water or other fluids, which may contain chloride.
[19.15.29.12 NMAC - N, 8/14/2018]

The target cleanup levels are determined using the NMAC 19.15.29 revisions dated July 24, 2018. The applicable Recommended Remediation Action Levels (RRAL) are 10 mg/Kg Benzene, 50 mg/Kg combined Benzene, Toluene, Ethyl Benzene, and Total Xylenes (BTEX), 1,000 mg/Kg combined GRO+DRO, and 2,500 mg/Kg Total Petroleum Hydrocarbons (TPH). Characterization of vertical extent of chloride concentration to a level below 10,000 ppm is required. Less than 600 mg/Kg is also required for pasture impact.

V. Work Performed 2005-2008

Site activities for this site commenced in 2005 for Remediation Permit Number 1R421 by Kane Environmental with the submittal of a work plan to the NMOCD. The following is a recap of the environmental activities that followed:

- June 2005: The subsurface affected material was delineated to below the threshold values for remediation guidelines at that time.
- January 2006: Three temporary monitoring wells were installed in 2006 and were sampled. Samples from these wells verified that no groundwater impacts were present. The remediation threshold values of 10,000

mg/kg total petroleum hydrocarbons (TPH), 10 mg/kg benzene and 50 mg/kg total benzene, toluene, ethylbenzene and xylenes (BTEX) were also finalized.

- January 2006: 332 cubic yards of affected material was excavated and properly disposed of at J & L Landfarm of Hobbs, NM (Permit #NM-01-0023) for treatment and disposal.
- January 2006: Eleven remediation wells were installed to access the affected zone between 10 and 25 feet. Sparge remediation was initiated using a household compressor at a pressure of 15 psi with an unknown flow rate.
- November 2006: Kane environmental directed the installation of four soil borings in order to verify remediation results, using an Air/Rotary drilling rig. Those results are included in the report to NMOCD dated December 01, 2006.
- June 2007: The number of active air-injection wells was decreased to six upon verification that the hydrocarbon concentrations in the other areas were below the threshold values.
- June 2008: The subsurface material sampling was completed and reporting limits verified.

V. Work Performed 2019

On April 05, 2019, subsequent to the third release assigned 1RP-5686 (now **nRM1926758725**), SESI was consulted to assess and remediate the Mattie Price Tank Battery. On April 09, 2019 SESI personnel together with personnel from Osborn Heirs Company were on location to assign and flag the area for auger hole installation. The auger holes were advanced to the point of refusal. Soil samples were field tested intermittently for Chloride and Petroleum Hydrocarbons. The field results at auger hole #1 for TPH were 40 ppm, and chloride levels were <128 ppm. Soil samples were grabbed at surface, and one-foot increments, field tested, and packaged for laboratory confirmation. All samples were properly packaged, labeled, preserved, and transported to Cardinal Laboratories via Chain of Custody for analyses. The following constituents were analyzed: Chloride (Cl SM-4500Cl-B), Total Petroleum Hydrocarbons (TPH Method 8015M), and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX, Method 8021B). The table below is a recap and tabulation of the results from the Cardinal Laboratories analyses. The locations of the auger holes are shown in Document 5: 2019 Auger and Borehole Locations.

Osborn Heirs Company
Mattie Price Tank Battery
Soil Sample Results (mg/Kg): Cardinal Laboratories 04/19/2019

Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
AH-1 (field test)	<128 ppm	- -	- -	- -	40 ppm	- -	- -	- -	- -	- -
AH-2, Surface	768	**14,200**	**37,500**	4,600	**56,300**	<1.00	27.6	19.4	118	**164**
AH-2, 1.5 ft.	96	66.9	669	77.2	813	<0.050	0.105	0.242	1.78	2.13
AH-3, Surface	800	**12,800**	**37,800**	4,700	**55,300**	<1.00	22.7	18.2	112	**153**
AH-3, 1 ft.	96	49.9	453	55.4	558	<0.050	0.084	0.234	1.63	1.95
AH-4, Surface	784	**11,900**	**34,100**	**5,280**	**51,280**	0.508	24	18.8	114	**157**
AH-4, 1 ft.	80	49.2	418	81.7	549	<0.050	0.108	0.274	1.9	2.28

Bold – Exceeds Closure Criteria for this location

Based on the confirmed laboratory results from Cardinal Laboratories and auger refusal, steps were taken to initiate soil boring activity. 2019 auger and borehole locations are shown on the attached figure.

On May 28, 2019 SESI personnel revisited the site in order to flag the location for New Mexico One Call clearance. SESI personnel observed that the air sparging system had been removed. A call was placed to Mr. Cunningham with

Osborn Heirs Company to confirm the removal. SESI personnel were told that the lease operator had received a landowner complaint that initiated the removal of the system.

On July 17, 2019 SESI personnel, together with personnel and equipment from Enviro-Drill revisited the site in order to extract soil borings for confirmation of vertical extent. Four (4) sites were designated in the proximity of the spill areas. These locations are also shown on Document 5. The boring extractions were preserved, packaged, and transported to Cardinal Laboratories via Chain of Custody for analyses of the following constituents using the methods referenced above: Chloride (Cl), Total Petroleum Hydrocarbons (TPH), and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). The table below is a recap and tabulation of the results from the Cardinal Laboratories analyses:

Osborn Heirs Company
Mattie Price Tank Battery
Soil Sample Results (mg/Kg): Cardinal Laboratories 07/17/2019

Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
B-1,0-2, Base	304	**806**	**6,800**	647	**8,253**	<0.050	<0.050	<0.050	1.39	1.39
B-1, 0-2, 1 ft.	576	**<10.0**	**1,840**	460	2,300	<0.050	<0.050	0.056	<0.150	<0.300
B-1, 5-7 ft.	80	**84.7**	**1,210**	146	1,441	<0.050	<0.050	<0.050	0.585	0.585
B-1, 10-12 ft.	48.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-1, 15-17 ft.	48.0	<10.0	12.2	<10.0	12.2	<0.050	<0.050	<0.050	<0.150	<0.300
B-1, 30-32 ft.	16.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 2 ft.	80.0	**496**	**1,050**	98.3	1,644	0.349	3.31	3.41	4.07	11.1
B-2, 5-7 ft.	48.0	<10.0	69.7	<10.0	69.7	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 10-12 ft.	160	**<10.0**	**2,570**	497	**3,067**	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 15-17 ft.	176	<10.0	13.7	<10.0	13.7	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 20-22 ft.	160	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 25-27 ft.	80.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-2, 30-32 ft.	48.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 0-2 ft.	912	<10.0	146	18.7	165	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 2-4 ft.	288	<10.0	15.2	<10.0	15.2	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 5-7 ft.	32.0	<10.0	19.7	<10.0	19.7	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 10-12 ft.	48.0	<10.0	20.5	<10.0	20.5	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 15-17 ft.	32.0	<10.0	14.2	<10.0	14.2	<0.050	<0.050	<0.050	<0.150	<0.300
B-3, 25-27 ft.	32.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	0.206	<0.300
B-3, 30-32 ft.	80.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 0-2 ft.	16.0	<10.0	511	178	689	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 2-4 ft.	32.0	<10.0	10.4	<10.0	10.4	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 4-6 ft.	32.0	<10.0	725	197	922	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 10-12 ft.	16.0	<10.0	142	38.2	180	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 15-17 ft.	16.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 20-22 ft.	16.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 25-27 ft.	16.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
B-4, 30-32 ft.	32.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300

Bold – Exceeds Closure Criteria for this location

Based upon the return results of the soil bore analyses from Cardinal Laboratories, Chlorides were not the constituent of concern. Upon further review of the Kane Environmental report dated March 2005 as was submitted to the NMOCD, SESI advanced soil bores labeled B-1 and B-2 respectively, in the same proximity as “Test Point A” in

the Kane Environmental analysis. The subsequent spills were in the same proximity, so further delineation of this area was deemed prudent to confirm previous remediation efforts, as well as vertical delineation. SESI proposed to confirm the horizontal remediation through sidewall soil samples collected simultaneously throughout the removal of impacted soils.

VI. Work Performed 2023

Prior to beginning work, drone photography of the site was performed (Document 6: September 14, 2023 Drone Photo). Before excavation commenced CW performed the required NM One Call to locate buried utilities on location. On September 21, 2023, SESI began remediation work at the Mattie Price battery. This involved excavation of impacted soil material and stockpiling for transport to OCD approved disposal facilities. The contractor for excavation and transport was Custom Welding Inc. of Hobbs (CW). The job was divided into an excavation on the north side of the battery and an excavation on the south side.

North side excavation involved removal of the soil material impacted from the 2019 release. Initially the general area to be removed was that outlined on the 2019 auger and borehole sampling location figure. Prior to sampling, both visual and odor indications were used to direct excavation. Following initial excavation three samples from the north excavation were obtained on September 22, 2023 with a fourth on September 25. The results of the sampling are shown in the table below and sample locations are shown on the attached figure (Document 7: September 2023 Sample Points). SP-2 is adjacent to an existing tank and excavation was limited due to safety concerns.

