

Rio State 3 (30-015-33690) Specific Justification for Volumes

The total volume released was 87 bbls of produced oil (68.4 bbls) and water (18.6 bbls). The total volume recovered was 25.5 bbls consisting of 11.5 bbls oil and 14 bbls water.

208.8 bbl tank (1.16 bbl/in)

Date	Gauge	Bbbls	Oil	Water	Lost Oil	Lost Water
1/2/2022	1' 10"	25.5	11.5	14	56.9	4.6
1/1/2022	6'3"	87	68.4	18.6		



McNabb Partners, LLC
Hobbs • Carlsbad • Midland
575.397.0050
www.mcnabbpartnersllc.com

September 25, 2024

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

RE: Closure Report
Incident ID: nAPP2202454641
Rio State #3 Tank Battery
Lat/Long: 32.708155, -104.546172
Project ID: 20220103-murchison-RioState3

NMOCD:

McNabb Partners LLC submits this closure request for above incident on behalf of Murchison Oil and Gas, LLC.

This report includes remediation action and sampling activities conducted at the Rio State #3 Tank Battery production site. McNabb Partners relied upon the submitted characterization and remediation plan submitted by Hungry Horse and approved by NMOCD on 06/17/2024.

- Remediation plan is included in Appendix C.

1. Remediation Activities and Confirmation Sampling

Remediation activities began on June 25, 2024. Plate 1 shows:

- Remediation extent (with depths) relative to the release extent as mapped by Hungry Horse.
- Confirmation soil sample locations.

Closure Criteria for the site according to Table I in 19.29.12.12 NMAC is listed below:

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



Rio State #3
Incident #: nAPP2202454641

Confirmation sampling was conducted along with the excavation activities. The confirmation soil samples (5-point composite) were collected every 200 square feet (or less) from the excavation bases and sidewalls and analyzed for TPH, BTEX and chloride by a certified laboratory.

On June 26, 2024, 3 confirmation samples were collected from the base of the excavation at 5 ft bgs (i.e., BS-01, BS-02 and BS-03) and 4 confirmation samples were collected from the walls of the excavation (i.e., SW-01 through SW-04). Analytical results indicate that samples BS-01 and SW-01 through SW-03 exceed NMOCD closure criteria for TPH and/or BTEX concentrations. Following the receipt of analytical data, 200 square feet areas represented by these samples were excavated further vertically and horizontally.

On June 28, 2024, 6 confirmation samples (WS-08 and WS-09 at depths of 0-2, 2-4 and 6 ft bgs) were collected from the walls of the excavation. Analytical results indicate that these samples exceeded TPH concentrations. Due to the presence of tank on top of the affected areas, these side walls could not be excavated any further at that time without causing major facility deconstruction.

On July 2, 2024, 4 confirmation samples were collected from the base of the excavation at 4 ft bgs (i.e., BS-04 through BS-07) and 8 confirmation samples were collected from the walls of the excavation (i.e., WS-03 through WS-07 at depths of 0-2 and 2-4 ft bgs). Analytical results indicate that all samples met concentrations listed in Table I (19.15.29 NMAC).

On July 8, 2024, 11 confirmation samples (WS-01, WS-02, WS-07 at depths of 0-2, 2-4 and 6 ft; and WS-10 at depths of 0-2 and 2-4 ft bgs) were collected from the walls of the excavation. Analytical results indicate that all samples met concentrations listed in Table I (19.15.29 NMAC).

Excavation activities in impacted areas of BS-01, WS-08 and WS-09 resumed after the storage tank was removed from the battery containment. Following the completion of the excavation in these affected areas, McNabb Partners collected final confirmation samples on September 18, 2024). 3 confirmation soil samples were collected from the base of the excavation (i.e., BS-01 at 12 ft bgs, BS-08 at 5 ft bgs, BS-09 at 5 ft bgs) and 8 confirmation soil samples were collected from the walls of the excavation (i.e., WS-01 at 6-9 and 9-12 ft bgs, WS-07 at 6-9 and 9-12 ft bgs, WS-08A at 0-2 and 2-5 ft bgs, and WS-09A at 0-2 and 2-5 ft bgs). Analytical results indicate that all samples met concentrations listed in Table I (19.15.29 NMAC) therefore all impacted soils were removed from the affected area of release.

Clean non-waste containing caliche was used for backfill material to restore the surface to an active production pad for oil and gas operations. Please refer to the composite sample "Backfill" in the Table A.

- Confirmation sample results are included in Table A Summary of Analytical.
- Certificate of Analysis for confirmation samples are included in Appendix B.
- All sampling notifications are included in Appendix A.



Rio State #3
Incident #: nAPP2202454641

2. Closure Request

Remediation Closure Request	
Requesting a remediation closure approval with this submission?	Yes
Have the lateral and vertical extents of contamination been fully delineated?	Yes
Was this release entirely contained within a lined containment area?	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized?	Yes
What was the total surface area (in sq ft) remediated?	1,635
What was the total volume (cubic yards) remediated?	600
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of 4 ft non waste containing material with concentration less than 600 mg/kg chlorides?	Yes
What was the total surface area (in sq ft) reclaimed?	1,635
What was the total volume (in cubic yards) reclaimed?	600
Summarize any addition remediation activities not included in answers above	Dig and haul disposal

On behalf of Murchison Oil & Gas, we respectfully request a closure for the incident ID: nAPP2202454641. Based on the remedial action activities and confirmation samples analytical results, the Site is compliant with applicable closure requirements set forth in rule 19.15.19.12 NMAC and no further actions are required at the site.

When the production site is no longer in use for oil and gas operations, the surface will be remediated, restored, reclaimed and revegetated per 19.15.29.12 and 19.15.29.13 NMAC.

Please contact me with any questions.

Sincerely,

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



Cc: Murchison Oil and Gas, LLC

September 25, 2024

Page 3 of 4



Rio State #3
Incident #: nAPP2202454641



Figure 1. Final Excavation.



Figure 2. Final Excavation.



Figure 3. Final Excavation.



Figure 4. Final Excavation.



Figure 5. Final Excavation before backfilling.