Osborn Heirs Company Mattie Price Tank Battery Soil Sample Results (mg/Kg): Cardinal Laboratories H235191 09/22/2023										
Sample ID	**Chloride**	**GRO**	**DRO**	**EXT DRO**	**TPH**	**Benzene**	**Toluene**	**Ethyl benzene**	**Total Xylenes**	**Total BTEX**
SP-1, 5 ft.	80	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300
SP-2, 2 ft.	96.0	**858**	**7,080**	1,330	**7,938**	<0.050	<0.050	0.785	4.01	4.80
SP-3, 5 ft.	144	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300

Osborn Heirs Company Mattie Price Tank Battery Soil Sample Results (mg/Kg): Cardinal Laboratories H235242 09/25/2023										
Sample ID	**Chloride**	**GRO**	**DRO**	**EXT DRO**	**TPH**	**Benzene**	**Toluene**	**Ethyl benzene**	**Total Xylenes**	**Total BTEX**
SP-4, 3 ft.	96.0	<10.0	<10.0	<10.0	<30.0	<0.050	<0.050	<0.050	<0.150	<0.300

Bold – Exceeds Closure Criteria for this location

South excavation involved constructing a trench between the south battery fence and flow lines on the south side of the two east-west tanks. In addition, Plains Pipeline has a buried east-west pipeline just outside the south battery fence and a north-south connection just east of the east tank. Another north-south pipeline crosses the property east of the concrete pump pad. To dig the trench, a temporary ramp was constructed beginning at the south side of the east tank and continuing to the area of the concrete pump pad. Drone photographs taken on February 6, 2024 (Documents 8 and 9) and other photographs accompanying this report show the trench and existing infrastructure that prevents current remediation in this area.

Upon completion of excavation, stockpiled impacted soil was transported to the Lazy Ace Landfarm west of Eunice. The facility is an OCD approved disposal facility holding Permit #NM1-041. The impacted material was loaded into 22 cubic yard belly dump trucks for transport. Disposal records show 46 loads were transported for an estimated total of 1,012 cubic yards of material disposed at the landfarm.

On October 11, 2023, a representative from SESI was present at the site to collect confirmatory samples from the south excavation. Confirmatory samples were preserved, packaged, and transported to Cardinal Laboratories via Chain of Custody for analyses of the following constituents: Chloride (CL), Total Petroleum Hydrocarbons (TPH), and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). Samples were analyzed using the analytical methods described above. The table below is a recap and tabulation of the results from the Cardinal Laboratories analyses: All five samples had a large exceedance of the TPH limit. The specific locations were not mapped and included here only to show further removal of impacted material from the south excavation was necessary.

Osborn Heirs Company
Mattie Price Tank Battery
Soil Sample Results (mg/Kg): Cardinal Laboratories H235547 10/11/2023

Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
Comp S-1 South Hole N. Wall	32.0	**887**	**32,400**	5,090	**33,287**	<0.050	<0.050	<0.050	3.13	3.13
Comp S-2 S. Hole Ramp	16.0	**1,000**	**24,000**	3,930	**28,930**	<0.050	<0.050	<0.050	3.80	3.80
Comp S-3 South Hole S. Wall	16.0	**558**	**22,600**	3,680	**26,838**	<0.050	<0.050	<0.050	2.15	2.15
Comp S-4 South Hole W. Wall	16.0	**304**	**16,800**	3,030	**20,134**	<0.050	<0.050	<0.050	1.22	1.22
Comp S-5 Bottom	48.0	**351**	**8,220**	1,280	**9,851**	<0.050	<0.050	<0.050	2.24	2.24

Bold – Exceeds Closure Criteria for this location

On October 12, 2023 the SESI representative was onsite and witnessed a portion of the south side of the north excavation had collapsed into the excavation. As a result of recent precipitation, the north excavation was muddy and too wet to collect samples requiring that the confirmation sampling in that area be postponed.

The follow-up date selected for confirmation sampling of the north excavation was October 20, 2023. Notice of Confirmation Sampling was provided to the NM OCD at least 48 hours in advance as required to provide an opportunity to attend and observe. The sampling area was generally rectangular with dimensions of 68 ft. x 19 ft. for a total of 1,292 sq. ft. Because OCD requires that one sample be collected for every 200 sq.ft., seven (6.42 rounded up to 7) samples needed to be obtained from this area. Ten locations were selected which included samples from both bottom and side wall locations. Confirmatory samples were preserved, packaged, and transported to Cardinal Laboratories via Chain of Custody for analyses of the following constituents: Chloride (Cl), Total Petroleum Hydrocarbons (TPH), and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). Laboratory analysis methods were those previously described above.

The attached table provides the analytical results of the North Area sampling that occurred on October 20. Sampling locations are shown in the attached figure (Document 10: Confirmation Sample and Borehole Locations). Two locations exceeded TPH closure criteria. One wall sample (N-3) adjacent to the west tank had TPH in excess of 10,300 mg/Kg. The second sample (N-9) was a north wall sample near the northwest corner of the north excavation. That area was dug out and the area resampled on November 7 (N-10, N-11). Though TPH was less than 2,500 mg/Kg, the bottom sample at location (N-8) exceeded the GRO+DRO criteria of 1,000 mg/Kg. That location was not re-excavated and the soil is to be removed at a later date.

Osborn Heirs Company Mattie Price Tank Battery North Area Soil Confirmation Sample Results (mg/Kg): Cardinal Laboratories H235776 10/20/2023										
Sample No.	**Sample ID**	**Date**	**Chloride**	**GRO**	**DRO**	**EXT DRO**	**GRO+ DRO**	**TPH**	**Benzene**	**Total BTEX**
N-1	NCS-EW, 3' BLS	10/20/23	96.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-2	NCS-NW-1,3' BLS	10/20/23	80.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-3	NCS-SW-1,4' BLS	10/20/23	48.0	629	8,480	1,230	**9,109**	**10,339**	<0.050	<0.300
N-4	NCS-B-1, 5' BLS	10/20/23	96.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-5	NCS-B-2, 5' BLS	10/20/23	32.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-6	NCS-B-3, 5' BLS	10/20/23	80.0	<10.0	660	291	660	951	<0.050	<0.300
N-7	NCS-SW-2,3' BLS	10/20/23	32.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-8	NCS-B-4,4' BLS	10/20/23	112	36.9	1,740	334	**1,777**	2,111	<0.050	<0.300
N-9	NCS-NW-2, 2'8" BLS	10/20/23	384	<10.0	2,920	903	**2,920**	**3,823**	<0.050	<0.300
N-10	NCS-NW-2, 1.5' BLS	11/07/23	608	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.300
N-11	NCS-NW-2, 3.2' BLS	11/07/23	576	<10.0	28.3	<10.0	28.3	28.3	<0.050	<0.300
N-12	NCS-WW, 2'4" BLS	10/20/23	368	<10.0	532	188	532	720	<0.050	<0.300
NMOCD Closure Criteria, GW>100 feet			20,000	- -	- -	- -	1,000	2,500	10	50

Notes: BLS-Below land surface, B-Bottom sample, **Bold**-exceeds closure criteria, NCS-North area confirmation sample, EW-North area, east excavation wall, NW-North area, north excavation wall, SW-North area, south excavation wall, WW-North area, west excavation wall. Cardinal Lab report ID for 11/07 samples H236135.

November 7, 2023 was the date selected for sampling of the south excavation area. As in the North Area, OCD was notified in advance of the sampling date. This area also is generally rectangular with an average width of approximately 18 ft. and length of 95 ft. The area is estimated at 1,710 sq. ft. and at least nine samples would need to be collected to comply with the 200 sq. ft. per sample requirement. As above a combination of wall and bottom samples was obtained for a total of thirteen. Confirmatory samples were preserved, packaged, and transported to Cardinal Laboratories via Chain of Custody for analyses of the following constituents: Chloride (Cl), Total Petroleum Hydrocarbons (TPH), and Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). The analytical results are shown in the below South Area table and locations are shown on Document XX.

Nine of the thirteen south excavation samples greatly exceed both the GRO+DRO and TPH closure criteria for this location. The south excavation depth ranges from 8 to 11 feet and is surrounded by flowlines and Plains pipelines. At the west end there is a concrete pad with a circulating pump and other infrastructure which limit the area of contaminated soil that could be removed. All three bottom samples exceed the established limits. With one exception, the samples collected from the north and south walls exceed the limits. However, it is not feasible to excavate either wall any deeper due to the presence of infrastructure. The far western portion of the southern excavation sample yields results that are within acceptable limits, except for the area beneath the transfer pump concrete pad on the eastern and southern sides, which exceed the limits.

Osborn Heirs Company Mattie Price Tank Battery South Area Soil Confirmation Sample Results (mg/Kg): Cardinal Laboratories H236135 11/07/2023										
Sample No.	Sample ID	Date	Chloride	GRO	DRO	EXT DRO	GRO+ DRO	TPH	Benzene	Total BTEX
S-1	SCS-B-1,10'BLS	11/07/23	16.0	121	2,650	330	**2,771**	**3,101**	<0.050	1.65
S-2	SCS-SW-1, 5'BLS	11/07/23	80.0	<10.0	17.0	<10.0	17.0	17.0	<0.050	<0.300
S-3	SCS-NW-4,4.3'BLS	11/07/23	32.0	3,780	35,700	4,150	**39,480**	**46,630**	<0.200	26.6
S-4	SCS-B-2, 11'BLS	11/07/23	16.0	2,850	12,600	1,750	**15,450**	**17,200**	<0.100	17.4
S-5	SCS-SW-2, 5'BLS	11/07/23	32.0	1,640	19,600	2,570	**21,240**	**23,810**	<0.050	9.35
S-6	SCS-SW-3, 9'BLS	11/07/23	16.0	287	9,550	1,290	**9,837**	**11,127**	<0.050	2.35
S-7	SCS-NW-3,4.2'BLS	11/07/23	16.0	<10.0	125	35.8	125	161	<0.050	<0.300
S-8	SCS-NW-2,5.9'BLS	11/07/23	16.0	130	7,630	1,090	**7,760**	**8,850**	<0.050	1.06
S-9	SCS-NW-1,3.4'BLS	11/07/23	32.0	898	17,100	3,010	**17,998**	**21,008**	<0.050	6.70
S-10	SCS-SW-4, 6'BLS	11/07/23	32.0	2,490	22,900	3,220	**26,390**	**28,610**	<0.050	12.7
S-11	SCS-B-3, 8' BLS	11/07/23	64.0	173	4,100	782	**4,273**	**5,055**	<0.050	2.53
S-12	SCS-SW-5, center,4.5'BLS	11/07/23	384	<10.0	324	99.2	324	423	<0.050	<0.300
S-13	SCS-WW, 2.7'BLS	11/07/23	192	<10.0	89.8	11.2	89.8	101	<0.050	<0.300
NMOCD Closure Criteria, GW>100 feet			20,000	- -	- -	- -	1,000	2,500	10	50

Notes: BLS-Below land surface, B-Bottom sample, **Bold**-exceeds closure criteria, SCS-South area confirmation sample, NW-South area, north excavation wall, SW-South area, south excavation wall, WW-South area, west excavation wall..

VII. Work Performed 2024

The closure report application dated March 29, 2024 was completed and submitted to OCD. It included a request for deferral due to extensive existing infrastructure placement preventing remedial activities mainly excavation to be performed safely. On May 28 Osborn Heirs was notified by OCD that the application was rejected for several reasons, mainly that the sampling impacts had not been fully delineated nor had vertical impacts been delineated at the facility. Following work performed in June 2024 and described below, the response to the OCD comments was prepared and is provided at the conclusion of this report.

In an attempt to define vertical extent, on June 5 SESI performed further excavation in the south excavation at the location marked S-4 on the facility figure. A trackhoe was mobilized and used for the additional digging which continued to its maximum depth. The total depth excavated (south excavation bottom plus trackhoe bucket reach) was 26 feet below land surface. A sample was obtained from the backhoe bucket and submitted for analysis. The results are shown in the table below.

Osborn Heirs Company Mattie Price Tank Battery Soil Sample Results (mg/Kg): Cardinal Laboratories H243210 06/05/2024										
Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
SP-4, 26' BLS	48.0	**548**	**5,070**	613	**6,231**	<0.050	<0.050	1.00	9.46	10.5

A review of the results shows that vertical delineation of hydrocarbon impacts in the south excavation had not been established. To determine vertical extent it was necessary that drilling of deep boreholes was required and Enviro-Drill of Albuquerque was engaged to perform the work. Prior to their arrival four locations were marked for drilling, two each in the north and south excavations. The borehole locations are shown on the facility figure

(Document 10: Confirmation Sample and Borehole Locations). Also, prior to drilling the south excavation had been backfilled and leveled with clean caliche to provide access and a stable platform for drilling. On June 24 Enviro-Drill mobilized to the Mattie Price location with their CME-75 Hollow Stem Auger drilling rig. Sampling was performed using a 5-foot split spoon core barrel. Borehole 1 was drilled on June 24, Borehole 2 on June 25 and Boreholes 3 and 4 on June 26. The two tables below provide the sample analytical results for the boreholes.

Osborn Heirs Company Mattie Price Tank Battery, South Excavation Vertical Extent Drilling Results (mg/Kg)): Cardinal Laboratories, H243755, 06/24/2024										
Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
BH-1, 30 ft.	32.0	<10.0	1,690	344	2,034	<0.050	<0.050	<0.050	<0.150	<0.300
BH-1, 35 ft.	32.0	14.8	1,720	244	1,978	<0.050	<0.050	<0.050	<0.150	<0.300
BH-1, 40 ft.	16.0	<10.0	10.6	<10.0	10.6	<0.050	<0.050	<0.050	<0.150	<0.300
BH-1, 45 ft.	16.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300
BH-1, 50 ft.	32.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300

Osborn Heirs Company Mattie Price Tank Battery, South Excavation Vertical Extent Soil Boring Results (mg/Kg): Cardinal Laboratories, H243802, 06/25/2024										
Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
BH-2, 10 ft.	64.0	<10.0	36.6	<10.0	36.6	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 15 ft.	64.0	<10.0	337	118	455	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 20 ft.	96.0	<10.0	26.3	<10.0	26.3	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 25 ft.	48.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 30 ft.	64.0	<10.0	109	30.5	140	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 35 ft.	48.0	<10.0	60.8	<10.0	60.8	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 40 ft.	32.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300
BH-2, 45 ft.	48.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300

Note: The south excavation was backfilled to the surface with clean caliche fill to allow access for borehole drilling. At the BH-2 location, clean backfill placement was 10 feet above the original excavation bottom.

Osborn Heirs Company Mattie Price Tank Battery, North Excavation Vertical Extent Drilling Results (mg/Kg): Cardinal Laboratories, H243839, 06/26/2024										
Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
BH-3, 15+4 ft.	32.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300
BH-3, 20+4 ft.	32.0	20.7	327	60.9	409	<0.050	<0.050	<0.050	<0.150	<0.300
BH-3, 30+4 ft.	32.0	<10.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150
BH-3, 35+4 ft.	16.0	<10.0	96.7	18.3	115	<10.0	<0.050	<0.050	<0.050	<0.150
BH-3, 40+4 ft.	48.0	<10.0	16.4	<10.0	16.4	<10.0	<0.050	<0.050	<0.050	<0.150
BH-3, 45+4 ft.	32.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300

Note: The north excavation was not backfilled; starting depths are approximately 4 feet below land surface. Cardinal Laboratories results show depth below excavation surface. Actual depths are shown in the above table.

Osborn Heirs Company Mattie Price Tank Battery, North Excavation Vertical Extent Drilling Results (mg/Kg): Cardinal Laboratories, H243839, 06/26/2024										
Sample ID	Chloride	GRO	DRO	EXT DRO	TPH	Benzene	Toluene	Ethyl benzene	Total Xylenes	Total BTEX
BH-4, 15+4 ft.	32.0	21.9	1,050	172	1,254	<0.050	<0.050	<0.050	<0.150	<0.300
BH-4, 20+4 ft.	32.0	<10.0	498	78.5	576	<0.050	<0.050	<0.050	<0.150	<0.300
BH-4, 25+4 ft.	32.0	<10.0	216	24.5	240	<0.050	<0.050	<0.050	<0.150	<0.300
BH-4, 30+4 ft.	64.0	<10.0	72.2	<10.0	72.2	<0.050	<0.050	<0.050	<0.150	<0.300
BH-4, 35+4 ft.	32.0	<10.0	22.7	<10.0	22.7	<0.050	<0.050	<0.050	<0.150	<0.300
BH-4, 40+4 ft.	64.0	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300

Note: The north excavation was not backfilled; starting depths are approximately 4 feet below land surface. Cardinal Laboratory results show depth below excavation surface. Actual depths are shown in the above table.

A review of the results shows the maximum depth of hydrocarbon impacts range between 35 and 44 feet below land surface. At Boreholes 2 and 3 no hydrocarbon impacts were seen at 25 and 34 feet, respectively, but reappeared in the next 5 foot deeper sample. The most likely explanation for these results is the presence of preferential pathways in the subsurface caused by natural fractures in the caliche. There were no chloride impacts at any depth in any borehole.

VIII. Discussion

Below is a discussion of the sampling results with notations of "deferred" and "further excavation." The specific reason for an infrastructure deferral is provided with the result.

North Excavation

Of the 10 samples collected, 7 initially passed, 1 passed following additional work and 2 are deferred.

North Excavation – passed following additional work.
N-9 (NCS NW-2, 2' 8" below land surface [BLS]), TPH 3,823 mg/kg, the wall sample passed following additional excavation and resampling at 1.5' (N-10) and 3.2' (N-11) on 11/07. BH-4 was drilled between samples N-8 and N-9, and vertical impacts were delineated.

North Excavation – Deferred
N-3 (NCS SW-1, 4' BLS), TPH 10,339 mg/kg, wall sample, excavation cannot be closer than 5 ft. from the vertical storage tank. BH-3 was drilled adjacent to N-3 and vertical impacts were delineated.
N-8 (NCS B-4, 4' BLS), TPH passes, GRO+DRO at 1,777 exceeds criteria. Bottom sample, this location is near the west end of the north area and will be further excavated at the time of remediation following removal of other infrastructure.

South Excavation

Of the 13 samples collected, 4 passed, 6 were deferred due to infrastructure and 3 needing further excavation were deferred due to excavation depth safety concerns.

South Excavation – Deferred
S-3 (SCS NW-4, 4.3'BLS), TPH 43,630 mg/kg, wall sample location beneath existing south crude oil transfer pipe.
S-5 (SCS SW-2, 5' BLS), TPH 23,810 mg/kg, wall sample location adjacent to south battery berm, fence and E/W Plains pipeline.

S-6 (SCS SW-3, 9' BLS), TPH 11,127 mg/kg, wall sample location is below S-5, 4 feet deeper, adjacent to south battery berm, fence and E/W Plains pipeline
S-8 (SCS NW-2, 5.9' BLS), TPH 8,850 mg/kg, wall sample location close to existing north crude oil transfer pipe and adjacent to Plains north-south pipeline.
S-9 (SCS NW-1, 3.4' BLS), TPH 21,008 mg/kg, wall sample taken beneath edge of concrete pad holding a crude oil transfer pump.
S-10 (SCS SW-4, 6' BLS), TPH 28,610 mg/kg, wall sample, location adjacent to south battery berm, fence and E/W Plains pipeline.