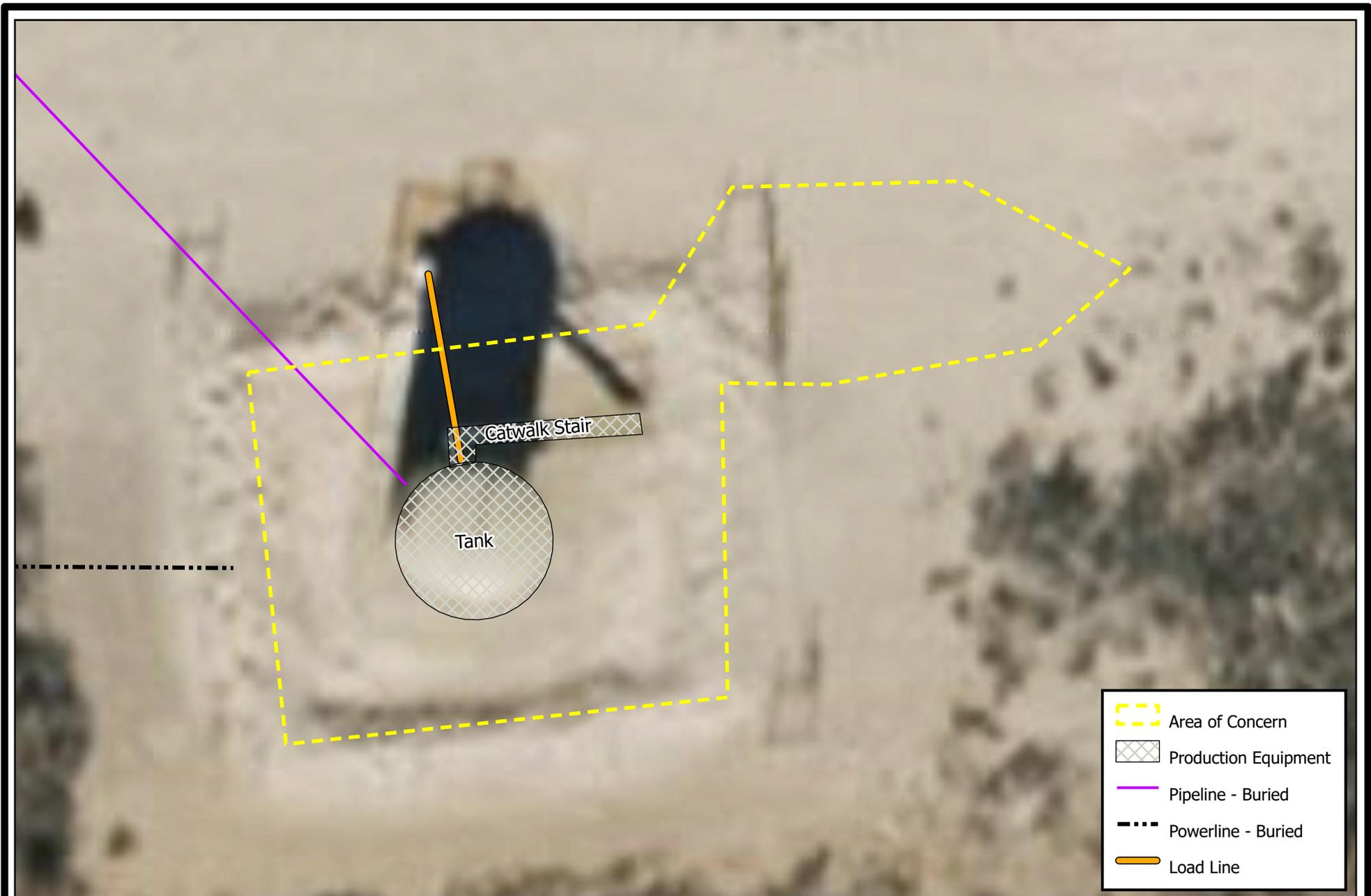


Figure 6. Final Excavation before backfilling.

Plates



McNabb Partners, LLC
Hobbs • Carlsbad • Midland

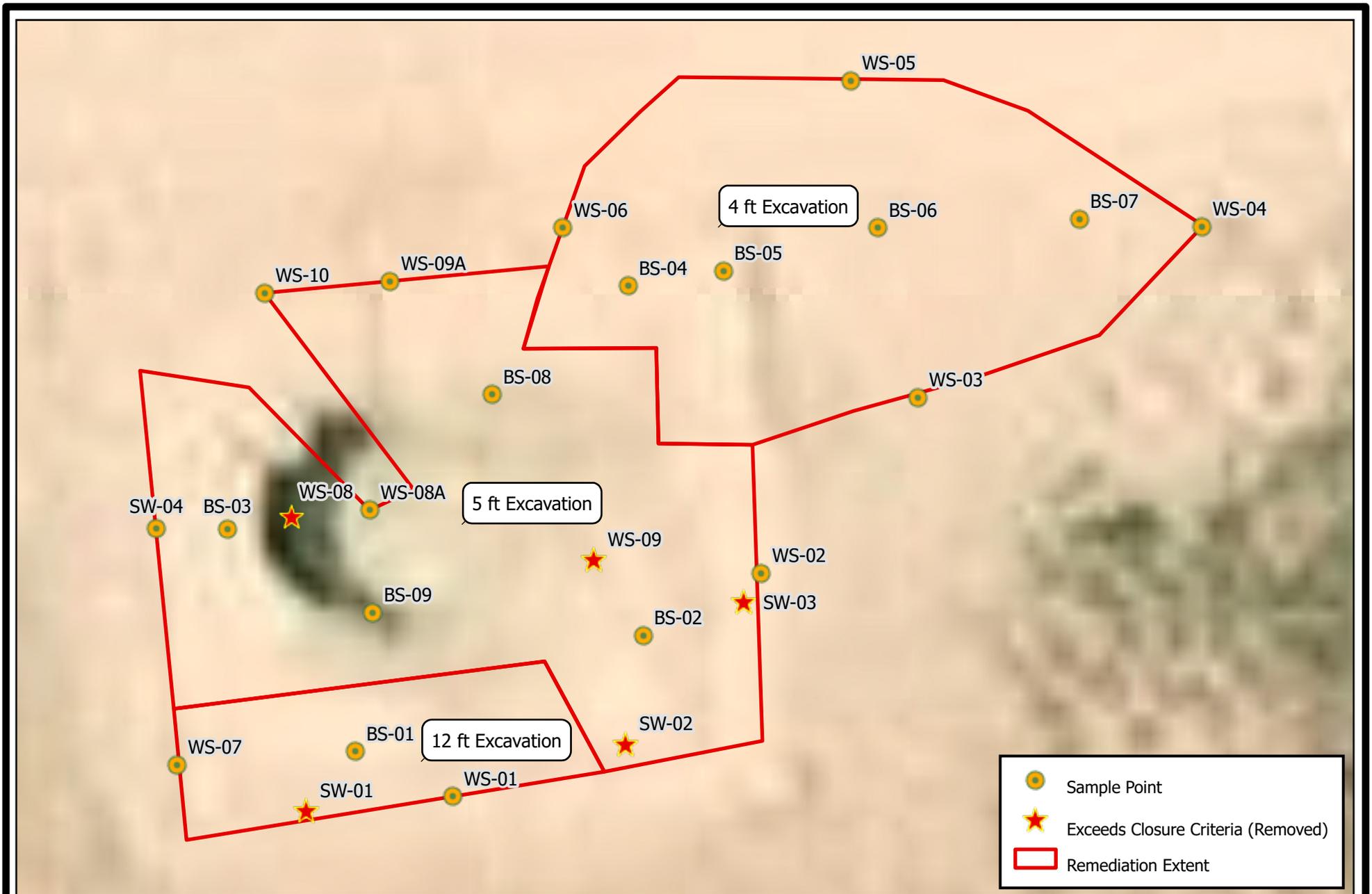


0 5 10
US Feet



Site Map
Rio State #3 Tank Battery
Incident #: nAPP2202454641
Murchison Oil and Gas, LLC