South Excavation – bottom samples needing further excavation, deferred; due to their depth and proximity to the wall on the south and infrastructure on the north side, it is unsafe to excavate deeper at this time.
S-1 (SCS B-1, 10' BLS), TPH 3,101 mg/kg
S-4 (SCS B-2, 11' BLS), TPH 17,200 mg/kg
S-11 (SCS B-3, 8' BLS), TPH 5,055 mg/kg

IX. Response to NMOCD Comments

Below is the SESI response to OCD's May 28 comments. Please refer to the attached figure (Document 10: Confirmation Sample and Borehole Locations) and the above tables showing results of the vertical extent drilling):

1. *Site map not to scale per 19.15.29.11A(1)NMAC.*
   The attached map revision shows a figure scale for 11x17 inch paper and a graphical scale for use with any other size presentation.
2. *Site map does not show subsurface pipeline location mentioned toward the deferral request in the southern excavation portion per 19.15.29.11A(1)NMAC.*
   Plains Pipeline locations are shown on the attached revision.
3. *Have not fully delineated within the northern excavation from map sample IDs #3, #8, and #9.*
   North map sample #3 is a wall sample adjacent to a tank and could not be further delineated at this time due to infrastructure and deferral is requested. However, BH-3 is adjacent to #3 and vertical hydrocarbon impacts were delineated. Wall sample #9 was excavated to 4 feet and adjacent wall samples #10 and #11 pass closure criteria. Bottom sample #8 passes TPH criteria but not GRO+DRO criteria; it is being deferred and will be further excavated at the time of remediation following removal of other infrastructure. BH-4 is between samples #8 and #9, and vertical impacts were delineated.
4. *Have not fully delineated within the southern excavation from map samples ID's #1, #5, #6, #8, #9 and #10.*
   South map number's 5, 6, 8 and 9 are wall samples where due to infrastructure further delineation currently is not possible and deferral is requested. Map sample #1 delineation is discussed below.
5. *Have not delineated vertically with the southern excavation from map sample IDs #4 and #11.*
   The BH-1 location was selected after surface excavation at S-1 showed hydrocarbon impacts at a depth greater than 26 feet. S-4 is adjacent to S-1 and a second borehole there was not drilled. S-11 is close to the wall beneath the transfer pump concrete pad and within several feet of the N-S Plains Pipeline preventing additional delineation at this time. BH-2 is near the two east-west tanks and shows hydrocarbon impacts at the surface and again from 30 to 35 feet.
6. *Osborn Heirs has 90-days (August26, 2024 to submit to OCD its appropriate or final closure report*.
   With the information included in this revised closure report, Osborn Heirs is requesting approval of deferral as presented in the C-141 for incident ID (n#)nRM1926758725.

X. Request for Deferral

The OCD-approved May 2023 revised Mattie Price work plan "proposes to confirm the horizontal remediation through bottom and sidewall soil samples, simultaneously throughout the removal of impacted soils."

SESI has executed remedial measures at this location to the extent of our capabilities, in adherence to and with the approval of the New Mexico Oil Conservation Division (NMOCD). Additionally, because of the presence of infrastructure such as tanks and flowlines that restrict the ability to excavate further in specific areas, a deferral has been requested for the south excavation on all sides and the bottom. For the north excavation a deferral has been requested only for the south wall and a bottom location on the west end of that excavation.

VIII. Supplemental Documentation

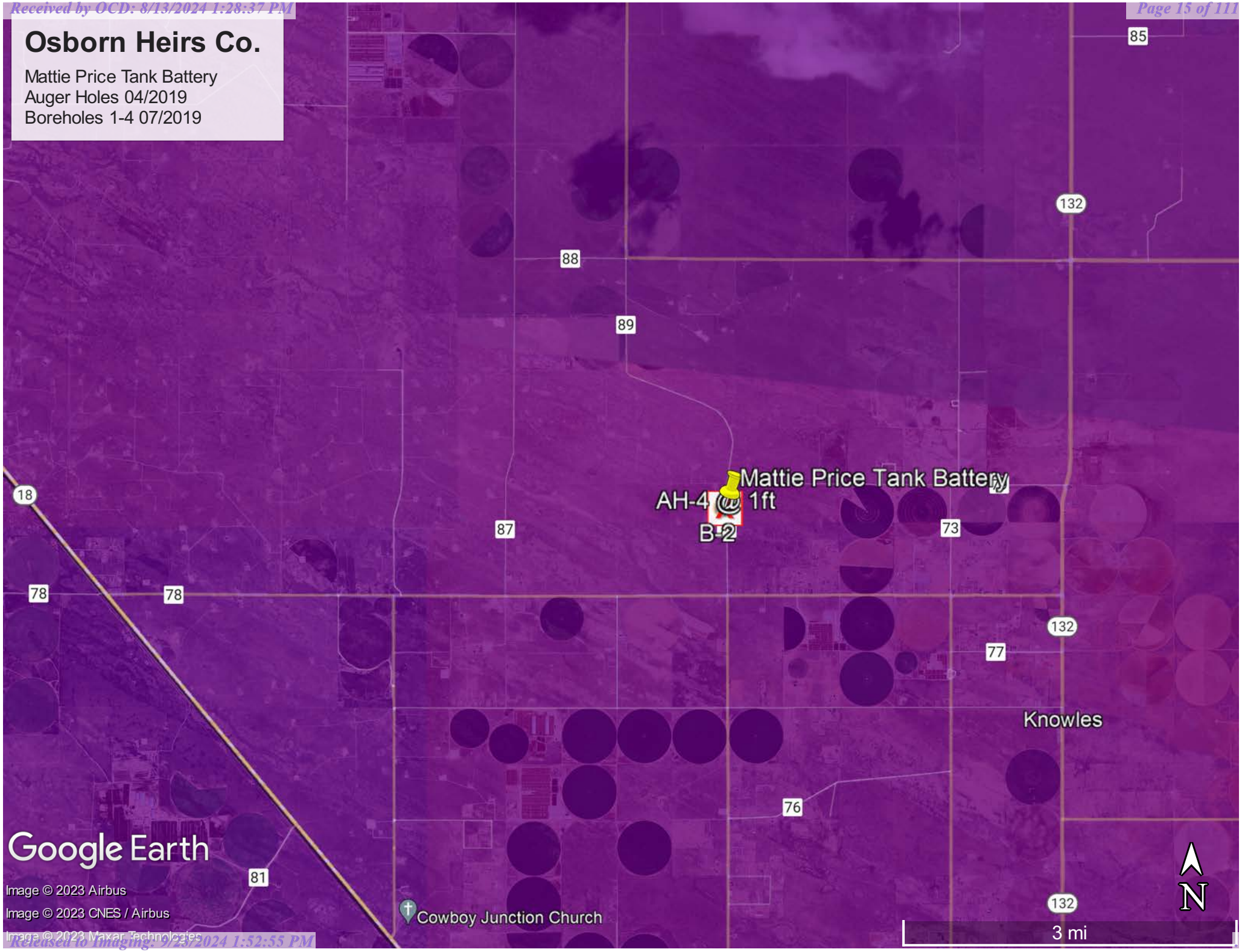
Document 1: Vicinity Map
Document 2: BLM Cave Karst Map
Document 3: OSE Information
Document 4: TOW Determination Memo
Document 5: 2019 Auger and Borehole Locations
Document 6: Drone Photo, 2023-09-14
Document 7: September 2023 Sample Points
Document 8: Drone Photo, East Looking West, 2024-02-06
Document 9: Drone Photo North Looking South, 2024-02-06
Document 10: Confirmation Sample and Borehole Locations
Document 11: Site Photographs
Document 12: Correspondence
Document 13: Lab Analyses

Mattie Price Battery

Vicinity Map (POD locations)

Osborn Heirs Co.

Mattie Price Tank Battery
Auger Holes 04/2019
Boreholes 1-4 07/2019



New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	POD Sub-basin Code	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 00904	L	LE	2	1	3	06	17S	38E	669072	3637520*	130	75	55

Average Depth to Water: **75 feet**

Minimum Depth: **75 feet**

Maximum Depth: **75 feet**

Record Count: 1

Basin/County Search:

Basin: Lea County **County:** Lea

PLSS Search:

Section(s): 6 **Township:** 17S **Range:** 38E

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

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

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

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

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

POD Number	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
L 00709	L	LE	3	3	1	05	17S	38E	670452	3637751*	130	40	90
L 00710	L	LE		1	1	05	17S	38E	670546	3638255*	130		
L 06961	L	LE	4	3	1	05	17S	38E	670652	3637751*	130	70	60

Average Depth to Water: **55 feet**

Minimum Depth: **40 feet**

Maximum Depth: **70 feet**

Record Count: 3

Basin/County Search:

Basin: Lea County **County:** Lea

PLSS Search:

Q4: NW **Section(s):** 5 **Township:** 17S **Range:** 38E

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

May 23, 2020

To: File
From: David G Boyer P.G.

Subject: Top of Water Determination

On Wednesday May 17 I accompanied Bob Allen, SESI President, and Hayden Able, SESI technician, to a windmill on property owned by Mr. Phillip Berry to determine if groundwater was present greater than a depth of 100 feet at that location. The location of the windmill is 900 feet from the Mattie Price battery location (see attached map). SESI had received permission from Mr. Berry to visit the windmill location.

The windmill is located at GPS decimal coordinates 32.865462 degrees North and -103.180639 degrees West. New Mexico State Plane Coordinates are SE/4 NE/4, Section 6, T17S, R38E. No record of the windmill was found in the NM Office of the State Engineer water well database.

Water level measurements were made with a Geotech Water Level meter with 101 feet of tape and a steel tip probe at the end (see photos). The meter was tested for operation before leaving the SESI office and again on arrival at the location. The probe and tape were lowered into the well to its maximum length without detecting groundwater.

As a result of this determination and location of the windmill with respect to the battery, closure criteria for remediation of impacted soils at the Mattie Price battery will be those constituent levels listed for sites having groundwater greater than 100 feet below ground surface.