Plate 1
09/25/2024



Confirmation Sampling Map
Rio State #3 Tank Battery
Incident #: nAPP2202454641
Murchison Oil and Gas, LLC

Plate 2
09/25/2024

Tables



McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Table A
Summary of Analytical

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	Location	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Comments	Lab	Lab #
NMOCD Closure Criteria						600	--	100	10	50			
BS-01	6/26/2024	5			Base	16	<5640	<5671.4	<1	62	Removed	Cardinal	H243870
BS-01	7/8/2024	6			Base	80	331.3	<341.3	<0.05	<0.3	Removed	Cardinal	H244041
BS-01	7/30/2024	7			Grab	57.3	<50	<50.0	<0.00202	0.11	Removed	Eurofins	890-6964-1
BS-01	7/30/2024	8			Grab	74.7	2969	2970	<0.00201	12.8	Removed	Eurofins	890-6964-1
BS-01	7/30/2024	9			Grab	150	2217	2220	<0.00200	17.4	Removed	Eurofins	890-6964-1
BS-01	7/30/2024	10			Grab	114	1300	1300	<0.00199	13.7	Removed	Eurofins	890-6964-1
BS-01	7/30/2024	11			Grab	138	97.1	97.1	<0.00199	0.197	Removed	Eurofins	890-6964-1
BS-01	7/30/2024	12			Grab	5.26	<50	<50.0	<0.00202	0.0145	Removed	Eurofins	890-6964-1
BS-01	9/18/2024	12			Base	32	12	12	<0.05	<0.3		Cardinal	H245673
BS-02	6/26/2024	5			Base	16	<55	<65	<0.05	0.318		Cardinal	H243870
BS-03	6/26/2024	5			Base	208	<20	<30	<0.05	<0.3		Cardinal	H243870
BS-04	7/2/2024	4			Base	80	<20	<30	<0.05	<0.3		Cardinal	H244017
BS-05	7/2/2024	4			Base	64	<20	<30	<0.05	<0.3		Cardinal	H244017
BS-06	7/2/2024	4			Base	80	<20	<30	<0.05	<0.3		Cardinal	H244017
BS-07	7/2/2024	4			Base	80	<20	<30	<0.05	<0.3		Cardinal	H244017
BS-08	9/18/2024	5			Base	16	50.9	50.9	<0.05	<0.3		Cardinal	H245673
BS-09	9/18/2024	5			Base	32	36.1	36.1	<0.05	<0.3		Cardinal	H245673
SW-01	6/26/2024		0	5	Wall	48	<1802	<1812	<0.05	5.37	Removed	Cardinal	H243870
SW-02	6/26/2024		0	5	Wall	16	9360	9406.1	<1	126	Removed	Cardinal	H243870
SW-03	6/26/2024		0	5	Wall	32	<4220	<4240.2	<0.5	37.3	Removed	Cardinal	H243870
SW-04	6/26/2024		0	5	Wall	32	<20	<30	<0.05	<0.3		Cardinal	H243870
WS-01	7/8/2024		0	2	Wall	32	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-01	7/8/2024		2	4	Wall	304	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-01	7/8/2024	6			Wall	144	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-01	9/18/2024		6	9	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-01	9/18/2024		9	12	Wall	64	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-02	7/8/2024		0	2	Wall	176	<27.7	<37.7	<0.05	<0.3		Cardinal	H244041
WS-02	7/8/2024		2	4	Wall	80	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-02	7/8/2024	6			Wall	48	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-03	7/2/2024		0	2	Wall	96	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-03	7/2/2024		2	4	Wall	448	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-04	7/2/2024		0	2	Wall	160	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-04	7/2/2024		2	4	Wall	64	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-05	7/2/2024		0	2	Wall	48	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-05	7/2/2024		2	4	Wall	48	<20	<30	<0.05	<0.3		Cardinal	H244017
WS-06	7/2/2024		0	2	Wall	64	<34.4	<44.4	<0.05	<0.3		Cardinal	H244017
WS-06	7/2/2024		2	4	Wall	160	<20	<30	<0.05	<0.3		Cardinal	H244017

Table A
Summary of Analytical

Sample ID	Date	Discrete Depth (Feet)	Top Depth (Feet)	Bottom Depth (Feet)	Location	Chloride (mg/kg)	GRO+DRO (mg/kg)	TPH Ext. (mg/kg)	Benzene (mg/kg)	BTEX (mg/kg)	Comments	Lab	Lab #
NMOCD Closure Criteria						600	--	100	10	50			
WS-07	7/8/2024		0	2	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-07	7/8/2024		2	4	Wall	128	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-07	7/8/2024	6			Wall	96	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-07	9/18/2024		6	9	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-07	9/18/2024		9	12	Wall	64	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-08	6/28/2024		0	2	Wall	16	328.2	<338.2	<0.05	3.98	Removed	Cardinal	H243921
WS-08	6/28/2024		2	4	Wall	<16	2882	2905.9	<0.1	49.1	Removed	Cardinal	H243921
WS-08	6/28/2024	5			Wall	<16	2518	<2528	<0.05	12.4	Removed	Cardinal	H243921
WS-09	6/28/2024		0	2	Wall	112	2634.9	2727.6	<0.05	0.696	Removed	Cardinal	H243921
WS-09	6/28/2024		2	4	Wall	16	4130	4156.8	<0.05	12.9	Removed	Cardinal	H243921
WS-09	6/28/2024	5			Wall	16	<49.7	<59.7	<0.05	<0.3	Removed	Cardinal	H243921
WS-08A	9/18/2024		0	2	Wall	48	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-08A	9/18/2024		2	5	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-09A	9/18/2024		0	2	Wall	64	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-09A	9/18/2024		2	5	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H245673
WS-10	7/8/2024		0	2	Wall	32	<20	<30	<0.05	<0.3		Cardinal	H244041
WS-10	7/8/2024		2	4	Wall	16	<20	<30	<0.05	<0.3		Cardinal	H244041
Backfill	6/25/2024				Backfill	304	<20	<30	<0.05	<0.3		Cardinal	H243842
Exceeds Closure Criteria													

Appendix A

Communications



McNabb Partners, LLC
Hobbs • Carlsbad • Midland

Cindy Cottrell

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Friday, September 13, 2024 8:59 AM
To: Cindy Cottrell
Cc: Greg Boans; andrew@mcnabbpartners.com; Dmitry Nikanorov
Subject: RE: [EXTERNAL] nAPP2202454641 Rio State #3 (30-015-33690)

Good morning Cindy,

The extension request for 9/30/24 is approved. Please include a copy of this correspondence in the remediation closure report.

Thank you,

Brittany Hall ● Environmental Specialist
 Environmental Bureau Projects Group
 EMNRD - Oil Conservation Division
 1000 Rio Brazos Road | Aztec, NM 87110
 505.517.5333 | Brittany.Hall@emnrd.nm.gov
<http://www.emnrd.nm.gov/ocd/>

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

From: Cindy Cottrell <ccottrell@jdmii.com>
Sent: Friday, September 13, 2024 7:23 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Greg Boans <gboans@jdmii.com>; andrew@mcnabbpartners.com; Dmitry Nikanorov <Dimitry@mcnabbpartners.com>
Subject: [EXTERNAL] nAPP2202454641 Rio State #3 (30-015-33690)

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

Brittany,

The closure report for Rio State #3 is due on Monday, 9/16/24. The tank has been removed and excavation is in progress. May we please have an extension until 9/30/24 in order to complete excavation and obtain confirmation samples?

Thank you for your consideration.



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

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 356504

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 356504
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,500
What is the estimated number of samples that will be gathered	20
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/25/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890
Please provide any information necessary for navigation to sampling site	GPS Coordinates: 32.7081068, -104.5461455

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 356504

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 356504
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermmp	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/21/2024

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

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

QUESTIONS

Action 358916

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 358916
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,500
What is the estimated number of samples that will be gathered	20
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/28/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890 Sampling will continue into 6/28/2024
Please provide any information necessary for navigation to sampling site	GPS Coordinates: 32.7081068, -104.5461455

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 358916

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 358916
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkerm	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/26/2024

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

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

QUESTIONS

Action 359510

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 359510
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,500
What is the estimated number of samples that will be gathered	20
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/02/2024
Time sampling will commence	08:00 AM
Please provide any information necessary for observers to contact samplers	Please contact dimitry@mcnabbpartners.com if needed. 917-497-6890 or Andrew Parker 970-579-9535 Delays in excavation efforts have effected the dates and times of sampling. Project is taking longer than anticipated to ensure human health and safety around production equipment.
Please provide any information necessary for navigation to sampling site	GPS Coordinates: 32.7081068, -104.5461455

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 359510

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 359510
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkerm	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	6/28/2024

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

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

QUESTIONS

Action 360579

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 360579
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,500
What is the estimated number of samples that will be gathered	15
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/08/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	Christopher Turner. 575-441-0080
Please provide any information necessary for navigation to sampling site	GPS Coordinates: 32.7081068, -104.5461455

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 360579

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 360579
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermmp	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/2/2024

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

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

QUESTIONS

Action 367510

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 367510
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	200
What is the estimated number of samples that will be gathered	3
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/30/2024
Time sampling will commence	08:30 AM
Please provide any information necessary for observers to contact samplers	dimitry@mcnabbpartners.com if needed. 917-497- 6890
Please provide any information necessary for navigation to sampling site	32.7081068, -104.5461455

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 367510

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 367510
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermp	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/25/2024

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

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

QUESTIONS

Action 383715

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383715
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Plan Approved
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

Sampling Event General Information	
<i>Please answer all the questions in this group.</i>	
What is the sampling surface area in square feet	1,000
What is the estimated number of samples that will be gathered	8
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/18/2024
Time sampling will commence	09:00 AM
Please provide any information necessary for observers to contact samplers	Please contact Dimityr at 9174976890 or dimitry@mcnabbpartners.com if necessary
Please provide any information necessary for navigation to sampling site	GPS coordinates of the excavation area: 32.708155, -104.546108

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 383715

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 383715
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
aparkermmp	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	9/16/2024

Appendix B

Certificates of Analysis



McNabb Partners, LLC
Hobbs • Carlsbad • Midland



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

July 03, 2024

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

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 06/26/24 16:45.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/26/2024	Sampling Date:	06/25/2024
Reported:	07/03/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: BACKFILL (H243842-01)

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) 97.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	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 99.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

BILL TO

ANALYSIS REQUEST

Company Name: **McNabb Parks**
 Project Manager: **Andrew Parker**

Address: **on file**

City: State: Zip:

Phone #: Fax #:

Project #: Project Owner:

Project Name: **Rio State #3**

Project Location:

Sampler Name: **Andrew Parker**

FOR LAB USE ONLY

P.O. #:

Company: **McNabb Parks**

Attn: **Andrew Parker**

Address:

City: State: Zip:

Phone #: Fax #:

PRESERV:

MATRIX

(G)RAB OR (C)OMP
 # CONTAINERS
 GROUNDWATER
 WASTEWATER
 SOIL
 OIL
 SLUDGE
 OTHER:
 ACID/BASE:
 ICE / COOL
 OTHER:

Lab I.D. **H249842**
 Sample I.D. **Backfill**

DATE **9/5**
 TIME **16:50**

~~X~~ **Backfill AP**
 X **TPH**
 X **BTEX, Benzene**
 X **C1**

PLEASE NOTE: Liability and/or damages, Cardinal's liability and client's exclusive remedy for any claim arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based on any of the above stated theories or otherwise, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. It is the client's responsibility to ensure that the performance of services hereunder by Cardinal, regardless of whether such claim is based on any of the above stated theories or otherwise, shall be limited to the amount paid by the client for the analysis.

Relinquished By: **[Signature]**
 Date: **6/26**
 Time: **16:45**

Received By: **[Signature]**
 Date: **9/5**
 Time: **16:50**

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Observed Temp. °C
 Corrected Temp. °C

Sample Condition
 Cool Intact
 Yes/No

CHECKED BY: (Initials)

Turnaround Time:
 Thermometer ID #140
 Correction Factor 0°C

Standard
 Rush

Bacteria (only) Sample Condition
 Cool Intact
 Yes/No

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

REMARKS:

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



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

July 01, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 06/27/24 16:22.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/26/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 01 5 (H243870-01)

BTEX 8021B		mg/kg		Analyzed By: JH				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<1.00	1.00	06/29/2024	ND	1.97	98.7	2.00	10.2		
Toluene*	2.28	1.00	06/29/2024	ND	1.97	98.3	2.00	9.33	GC-NC1	
Ethylbenzene*	13.5	1.00	06/29/2024	ND	2.07	104	2.00	8.85	GC-NC1	
Total Xylenes*	46.2	3.00	06/29/2024	ND	6.11	102	6.00	8.58	GC-NC1	
Total BTEX	62.0	6.00	06/29/2024	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 144 % 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	06/28/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	2270	10.0	06/28/2024	ND	170	84.8	200	1.84		
DRO >C10-C28*	3370	10.0	06/28/2024	ND	176	87.9	200	4.71		
EXT DRO >C28-C36	31.4	10.0	06/28/2024	ND						