David G. Boyer, P.G.
Hydrogeologist
Safety & Environmental Solutions, Inc.
703 East Clinton St.
P.O. Box 1613
Hobbs, New Mexico 88241
(575) 397-0510 (office)
(575) 393-4388 (fax)
(575) 390-7067 (cell)


Mattie Price
Write a description for your map.
Legend
Mattie Price
Sample Point 5
Sample Point 4
Sample Point 3
Windmill
Google Earth
700 ft
N


May 17, 2023 at 11:14:14 AM
32° 51' 55.915" N, 103° 10' 52.301" W
Lea County
N
W
E
S


May 17, 2023 at 11:14:31 AM
32° 51' 55.915" N, 103° 10' 52.301" W
Lea County
N
W
E
S


May 17, 2023 at 11:14:37 AM
32° 51' 55.915" N, 103° 10' 52.301" W
Lea County
N
W
E
S


May 17, 2023 at 11:16:46 AM
32° 51' 55.584" N, 103° 10' 52.321" W
Lea County
GEOTECH ENVIRONMENTAL EQUIPMENT, INC.
1-800-833-7958
On/Sensitivity
Water Level Meter
geotech
WWW.GEOTECHENV.COM
Serial# 4913
N
W
E
S


May 17, 2023 at 11:17:31 AM
32° 51' 55.584" N, 103° 10' 52.321" W
Lea County
N
W
E
S

Mattie Price Battery

Site Remediation Plan

Legend

- Mattie Price Tank Battery
- Soil Bore
- Spill Area

Mattie Price Tank Battery

AH 4 @ 1ft

AH-3 @ 1ft

AH-2 @ 1.5ft

AH-1 to Refusal

BH-3

BH-2

BH-4

BH-1

Survey Google Earth

N

50 ft

09-22-23 Sample Points

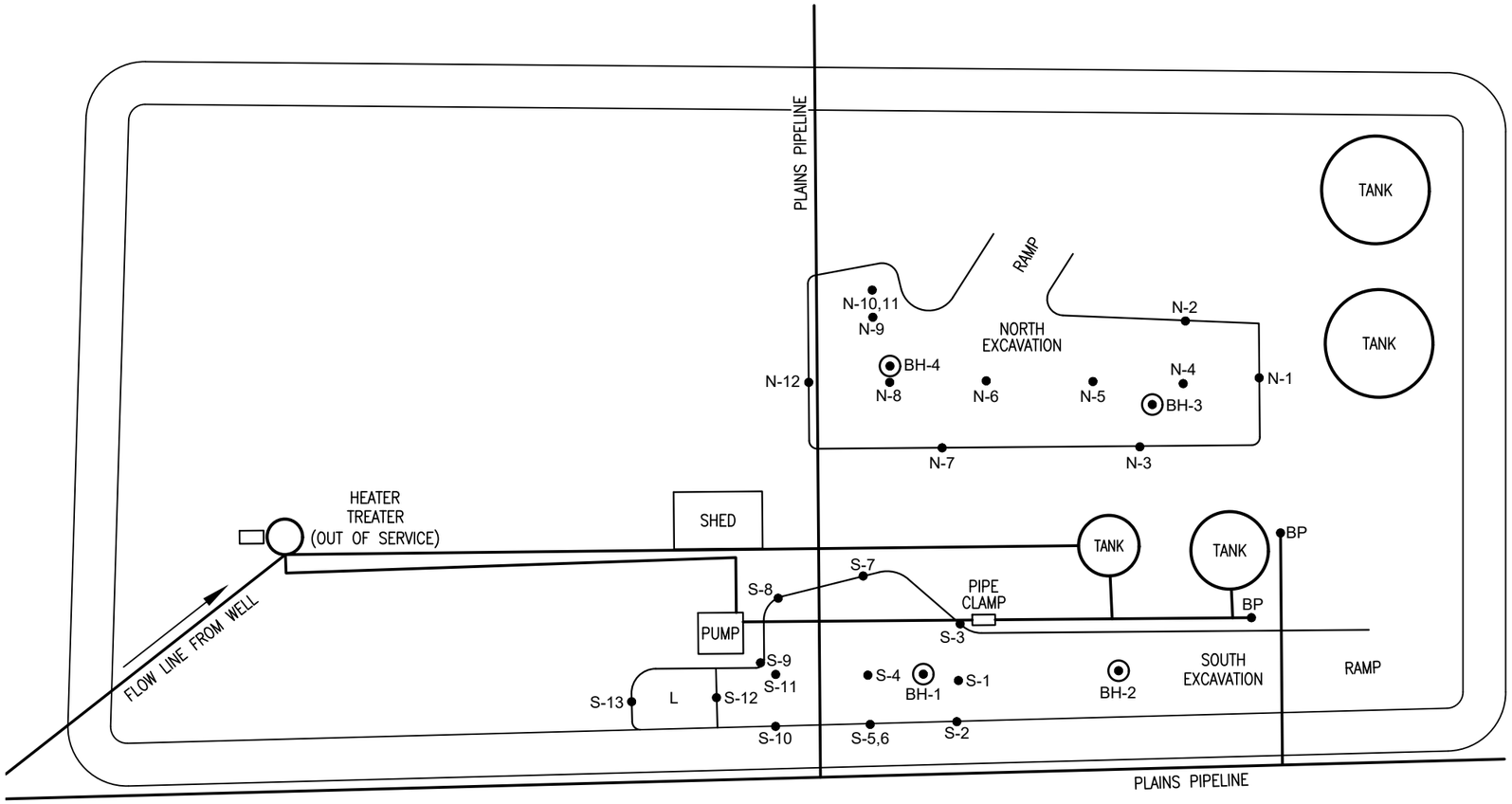
Legend
SP

SP 4
SP 1
SP 3
SP 2

Survey
Google Earth

N

70 ft



NOTE:

The south excavation ramp was backfilled to the surface with clean caliche fill to allow access for borehole drilling.

The north excavation was not backfilled; starting depth is approximately 4 feet below land surface.

10' 0 10' 20' 40'
SCALE

N
W E
S

LEGEND:

BH-2⊙	VERTICAL BOREHOLE LOCATION
N-1●	NORTH AREA CONFIRMATION SAMPLE
S-1●	SOUTH AREA CONFIRMATION SAMPLE
BP	BULL PLUG LOCATION
L	ROCK LEDGE

DRAWING TITLE: CONFIRMATION SAMPLE AND BOREHOLE LOCATIONS	OSBORN HEIRS CO. MATTIE PRICE TANK BATTERY		
	DRAWN BY: EJS	CHK'D BY: DB	SCALE: 1" = 20'-0"
	DATE: 8-6-24	APPR BY: -	DRAWING NUMBER: MPTB_01.DWG
			REV.: 0

September 22, 2023

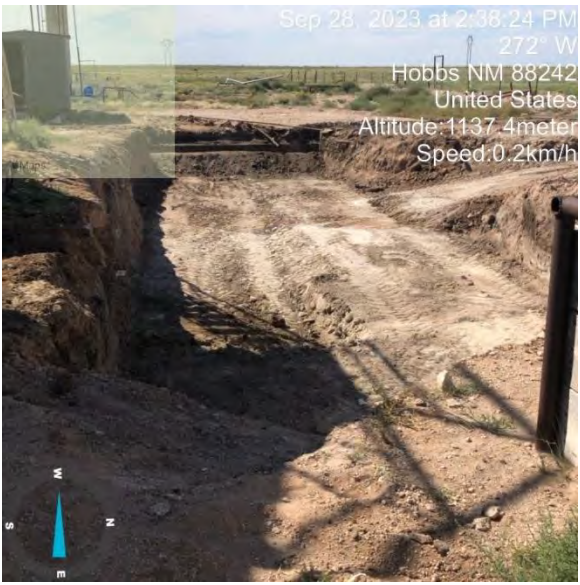
September 22, 2023

September 22, 2023

September 25, 2023

September 28, 2023

September 28, 2023



October 9, 2023

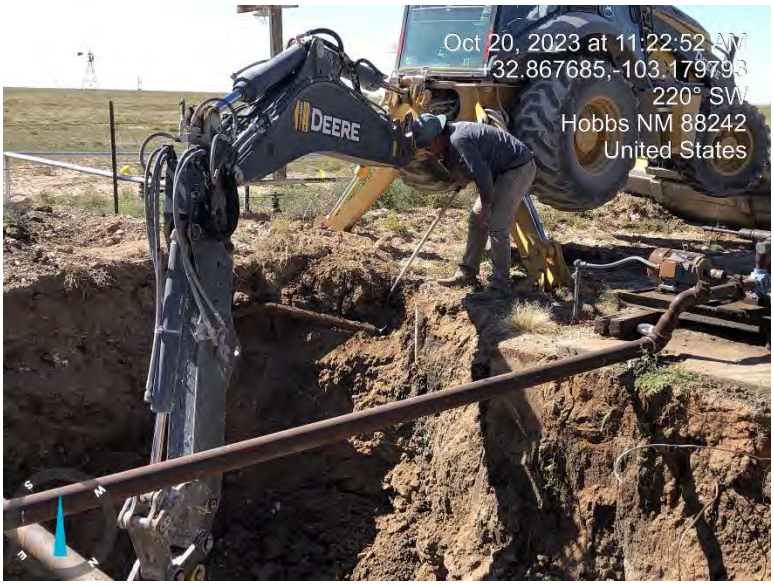

Oct 9, 2023 at 10:37:26 AM
32° 52' 3.226" N, 103° 10' 47.545" W
Lea County
N
E
S
W

October 11, 2023


Oct 11, 2023 at 11:39:38 AM
86° E
Hobbs NM 88242
United States
Altitude:1137.4meter
Speed:2.6km/h


Oct 11, 2023 at 11:40:06 AM
253° W
Hobbs NM 88242
United States
Altitude:1137.4meter
Speed:0.0km/h
Maps

October 20. 2023



October 26, 2023

October 26, 2023

November 7, 2023

November 9, 2023

Mattie Price Battery South Excavation June 2024

South Excavation Trench looking west, E-W Plains Pipeline south of berm

Trench and west tank

Looking north showing hydrocarbon impacts, north-south Plains Pipeline in foreground

South berm wall showing hydrocarbon impacts, delineation excavation at right

Southwest corner of trench, north-south Plains Pipeline overhead

Northwest corner of trench showing hydrocarbon impacts below transfer pump and concrete pad