Surrogate: 1-Chlorooctane 339 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/26/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 02 5 (H243870-02)

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	06/29/2024	ND	1.97	98.7	2.00	10.2	
Toluene*	<0.050	0.050	06/29/2024	ND	1.97	98.3	2.00	9.33	
Ethylbenzene*	0.104	0.050	06/29/2024	ND	2.07	104	2.00	8.85	GC-NC1
Total Xylenes*	0.214	0.150	06/29/2024	ND	6.11	102	6.00	8.58	GC-NC1
Total BTEX	0.318	0.300	06/29/2024	ND					GC-NC1

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/28/2024	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	06/28/2024	ND	170	84.8	200	1.84	
DRO >C10-C28*	45.0	10.0	06/28/2024	ND	176	87.9	200	4.71	
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/26/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: SW - 01 0-5 (H243870-03)

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	06/29/2024	ND	1.97	98.7	2.00	10.2	
Toluene*	0.090	0.050	06/29/2024	ND	1.97	98.3	2.00	9.33	GC-NC1
Ethylbenzene*	1.50	0.050	06/29/2024	ND	2.07	104	2.00	8.85	GC-NC1
Total Xylenes*	3.78	0.150	06/29/2024	ND	6.11	102	6.00	8.58	GC-NC1
Total BTEX	5.37	0.300	06/29/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 235 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	372	10.0	06/28/2024	ND	170	84.8	200	1.84		
DRO >C10-C28*	1430	10.0	06/28/2024	ND	176	87.9	200	4.71		
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND						

Surrogate: 1-Chlorooctane 166 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/26/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: SW - 02 0-5 (H243870-04)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<1.00	1.00	06/29/2024	ND	1.97	98.7	2.00	10.2	S-04
Toluene*	5.11	1.00	06/29/2024	ND	1.97	98.3	2.00	9.33	GC-NC1, S-04
Ethylbenzene*	27.1	1.00	06/29/2024	ND	2.07	104	2.00	8.85	GC-NC1, S-04
Total Xylenes*	93.4	3.00	06/29/2024	ND	6.11	102	6.00	8.58	GC-NC1, S-04
Total BTEX	126	6.00	06/29/2024	ND					GC-NC1, S-04

Surrogate: 4-Bromofluorobenzene (PID) 180 % 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	06/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	3990	10.0	06/28/2024	ND	170	84.8	200	1.84		
DRO >C10-C28*	5370	10.0	06/28/2024	ND	176	87.9	200	4.71		
EXT DRO >C28-C36	46.1	10.0	06/28/2024	ND						

Surrogate: 1-Chlorooctane 490 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/26/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: SW - 03 0-5 (H243870-05)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	06/29/2024	ND	1.97	98.7	2.00	10.2	S-04
Toluene*	0.985	0.500	06/29/2024	ND	1.97	98.3	2.00	9.33	GC-NC1, S-04
Ethylbenzene*	7.19	0.500	06/29/2024	ND	2.07	104	2.00	8.85	GC-NC1, S-04
Total Xylenes*	29.1	1.50	06/29/2024	ND	6.11	102	6.00	8.58	GC-NC1, S-04
Total BTEX	37.3	3.00	06/29/2024	ND					GC-NC1, S-04

Surrogate: 4-Bromofluorobenzene (PID) 169 % 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	06/28/2024	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1520	10.0	06/28/2024	ND	170	84.8	200	1.84		
DRO >C10-C28*	2700	10.0	06/28/2024	ND	176	87.9	200	4.71		
EXT DRO >C28-C36	20.2	10.0	06/28/2024	ND						

Surrogate: 1-Chlorooctane 280 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/27/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 03 5 (H243870-06)

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	06/29/2024	ND	1.97	98.7	2.00	10.2		
Toluene*	<0.050	0.050	06/29/2024	ND	1.97	98.3	2.00	9.33		
Ethylbenzene*	<0.050	0.050	06/29/2024	ND	2.07	104	2.00	8.85		
Total Xylenes*	<0.150	0.150	06/29/2024	ND	6.11	102	6.00	8.58		
Total BTEX	<0.300	0.300	06/29/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	06/28/2024	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	06/28/2024	ND	170	84.8	200	1.84		
DRO >C10-C28*	<10.0	10.0	06/28/2024	ND	176	87.9	200	4.71		
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND						

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/27/2024	Sampling Date:	06/27/2024
Reported:	07/01/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: SW - 04 0-5 (H243870-07)

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	06/29/2024	ND	1.97	98.7	2.00	10.2	
Toluene*	<0.050	0.050	06/29/2024	ND	1.97	98.3	2.00	9.33	
Ethylbenzene*	<0.050	0.050	06/29/2024	ND	2.07	104	2.00	8.85	
Total Xylenes*	<0.150	0.150	06/29/2024	ND	6.11	102	6.00	8.58	
Total BTEX	<0.300	0.300	06/29/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	06/28/2024	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	06/28/2024	ND	170	84.8	200	1.84	
DRO >C10-C28*	<10.0	10.0	06/28/2024	ND	176	87.9	200	4.71	
EXT DRO >C28-C36	<10.0	10.0	06/28/2024	ND					

Surrogate: 1-Chlorooctane 94.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

July 08, 2024

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

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 06/28/24 16:24.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 08 0-2' (H243921-01)

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	07/05/2024	ND	1.99	99.5	2.00	2.10		
Toluene*	<0.050	0.050	07/05/2024	ND	2.08	104	2.00	1.52	GC-NC	
Ethylbenzene*	1.42	0.050	07/05/2024	ND	2.12	106	2.00	0.805	GC-NC1	
Total Xylenes*	2.57	0.150	07/05/2024	ND	6.25	104	6.00	0.851	GC-NC1	
Total BTEX	3.98	0.300	07/05/2024	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 201 % 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	07/05/2024	ND	416	104	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	73.2	10.0	07/03/2024	ND	217	109	200	0.908		
DRO >C10-C28*	255	10.0	07/03/2024	ND	215	108	200	0.0195	QM-07	
EXT DRO >C28-C36	<10.0	10.0	07/03/2024	ND						

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 08 2-4' (H243921-02)

BTEX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	07/06/2024	ND	1.99	99.5	2.00	2.10	
Toluene*	<0.100	0.100	07/06/2024	ND	2.08	104	2.00	1.52	GC-NC
Ethylbenzene*	9.80	0.100	07/06/2024	ND	2.12	106	2.00	0.805	GC-NC1
Total Xylenes*	39.3	0.300	07/06/2024	ND	6.25	104	6.00	0.851	GC-NC1
Total BTEX	49.1	0.600	07/06/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 445 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/05/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	782	10.0	07/03/2024	ND	217	109	200	0.908	
DRO >C10-C28*	2100	10.0	07/03/2024	ND	215	108	200	0.0195	
EXT DRO >C28-C36	23.9	10.0	07/03/2024	ND					

Surrogate: 1-Chlorooctane 188 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 08 5' (H243921-03)

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	07/04/2024	ND	1.91	95.5	2.00	0.998	
Toluene*	<0.050	0.050	07/04/2024	ND	1.90	95.2	2.00	1.52	GC-NC
Ethylbenzene*	2.80	0.050	07/04/2024	ND	2.01	100	2.00	1.63	GC-NC1, QM-07
Total Xylenes*	9.59	0.150	07/04/2024	ND	5.92	98.7	6.00	1.58	GC-NC1, QM-07
Total BTEX	12.4	0.300	07/04/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 344 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/05/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	758	10.0	07/03/2024	ND	217	109	200	0.908	
DRO >C10-C28*	1760	10.0	07/03/2024	ND	215	108	200	0.0195	
EXT DRO >C28-C36	<10.0	10.0	07/03/2024	ND					

Surrogate: 1-Chlorooctane 175 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 09 0-2' (H243921-04)

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	07/04/2024	ND	1.91	95.5	2.00	0.998	
Toluene*	<0.050	0.050	07/04/2024	ND	1.90	95.2	2.00	1.52	
Ethylbenzene*	0.174	0.050	07/04/2024	ND	2.01	100	2.00	1.63	GC-NC1
Total Xylenes*	0.522	0.150	07/04/2024	ND	5.92	98.7	6.00	1.58	GC-NC1
Total BTEX	0.696	0.300	07/04/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	07/05/2024	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	74.9	10.0	07/03/2024	ND	217	109	200	0.908	
DRO >C10-C28*	2560	10.0	07/03/2024	ND	215	108	200	0.0195	
EXT DRO >C28-C36	92.7	10.0	07/03/2024	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 09 2-4' (H243921-05)

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	07/04/2024	ND	1.91	95.5	2.00	0.998		
Toluene*	<0.050	0.050	07/04/2024	ND	1.90	95.2	2.00	1.52	GC-NC	
Ethylbenzene*	2.86	0.050	07/04/2024	ND	2.01	100	2.00	1.63	GC-NC1	
Total Xylenes*	10.0	0.150	07/04/2024	ND	5.92	98.7	6.00	1.58	GC-NC1	
Total BTEX	12.9	0.300	07/04/2024	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 327 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/05/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1170	10.0	07/04/2024	ND	217	109	200	0.908		
DRO >C10-C28*	2960	10.0	07/04/2024	ND	215	108	200	0.0195		
EXT DRO >C28-C36	26.8	10.0	07/04/2024	ND						

Surrogate: 1-Chlorooctane 230 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	06/28/2024	Sampling Date:	06/28/2024
Reported:	07/08/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS - 09 5' (H243921-06)

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	07/04/2024	ND	1.91	95.5	2.00	0.998	
Toluene*	<0.050	0.050	07/04/2024	ND	1.90	95.2	2.00	1.52	
Ethylbenzene*	0.079	0.050	07/04/2024	ND	2.01	100	2.00	1.63	GC-NC1
Total Xylenes*	0.196	0.150	07/04/2024	ND	5.92	98.7	6.00	1.58	GC-NC1
Total BTEX	<0.300	0.300	07/04/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/05/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/04/2024	ND	217	109	200	0.908	
DRO >C10-C28*	39.7	10.0	07/04/2024	ND	215	108	200	0.0195	
EXT DRO >C28-C36	<10.0	10.0	07/04/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: McNabb Partners
 Project Manager: Andrew Parker
 Address: Dr-File
 City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____
 Project #: _____ Project Owner: _____
 Project Name: 20220105-Murkison-RioState3
 Project Location: Rio State 3
 Sampler Name: Christopher Turner
 P.O. #: 20220105-Murkison-RioState3
 Company: McNabb Partners
 Attn: andrew@mcnabbpartners.com
 Address: _____ City: _____ State: _____ Zip: _____
 Phone #: _____ Fax #: _____

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE:			
4243921	WS-08	C	1		X						06/28	13:14	X Chloride
1	WS-08	C	1		X						06/28	13:19	X TPH (GRO+DRO+MRO)
2	WS-08	C	1		X						06/28	13:40	X BTEX (Benene)
3	WS-08	C	1		X						06/28	13:45	
4	WS-09	C	1		X						06/28	13:52	
5	WS-09	C	1		X						06/28	13:52	
U	WS-09	C	1		X						06/28	13:52	

PLEASE NOTE: Liability and/or Damages: Customer's liability and/or damage is limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of data, 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 on any of the above stated provisions or otherwise.

FOR LAB USE ONLY

Retrieved By: AP Date: 4-28-24
 Time: 13:24
 Received By: AP Date: 4-28-24
 Time: 13:24

Delivered By: (Circle One) Standard Rush
 Sample Condition: Cool Intact Yes No
 Sample - UPS - Bus - Other: Yes No

Observed Temp. °C: 15.5
 Corrected Temp. °C: 15.5

Turnaround Time: _____
 Thermometer ID #140 _____
 Correction Factor 0°C _____

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

REMARKS: _____

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



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

July 11, 2024

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

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 07/03/24 15:15.

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

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

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

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

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

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

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

Sincerely,

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BS - 07 4'	H244017-01	Soil	02-Jul-24 14:00	03-Jul-24 15:15
BS - 06 4'	H244017-02	Soil	02-Jul-24 14:12	03-Jul-24 15:15
BS - 05 4'	H244017-03	Soil	02-Jul-24 14:20	03-Jul-24 15:15
BS - 04 4'	H244017-04	Soil	02-Jul-24 14:24	03-Jul-24 15:15
WS - 03 0-2'	H244017-05	Soil	02-Jul-24 14:34	03-Jul-24 15:15
WS - 03 2-4'	H244017-06	Soil	02-Jul-24 14:38	03-Jul-24 15:15
WS - 04 0-2'	H244017-07	Soil	02-Jul-24 14:43	03-Jul-24 15:15
WS - 04 2-4'	H244017-08	Soil	02-Jul-24 14:47	03-Jul-24 15:15
WS - 05 0-2'	H244017-09	Soil	02-Jul-24 14:51	03-Jul-24 15:15
WS - 05 2-4'	H244017-10	Soil	02-Jul-24 14:55	03-Jul-24 15:15
WS - 06 0-2'	H244017-11	Soil	02-Jul-24 15:02	03-Jul-24 15:15
WS - 06 2-4'	H244017-12	Soil	02-Jul-24 15:09	03-Jul-24 15:15

07/11/24 - Client changed the sample date (see COC). This is the revised report and will replace the one sent on 07/10/24.