Surface flow lines above north-south Plains Pipeline

View looking northeast, hydrocarbon impacts north of flow line
not accessible for excavation

Hydrocarbon impacts vicinity of sample location S-3. Infrastructure prevents further excavation

Vertical delineation attempt at sample location S-4, hydrocarbon impacts at depth

Preparing south excavation for borehole drilling with clean caliche backfill

Placement and compaction using bulldozer

South excavation compacted backfill prepared for drilling of boreholes #1 and #2

Mattie Price Battery North Excavation June 2024

North excavation looking west

North excavation looking east

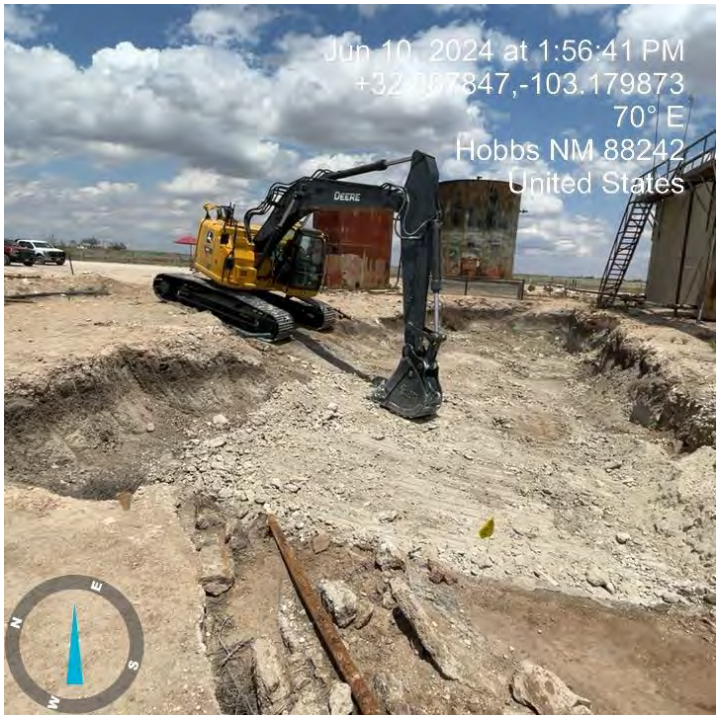
North excavation view looking southeast

North excavation view looking southwest

South sidewall in vicinity of sample location N-3 showing hydrocarbon impacts

South sidewall showing length of hydrocarbon impacts, existing infrastructure prevents further excavation

Unsuccessful attempt of vertical delineation vicinity of sample location N-8, Borehole #4 was drilled at this location



Trackhoe preparing north excavation for drilling

Mattie Price Battery Soil Boring Drilling, June 24-25, 2024


N
NE
E
0
30
60
90
45°NE (T)
32°52'3"N, 103°10'47"W ±13ft
3736ft
Mattie price
25 Jun 2024
07:50:52 MDT
Bore Hole 1 Backfill


N
NE
E
330
0
30
60
90
34°NE (T)
32°52'3"N, 103°10'46"W ±13ft
3735ft
Mattie price
25 Jun 2024
08:08:14 MDT
Battery Bore Hole #2


NW
N
NE
330
0
30
60
20°N (T)
32°52'3"N, 103°10'46"W ±13ft
3726ft
Mattie price
25 Jun 2024
12:44:30 MDT
Bore Hole 2 Plug


S
180
SW
210
W
270
300
241°SW (T) 32°52'4"N, 103°10'46"W ±13ft 3729ft
Mattie price
26 Jun 2024
09:22:20 MDT
Bore Hole 3 Drilling


S
180
210
SW
24
W
270
300
242°SW (T)
32°52'4"N, 103°10'46"W ±13ft
3762ft
Mattie price
26 Jun 2024
11:05:42 MDT
BH-3 Plug


E
90
120
SE
150
S
180
210
146°SE (T)
32°52'4"N, 103°10'47"W ±13ft
3739ft
Mattie price
26 Jun 2024
14:01:01 MDT
Bore Hole 4 Plug

SESI NM

From: Bob Allen <ballen@sesi-nm.com> on behalf of Bob Allen
Sent: Thursday, July 18, 2024 3:43 PM
To: Velez, Nelson, EMNRD
Cc: garyc@osbornheirs.com; David Boyer; lmendenhall@sesi-nm.com
Subject: FW: Response to OCD Comments
Attachments: Vertical Extent Borehole Drilling, June 2024.pdf; Vertical Extent Borehole Map, June 2024.pdf

Nelson, here are the results of the samples taken from the boreholes as well as a map showing the locations of the boreholes and the locations of the above and underground pipelines that restrict the area that can be excavated.

Bob Allen CSP, CHMM
Office: (575) 397-0510
Cell (575) 390-7063

From: David Boyer <dboyer@sesi-nm.com>
Sent: Thursday, July 18, 2024 3:02 PM
To: Bob Allen <ballen@sesi-nm.com>
Subject: Response to OCD Comments

Response to Comments (please refer to the attached map revision and the table showing results of the vertical extent drilling):

1. *Site map not to scale per 19.15.29.11A(1)NMAC.*
   The attached map revision shows a figure scale for 11x17 inch paper and a graphical scale for use with any other size presentation.
2. *Site map does not show subsurface pipeline location mentioned toward the deferral request in the southern excavation portion per 19.15.29.11A(1)NMAC.*
   Plains Pipeline locations are shown on the attached revision.
3. *Have not fully delineated within the northern excavation from map sample IDs #3, #8, and #9.*
   Map sample #3 is a wall sample and could not be further delineated at this time due to infrastructure and deferral is requested. However, BH-3 is adjacent to #3 and vertical hydrocarbon impacts were delineated. BH-4 is between samples #8 and #9, and vertical impacts were delineated.
4. *Have not fully delineated within the southern excavation from map samples ID's #1, #5, #6, #8, #9 and #10.*
   Map #'s 5, 6, 8 and 9 are wall samples where due to infrastructure further delineation currently is not possible and deferral is requested. South map sample #1 delineation is discussed below.
5. *Have not delineated vertically with the southern excavation from map sample IDs #4 and #11.*
   One likely source of the hydrocarbon impacts in the southern excavation is a leak of unknown duration in the pipe from the heater-treater to the east-west tanks shown on the figure. The leak was clamped at the location shown on the figure. The BH-1 location was selected after surface excavation at S-1 showed hydrocarbon impacts at a depth greater than 26 feet. S-4 is adjacent to S-1 and a second borehole there was not drilled. S-11

is close to the wall beneath the transfer pump and close to the N-S Plains Pipeline. BH-2 is east of the clamped pipe and shows hydrocarbon impacts at the surface and again from 30 to 35 feet.

6. *Osborn Heirs has 90-days (August26, 2024 to submit to OCD its appropriate or final closure report.* With the information included in this response to comments, Osborn Heirs is requesting approval of deferral as presented in the C-141 for incident ID (n#)nRM1926758725.

SESI NM

From: Bob Allen <ballen@sesi-nm.com> on behalf of Bob Allen
Sent: Wednesday, June 5, 2024 1:08 PM
To: Velez, Nelson, EMNRD
Cc: garyc@osbornheirs.com; dboyer@sesi-nm.com; office2@sesi-nm.com
Subject: Mattie Price South excavation - vertical extent search

Nelson, we dug to a depth of 26; BGS today searching for the vertical extent of contamination. Our sample at that depth still had a very strong hydrocarbon odor. We are sending the sample for laboratory testing today and should have the results shortly.

The main reason I a writing this email is because we cannot reach any deeper with the track hoe. I am proposing backfilling the existing excavation with tested backfill and bring in a rig to drill and find the vertical extent. Do you have any objections to that approach?

Please let me know what you think of that approach which should reveal the vertical extent needed for the deferment.
Thank you for your time.

Bob Allen CSP, CHMM
575-390-7063

SESI NM

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov> on behalf of Velez, Nelson, EMNRD
Sent: Wednesday, June 5, 2024 1:43 PM
To: Bob Allen
Cc: garyc@osbornheirs.com; dboyer@sesi-nm.com; office2@sesi-nm.com
Subject: Re: [EXTERNAL] Mattie Price South excavation - vertical extent search

Good afternoon Bob,

Thank you for your inquiry. I have no objections to your approach, but please provide me a site sketch, photos if any, as to where you have excavated. Thanks.

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Bob Allen <ballen@sesi-nm.com>
Sent: Wednesday, June 5, 2024 1:07 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: garyc@osbornheirs.com <garyc@osbornheirs.com>; dboyer@sesi-nm.com <dboyer@sesi-nm.com>; office2@sesi-nm.com <office2@sesi-nm.com>
Subject: [EXTERNAL] Mattie Price South excavation - vertical extent search

Nelson, we dug to a depth of 26; BGS today searching for the vertical extent of contamination. Our sample at that depth still had a very strong hydrocarbon odor. We are sending the sample for laboratory testing today and should have the results shortly.

The main reason I a writing this email is because we cannot reach any deeper with the track hoe. I am proposing backfilling the existing excavation with tested backfill and bring in a rig to drill and find the vertical extent. Do you have any objections to that approach?

Please let me know what you think of that approach which should reveal the vertical extent needed for the deferment.
Thank you for your time.