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

BS - 07 4'
H244017-01 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	80.0		16.0	mg/kg	4	4070937	AC	09-Jul-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070904	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			109 %	71.5-134		4070904	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			72.6 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			76.3 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

BS - 06 4'
H244017-02 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	80.0		16.0	mg/kg	4	4070937	AC	09-Jul-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070904	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070904	JH	10-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			109 %	71.5-134		4070904	JH	10-Jul-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			83.4 %	48.2-134		4070807	MS	09-Jul-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			87.6 %	49.1-148		4070807	MS	09-Jul-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

BS - 05 4'
H244017-03 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	64.0		16.0	mg/kg	4	4070937	AC	09-Jul-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	09-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	09-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	09-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	09-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	09-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			101 %	71.5-134		4070905	JH	09-Jul-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			90.2 %	48.2-134		4070807	MS	09-Jul-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			94.9 %	49.1-148		4070807	MS	09-Jul-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

BS - 04 4'
H244017-04 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	80.0		16.0	mg/kg	4	4070937	AC	09-Jul-24	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			95.8 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			104 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

WS - 03 0-2'
H244017-05 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	96.0		16.0	mg/kg	4	4070937	AC	09-Jul-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			101 %	71.5-134		4070905	JH	10-Jul-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			81.5 %	48.2-134		4070807	MS	09-Jul-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			82.8 %	49.1-148		4070807	MS	09-Jul-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 03 2-4'
H244017-06 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	448		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	QM-07
----------	-----	--	------	-------	---	---------	----	-----------	-----------	-------

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			88.4 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			93.3 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

WS - 04 0-2'
H244017-07 (Soil)

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

Cardinal Laboratories

Inorganic Compounds

Chloride	160		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			100 %	71.5-134		4070905	JH	10-Jul-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			89.2 %	48.2-134		4070807	MS	09-Jul-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			91.9 %	49.1-148		4070807	MS	09-Jul-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 04 2-4'
H244017-08 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	64.0		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			91.0 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			96.0 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 05 0-2'
H244017-09 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	48.0		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			99.9 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			95.5 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			99.6 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 05 2-4'
H244017-10 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	48.0		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-CI-B	
----------	------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			102 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			82.6 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			88.1 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 06 0-2'
H244017-11 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	64.0		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			104 %	71.5-134		4070905	JH	10-Jul-24	8021B	
--	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	24.4		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			74.7 %	48.2-134		4070807	MS	09-Jul-24	8015B	
----------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

<i>Surrogate: 1-Chlorooctadecane</i>			77.7 %	49.1-148		4070807	MS	09-Jul-24	8015B	
--------------------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

**WS - 06 2-4'
H244017-12 (Soil)**

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

Cardinal Laboratories

Inorganic Compounds

Chloride	160		16.0	mg/kg	4	4070930	CT	09-Jul-24	4500-Cl-B	
----------	-----	--	------	-------	---	---------	----	-----------	-----------	--

Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4070905	JH	10-Jul-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4070905	JH	10-Jul-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %	71.5-134		4070905	JH	10-Jul-24	8021B	
---------------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4070807	MS	09-Jul-24	8015B	

Surrogate: 1-Chlorooctane			95.1 %	48.2-134		4070807	MS	09-Jul-24	8015B	
---------------------------	--	--	--------	----------	--	---------	----	-----------	-------	--

Surrogate: 1-Chlorooctadecane			100 %	49.1-148		4070807	MS	09-Jul-24	8015B	
-------------------------------	--	--	-------	----------	--	---------	----	-----------	-------	--

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

Inorganic Compounds - Quality Control

Cardinal Laboratories

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

Batch 4070930 - 1:4 DI Water

Blank (4070930-BLK1)		Prepared & Analyzed: 09-Jul-24								
Chloride	ND	16.0	mg/kg							
LCS (4070930-BS1)		Prepared & Analyzed: 09-Jul-24								
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (4070930-BSD1)		Prepared & Analyzed: 09-Jul-24								
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

Batch 4070937 - 1:4 DI Water

Blank (4070937-BLK1)		Prepared & Analyzed: 09-Jul-24								
Chloride	ND	16.0	mg/kg							
LCS (4070937-BS1)		Prepared & Analyzed: 09-Jul-24								
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (4070937-BSD1)		Prepared & Analyzed: 09-Jul-24								
Chloride	448	16.0	mg/kg	400		112	80-120	7.41	20	

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Project: RIO STATE #3
Project Number: 20220103-MURCHISON - RIOSTAT
Project Manager: ANDREW PARKER
Fax To: (575) 391-8484

Reported:
11-Jul-24 17:01

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

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

Batch 4070904 - Volatiles**Blank (4070904-BLK1)**

Prepared & Analyzed: 09-Jul-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0517		mg/kg	0.0500		103	71.5-134			

LCS (4070904-BS1)

Prepared & Analyzed: 09-Jul-24

Benzene	1.92	0.050	mg/kg	2.00		96.2	82.8-130			
Toluene	1.95	0.050	mg/kg	2.00		97.6	86-128			
Ethylbenzene	1.97	0.050	mg/kg	2.00		98.6	85.9-128			
m,p-Xylene	3.87	0.100	mg/kg	4.00		96.7	89-129			
o-Xylene	1.94	0.050	mg/kg	2.00		96.9	86.1-125			
Total Xylenes	5.81	0.150	mg/kg	6.00		96.8	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0494		mg/kg	0.0500		98.9	71.5-134			

LCS Dup (4070904-BSD1)

Prepared & Analyzed: 09-Jul-24

Benzene	2.04	0.050	mg/kg	2.00		102	82.8-130	6.01	15.8	
Toluene	2.01	0.050	mg/kg	2.00		101	86-128	3.03	15.9	
Ethylbenzene	2.03	0.050	mg/kg	2.00		102	85.9-128	3.11	16	
m,p-Xylene	3.97	0.100	mg/kg	4.00		99.2	89-129	2.47	16.2	
o-Xylene	1.99	0.050	mg/kg	2.00		99.4	86.1-125	2.51	16.7	
Total Xylenes	5.95	0.150	mg/kg	6.00		99.2	88.2-128	2.48	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0489		mg/kg	0.0500		97.7	71.5-134			

Batch 4070905 - Volatiles**Blank (4070905-BLK1)**

Prepared & Analyzed: 09-Jul-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Project: RIO STATE #3
Project Number: 20220103-MURCHISON - RIOSTAT
Project Manager: ANDREW PARKER
Fax To: (575) 391-8484

Reported:
11-Jul-24 17:01

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

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

Batch 4070905 - Volatiles**Blank (4070905-BLK1)**

Prepared & Analyzed: 09-Jul-24

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0504		mg/kg	0.0500		101	71.5-134			

LCS (4070905-BS1)