Bob Allen CSP, CHMM
575-390-7063

CARDINAL Laboratories

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

June 07, 2024

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: MATTIE PRICE

Enclosed are the results of analyses for samples received by the laboratory on 06/05/24 16:49.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated 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,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/05/2024	Sampling Date:	06/05/2024
Reported:	06/07/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSB-19-001	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: S - SP-4, 26' BLS (H243210-01)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.94	97.0	2.00	0.568	
Toluene*	<0.050	0.050	06/07/2024	ND	1.95	97.6	2.00	0.0751	GC-NC
Ethylbenzene*	**1.00**	0.050	06/07/2024	ND	1.85	92.3	2.00	0.121	GC-NC1
Total Xylenes*	**9.46**	0.150	06/07/2024	ND	5.74	95.6	6.00	0.189	GC-NC1
Total BTEX	**10.5**	0.300	06/07/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID *243 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	06/07/2024	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**548**	50.0	06/06/2024	ND	227	114	200	1.19	
DRO >C10-C28*	**5070**	50.0	06/06/2024	ND	225	112	200	0.851	
EXT DRO >C28-C36	**613**	50.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane *143 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *129 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions
Project Manager:	Bob Allen
Address:	703 East Clinton, PO Box 1613
City:	Hobbs State: NM Zip: 88240
Phone #:	575 397-0510 Fax #: 575 393-4388
Project #:	05B-19-001 Project Owner:
Project Name:	Mattie Price Battery
Project Location:	N Hobbs
Sampler Name:	

BILL TO

P.O. #:	
Company:	Same
Attn:	
Address:	
City:	
State: Zip:	
Phone #:	
Fax #:	

ANALYSIS REQUEST

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE (2024)	TIME	TPH 8015M	BTEX	Chloride
H243210 1	S-SP-A, 26' BLS	G	1				X				✓		06/25	1655	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: A J Boyer	Date: 06/05 Time: 1649	Received By: aDams
Relinquished By:	Date: Time:	Received By:

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 2.6 / 140

Sample Condition: Cool ☑ Yes ☐ No; Intact ☐ Yes ☐ No

CHECKED BY: (Initials) AD

Phone Result: ☐ Yes ☒ No Add'l Phone #:
Fax Result: ☐ Yes ☐ No Add'l Fax #:

REMARKS: email ballen@sesi-nm.com, aboyer@sesi-nm.com, office2@sesi-nm.com

Rush 48

CARDINAL Laboratories

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

June 26, 2024

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: OSBORN HEIRS

Enclosed are the results of analyses for samples received by the laboratory on 06/25/24 8:45.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	06/26/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 1 - 30' (H243755-01)

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	06/25/2024	ND	1.87	93.5	2.00	5.70	
Toluene*	<0.050	0.050	06/25/2024	ND	2.03	102	2.00	5.22	
Ethylbenzene*	<0.050	0.050	06/25/2024	ND	2.05	103	2.00	4.61	
Total Xylenes*	<0.150	0.150	06/25/2024	ND	6.41	107	6.00	4.29	
Total BTEX	<0.300	0.300	06/25/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/25/2024	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	06/25/2024	ND	203	102	200	5.05	
DRO >C10-C28*	**1690**	10.0	06/25/2024	ND	212	106	200	5.21	
EXT DRO >C28-C36	**344**	10.0	06/25/2024	ND					

Surrogate: 1-Chlorooctane *88.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *110 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	06/26/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 1 - 40' (H243755-02)

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	06/25/2024	ND	1.87	93.5	2.00	5.70	
Toluene*	<0.050	0.050	06/25/2024	ND	2.03	102	2.00	5.22	
Ethylbenzene*	<0.050	0.050	06/25/2024	ND	2.05	103	2.00	4.61	
Total Xylenes*	<0.150	0.150	06/25/2024	ND	6.41	107	6.00	4.29	
Total BTEX	<0.300	0.300	06/25/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	06/25/2024	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	06/25/2024	ND	203	102	200	5.05	
DRO >C10-C28*	**10.6**	10.0	06/25/2024	ND	212	106	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	06/25/2024	ND					

Surrogate: 1-Chlorooctane *89.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	06/26/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 1 - 45' (H243755-03)

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	06/25/2024	ND	1.87	93.5	2.00	5.70	
Toluene*	<0.050	0.050	06/25/2024	ND	2.03	102	2.00	5.22	
Ethylbenzene*	<0.050	0.050	06/25/2024	ND	2.05	103	2.00	4.61	
Total Xylenes*	<0.150	0.150	06/25/2024	ND	6.41	107	6.00	4.29	
Total BTEX	<0.300	0.300	06/25/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	06/25/2024	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	06/25/2024	ND	203	102	200	5.05	
DRO >C10-C28*	<10.0	10.0	06/25/2024	ND	212	106	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	06/25/2024	ND					

Surrogate: 1-Chlorooctane *88.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	06/26/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 1 - 50' (H243755-04)

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	06/25/2024	ND	1.87	93.5	2.00	5.70	
Toluene*	<0.050	0.050	06/25/2024	ND	2.03	102	2.00	5.22	
Ethylbenzene*	<0.050	0.050	06/25/2024	ND	2.05	103	2.00	4.61	
Total Xylenes*	<0.150	0.150	06/25/2024	ND	6.41	107	6.00	4.29	
Total BTEX	<0.300	0.300	06/25/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/25/2024	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	06/25/2024	ND	203	102	200	5.05	
DRO >C10-C28*	<10.0	10.0	06/25/2024	ND	212	106	200	5.21	
EXT DRO >C28-C36	<10.0	10.0	06/25/2024	ND					

Surrogate: 1-Chlorooctane *88.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *86.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/24/2024
Reported:	06/26/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 1 - 35' (H243755-05)

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	06/25/2024	ND	1.87	93.5	2.00	5.70	
Toluene*	<0.050	0.050	06/25/2024	ND	2.03	102	2.00	5.22	
Ethylbenzene*	<0.050	0.050	06/25/2024	ND	2.05	103	2.00	4.61	
Total Xylenes*	<0.150	0.150	06/25/2024	ND	6.41	107	6.00	4.29	
Total BTEX	<0.300	0.300	06/25/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	06/25/2024	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*	**14.8**	10.0	06/25/2024	ND	203	102	200	5.05	
DRO >C10-C28*	**1720**	10.0	06/25/2024	ND	212	106	200	5.21	
EXT DRO >C28-C36	**244**	10.0	06/25/2024	ND					

Surrogate: 1-Chlorooctane *90.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *109 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions	**BILL TO**	
Project Manager:	Bob Allen	P.O. #:	
Address:	703 East Clinton, PO Box 1613	Company:	Same
City:	Hobbs State: NM Zip: 88240	Attn:	Bob Allen
Phone #:	575 397-0510 Fax #: 575 393-4388	Address:	
Project #:	Project Owner:	City:	
Project Name:	~~Mattie Price~~ Osborn Heirs	State: Zip:	
Project Location:	MATTIE PRICE	Phone #:	
Sampler Name:	J. Julian Mendoza	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST		
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 8015	BTEX	CHLORIDES
H243755																	
1	BH1 - 30'	G	1			X					X		6/24/24	2:30	X	X	X
2	BH1 - 40'	"	"			X					X		6/24/24	2:45	X	X	X
3	BH1 - 45'	"	"			X					X		6/24/24	3:00	X	X	X
4	BH1 - 50'	"	"			X					X		6/24/24	3:15	X	X	X
5	BH1 - 35'	"	"			X					X		6/24/24	0240	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 6/24/24 Time: 5:30pm	Received By:	Phone Result: ☐ Yes ☒ No Add'l Phone #:
Leslie Wills		S Rodriguez	Fax Result: ☐ Yes ☒ No Add'l Fax #:
Relinquished By:	Date: 6/25/24 Time: 0845	Received By:	REMARKS: ballen@sesi-NM.com dboyer@sesi-nm.com office2@sesi-nm.com rmartinez@sesi-nm.com RUSH! 24 HR
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	1.9 c #140	Sample Condition Cool: ~~Yes~~ No Intact: ~~Yes~~ No	CHECKED BY: (Initials) SR

CARDINAL Laboratories

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

July 02, 2024

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: MATTIE PRICE

Enclosed are the results of analyses for samples received by the laboratory on 06/25/24 14:50.

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.

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 10' (H243802-01)

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	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	**36.6**	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *82.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.8 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 15' (H243802-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	**337**	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	**118**	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *85.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *79.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 20' (H243802-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	**26.3**	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *81.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *78.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 25' (H243802-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	<10.0	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *85.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *80.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 30' (H243802-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	**109**	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	**30.5**	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 35' (H243802-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	**60.8**	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *85.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 40' (H243802-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	<10.0	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *91.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/25/2024	Sampling Date:	06/25/2024
Reported:	07/02/2024	Sampling Type:	Soil
Project Name:	MATTIE PRICE	Sampling Condition:	Cool & Intact
Project Number:	OSBORN HEIRS	Sample Received By:	Alyssa Parras
Project Location:	HOBBS		

Sample ID: BH2 - 45' (H243802-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/01/2024	ND	2.14	107	2.00	0.136	
Toluene*	<0.050	0.050	07/01/2024	ND	2.25	113	2.00	0.0248	
Ethylbenzene*	<0.050	0.050	07/01/2024	ND	2.24	112	2.00	0.638	
Total Xylenes*	<0.150	0.150	07/01/2024	ND	6.88	115	6.00	0.0124	
Total BTEX	<0.300	0.300	07/01/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/01/2024	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	07/01/2024	ND	181	90.3	200	2.57	
DRO >C10-C28*	<10.0	10.0	07/01/2024	ND	161	80.3	200	4.14	
EXT DRO >C28-C36	<10.0	10.0	07/01/2024	ND					

Surrogate: 1-Chlorooctane *89.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Safety and Environmental Solutions	**BILL TO**
Project Manager: Bob Allen	P.O. #:
Address: 703 East Clinton, PO Box 1613	Company: Same
City: Hobbs State: NM Zip: 88240	Attn: BOB Allen
Phone #: 575 397-0510 Fax #: 575 393-4388	Address:
Project #: Project Owner:	City:
Project Name: Osborn Heirs	State: Zip:
Project Location: Mattie Price	Phone #:
Sampler Name: Julian mendoza	Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TPH 8015	BTEX	chlorides
H243802											✓						
1	BH2 - 10'	G	1			X					X		6-25-24	8:12 am	X	X	X
2	BH2 - 15'					X					X		6-25-24	8:18	X	X	X
3	BH2 - 20'					X					X		6-25-24	8:24	X	X	X
4	BH2 - 25'					X					X		6-25-24	8:50	X	X	X
5	BH2 - 30'					X					X		6-25-24	9:00	X	X	X
6	BH2 - 35'					X					X		6-25-24	9:17	X	X	X
7	BH2 - 40'					X					X		6-25-24	9:29	X	X	X
8	BH2 - 45'					X					X		6-25-24	9:44	X	X	X

Relinquished By: Leslie Wills	Date: 6-25-24 Time: 2:00	Received By:	
Relinquished By:	Date: 6.25.24 Time: 1450	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: #140	2.8c	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☒ No Add'l Phone #:
Fax Result: ☐ Yes ☒ No Add'l Fax #:

REMARKS:
ballen@sesi-NM.com
dboyer@sesi-NM.com
office2@sesi-NM.com
rmartinez@sesi-NM.com
mendozaJulian32@gmail.com

CARDINAL Laboratories

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

July 08, 2024

Bob Allen

Safety & Environmental Solutions

703 East Clinton

Hobbs, NM 88240

RE: OSBORN HEIRS

Enclosed are the results of analyses for samples received by the laboratory on 06/26/24 15:58.

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

Cardinal Laboratories is accreditated 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,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 15' (H243839-01)

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	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	<10.0	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *79.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 20' (H243839-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	GC-NC
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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*	**20.7**	10.0	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	**327**	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	**60.9**	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *97.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *118 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 30' (H243839-03)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	<10.0	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *98.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *119 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 35' (H243839-04)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	GC-NC
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	**96.7**	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	**18.3**	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *95.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *117 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 40' (H243839-05)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**48.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	**16.4**	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *95.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *116 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 3 - 45' (H243839-06)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	<10.0	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *99.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *121 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 15' (H243839-07)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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*	**21.9**	10.0	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	**1050**	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	**172**	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *104 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *127 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 20' (H243839-08)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *100 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	203	101	200	1.95	
DRO >C10-C28*	**498**	10.0	07/02/2024	ND	168	84.2	200	6.19	
EXT DRO >C28-C36	**78.5**	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *100 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *124 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 25' (H243839-09)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *99.2 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	185	92.4	200	3.66	
DRO >C10-C28*	**216**	10.0	07/02/2024	ND	174	87.2	200	13.7	
EXT DRO >C28-C36	**24.5**	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *112 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 30' (H243839-10)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *97.6 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/02/2024	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	07/02/2024	ND	185	92.4	200	3.66	
DRO >C10-C28*	**72.2**	10.0	07/02/2024	ND	174	87.2	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *115 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *118 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 35' (H243839-11)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**32.0**	16.0	07/02/2024	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	07/02/2024	ND	185	92.4	200	3.66	
DRO >C10-C28*	**22.7**	10.0	07/02/2024	ND	174	87.2	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *92.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

Safety & Environmental Solutions
Bob Allen
703 East Clinton
Hobbs NM, 88240
Fax To: (575) 393-4388

Received:	06/26/2024	Sampling Date:	06/26/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	OSBORN HEIRS	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	MATTIE PRICE		

Sample ID: BH 4 - 40' (H243839-12)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/02/2024	ND	1.91	95.4	2.00	5.30	
Toluene*	<0.050	0.050	07/02/2024	ND	1.91	95.3	2.00	6.40	
Ethylbenzene*	<0.050	0.050	07/02/2024	ND	2.04	102	2.00	7.16	
Total Xylenes*	<0.150	0.150	07/02/2024	ND	5.98	99.7	6.00	7.39	
Total BTEX	<0.300	0.300	07/02/2024	ND					

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

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	07/02/2024	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	07/02/2024	ND	185	92.4	200	3.66	
DRO >C10-C28*	<10.0	10.0	07/02/2024	ND	174	87.2	200	13.7	
EXT DRO >C28-C36	<10.0	10.0	07/02/2024	ND					

Surrogate: 1-Chlorooctane *111 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *113 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions
Project Manager:	Bob Allen
Address:	703 East Clinton, PO Box 1613
City:	Hobbs State: NM Zip: 88240
Phone #:	575 397-0510 Fax #: 575 393-4388
Project #:	Project Owner:
Project Name:	Osborn Heirs
Project Location:	mattie Price
Sampler Name:	Juian mendoza

BILL TO

P.O. #:	
Company:	Same
Attn:	BOB Allen
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH 8015	BTEX	chlorides										
H243839	BH3-15'	G	1			X					X		6-26-24	9:20 am	X	X	X										
2	BH3-20'					X					X		6-26-24	9:25	X	X	X										
~~BH3-25'~~						X					X		6-26-24	9:33	X	X	X										
3	BH3-30'					X					X		6-26-24	9:39	X	X	X										
4	BH3-35'					X					X		6-26-24	9:58	X	X	X										
5	BH3-40'					X					X		6-26-24	10:05	X	X	X										
6	BH3-45'					X					X		6-26-24	10:12	X	X	X										
7	BH4-15'					X					X		6-26-24	11:39	X	X	X										
8	BH4-20'					X					X		6-26-24	11:47	X	X	X										
9	BH4-25'					X					X		6-26-24	11:50	X	X	X										

Jm 6-26-24

Relinquished By:	Date: 6-26-24	Received By:	
Leslie Wills	Time: ~~3:09 pm~~ 1558	S Rodriguez	
Relinquished By:	Date:	Received By:	
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other: 2.9c #140

Sample Condition: Cool ☐ Yes ☐ No; Intact ☑ Yes ☐ No

CHECKED BY: (Initials) SR

Phone Result: ☐ Yes ☒ No Add'l Phone #:
Fax Result: ☐ Yes ☒ No Add'l Fax #:

REMARKS:
ballen@sesi-NM.com
dboyer@sesi-NM.com
office2@sesi-NM.com
rmartinez@sesi-NM.com
mendoza Juian32@gmail.com

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	Safety and Environmental Solutions
Project Manager:	Bob Allen
Address:	703 East Clinton, PO Box 1613
City:	Hobbs State: NM Zip: 88240
Phone #:	575 397-0510 Fax #: 575 393-4388
Project #:	Project Owner:
Project Name:	Osborn Heirs
Project Location:	mattie Price
Sampler Name:	Julian mendoza

BILL TO

P.O. #:	
Company:	Same
Attn:	Bob Allen
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH 8015	BTEX	chlorides
H243839																	
10	BH4-30'	G	1			X					X		6-26-24	11:59 PM	X	X	X
11	BH4-35'	1	1			X					X		6-26-24	12:04	X	X	X
12	BH4-40'	1	1			X					X		6-26-24	12:30	X	X	X

Relinquished By:	Date: 6-26-24	Received By:	
Leslie Wills	Time: ~~3:30 PM~~	SRodriguez	
Relinquished By:	Date: 1558	Received By:	
	Time:		

Delivered By: (Circle One) 2.9c #140
Sampler - UPS - Bus - Other:

Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No

CHECKED BY: (Initials) SR

Phone Result: ☐ Yes ☒ No Add'l Phone #:
Fax Result: ☐ Yes ☒ No Add'l Fax #:

REMARKS:
ballen@sesi-nm.com
dboyer@sesi-nm.com
office2@sesi-nm.com
rmartinez@sesi-nm.com
mendozaJulian32@gmail.com

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 372993

QUESTIONS

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nRM1926758725**
Incident Name	**NRM1926758725 MATTIE PRICE @ 0**
Incident Type	**Release Other**
Incident Status	**Deferral Request Received**
Incident Facility	**[fEEM0430853723] Mattie Price Tank Battery**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	MATTIE PRICE
Date Release Discovered	04/05/2019
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Release 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: Overflow - Tank, Pit, Etc. | Well | Crude Oil | Released: 7 BBL | Recovered: 6 BBL | Lost: 1 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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

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

QUESTIONS (continued)

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	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	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
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: Gary Cunningham Title: Engineer Email: garyc@osbornheirs.com Date: 08/13/2024

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 (continued)

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	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)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1000 (ft.) and ½ (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (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)	912
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	46630
GRO+DRO (EPA SW-846 Method 8015M)	39480
BTEX (EPA SW-846 Method 8021B or 8260B)	26.6
Benzene (EPA SW-846 Method 8021B or 8260B)	0.2
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	10/01/2025
On what date will (or did) the final sampling or liner inspection occur	12/01/2025
On what date will (or was) the remediation complete(d)	02/01/2026
What is the estimated surface area (in square feet) that will be reclaimed	19935
What is the estimated volume (in cubic yards) that will be reclaimed	2953
What is the estimated surface area (in square feet) that will be remediated	3298
What is the estimated volume (in cubic yards) that will be remediated	1221
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 (continued)

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	LAZY ACE LANDFARM [fEEM0420827553]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** 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.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Gary Cunningham Title: Engineer Email: garyc@osbornheirs.com Date: 08/13/2024
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 (continued)

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	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	Contamination exist under two water tanks and two production tanks preventing remediation including excavation
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	3298
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	1221
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.	
Enter the facility ID (f#) on which this deferral should be granted	Mattie Price Tank Battery [fEEM0430853723]
Enter the well API (30-) on which this deferral should be granted	30-025-23490 MATTIE PRICE #002
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Gary Cunningham Title: Engineer Email: garyc@osbornheirs.com Date: 08/13/2024

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 (continued)

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	*{Unavailable.}*

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 372993

CONDITIONS

Operator: OSBORN HEIRS CO P.O. Box 17968 San Antonio, TX 78217	OGRID: 16616
	Action Number: 372993
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Deferral is approved. Remediation Due date will be left open until the site has been plugged and abandoned or a major facility deconstruction takes place.	9/23/2024