Prepared & Analyzed: 09-Jul-24

Benzene	2.01	0.050	mg/kg	2.00		101	82.8-130			
Toluene	2.00	0.050	mg/kg	2.00		99.8	86-128			
Ethylbenzene	2.03	0.050	mg/kg	2.00		102	85.9-128			
m,p-Xylene	4.01	0.100	mg/kg	4.00		100	89-129			
o-Xylene	1.99	0.050	mg/kg	2.00		99.4	86.1-125			
Total Xylenes	6.00	0.150	mg/kg	6.00		100	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0509		mg/kg	0.0500		102	71.5-134			

LCS Dup (4070905-BSD1)

Prepared & Analyzed: 09-Jul-24

Benzene	1.98	0.050	mg/kg	2.00		98.9	82.8-130	1.84	15.8	
Toluene	1.95	0.050	mg/kg	2.00		97.7	86-128	2.09	15.9	
Ethylbenzene	1.99	0.050	mg/kg	2.00		99.5	85.9-128	2.11	16	
m,p-Xylene	3.93	0.100	mg/kg	4.00		98.1	89-129	2.13	16.2	
o-Xylene	1.95	0.050	mg/kg	2.00		97.7	86.1-125	1.75	16.7	
Total Xylenes	5.88	0.150	mg/kg	6.00		98.0	88.2-128	2.00	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	71.5-134			

Cardinal Laboratories

* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

MC NABB SERVICES P. O. BOX 5753 HOBBS NM, 88240	Project: RIO STATE #3 Project Number: 20220103-MURCHISON - RIOSTAT Project Manager: ANDREW PARKER Fax To: (575) 391-8484	Reported: 11-Jul-24 17:01
---	---	------------------------------

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

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

Batch 4070807 - General Prep - Organics

Blank (4070807-BLK1) Prepared: 08-Jul-24 Analyzed: 09-Jul-24

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	58.4		mg/kg	50.0		117	48.2-134			
Surrogate: 1-Chlorooctadecane	65.0		mg/kg	50.0		130	49.1-148			

LCS (4070807-BS1) Prepared: 08-Jul-24 Analyzed: 10-Jul-24

GRO C6-C10	102	10.0	mg/kg	100		102	66.4-123			
DRO >C10-C28	101	10.0	mg/kg	100		101	66.5-118			
Total TPH C6-C28	203	10.0	mg/kg	200		101	77.6-123			
Surrogate: 1-Chlorooctane	49.6		mg/kg	50.0		99.3	48.2-134			
Surrogate: 1-Chlorooctadecane	53.0		mg/kg	50.0		106	49.1-148			

LCS Dup (4070807-BSD1) Prepared: 08-Jul-24 Analyzed: 09-Jul-24

GRO C6-C10	99.6	10.0	mg/kg	100		99.6	66.4-123	2.67	17.7	
DRO >C10-C28	102	10.0	mg/kg	100		102	66.5-118	1.00	21	
Total TPH C6-C28	201	10.0	mg/kg	200		101	77.6-123	0.831	18.5	
Surrogate: 1-Chlorooctane	62.1		mg/kg	50.0		124	48.2-134			
Surrogate: 1-Chlorooctadecane	70.2		mg/kg	50.0		140	49.1-148			

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>McShane Par Truss</u>		P.O. # <u>20220103-murchison-Rio State 3</u>	
Project Manager: <u>Andrew Parker</u>		Company: <u>McShane Par Truss</u>	
Address: <u>On-File</u>		Attn: <u>Andrew Emerald Parker, LSW</u>	
City:	State:	Zip:	
Phone #:	Fax #:	City:	
Project #:	Project Owner:		
Project Name: <u>20220103-murchison-Rio State 3</u>			
Project Location: <u>Rio State 3</u>			
Sampler Name: <u>Christopher Turner</u>		Phone #:	
FOR LAB USE ONLY			
Lab I.D.:	Sample I.D.:	(G)RAB OR (C)OMP.	# CONTAINERS
<u>H244617</u>	<u>BS-07</u>	<u>1</u>	
<u>1</u>	<u>BS-06</u>	<u>1</u>	
<u>2</u>	<u>BS-05</u>	<u>1</u>	
<u>3</u>	<u>BS-04</u>	<u>1</u>	
<u>4</u>	<u>WS-03</u>	<u>1</u>	
<u>5</u>	<u>WS-03</u>	<u>1</u>	
<u>6</u>	<u>WS-04</u>	<u>1</u>	
<u>7</u>	<u>WS-04</u>	<u>1</u>	
<u>8</u>	<u>WS-05</u>	<u>1</u>	
<u>9</u>	<u>WS-05</u>	<u>1</u>	
<u>10</u>	<u>WS-05</u>	<u>1</u>	
Time:		MATRIX	PRESERV.
<u>4 FT</u>		GROUNDWATER	ICE / COOL
<u>4 FT</u>		WASTEWATER	OTHER
<u>4 FT</u>		SOIL	
<u>4 FT</u>		OIL	
<u>4 FT</u>		SLUDGE	
<u>6-2 FT</u>		OTHER:	
<u>2-4 FT</u>		ACID/BASE:	
<u>6-2 FT</u>		ICE / COOL	
<u>2-4 FT</u>		OTHER:	
<u>0-2 FT</u>			
<u>2-4 FT</u>			
<u>2-4 FT</u>			
DATE		SAMPLING	TIME
<u>07/24/24</u>			<u>14:00</u>
			<u>14:12</u>
			<u>14:20</u>
			<u>14:24</u>
			<u>14:34</u>
			<u>14:38</u>
			<u>14:43</u>
			<u>14:47</u>
			<u>14:51</u>
			<u>14:55</u>
PLEASE NOTE: Liability and/or safety and client's activities remain the responsibility of the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for such claims or damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subcontractors, affiliates or successors. Any loss of or related to the performance of analysis hereunder by Cardinal, regardless of whether such claim is based on any of the above stated reasons or otherwise, shall be the sole responsibility of the client.			
Relinquished By:	Date:	Received By:	Time:
<u>[Signature]</u>	<u>7-3-24</u>	<u>[Signature]</u>	<u>1515</u>
Relinquished By:	Date:	Received By:	Time:
<u>[Signature]</u>		<u>[Signature]</u>	
Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition
<u>UPS - Bus - Other:</u>	<u>8.6</u>		<input checked="" type="checkbox"/> Intact <input type="checkbox"/> Cool <input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Intact <input type="checkbox"/> Cool <input type="checkbox"/> Yes <input type="checkbox"/> No
Checked By: (Initials)	Thermometer ID #140	Correction Factor 0°C	Standard
<u>[Signature]</u>			<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
Remarks:	Turnaround Time:	Bacteria (only) Sample Condition	Observed Temp. °C
<u>* Customer requested Date change 9/27/11/24</u>		<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<u>9.0</u>
		<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	<u>7/11/24</u>
		<input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: McNabb Partners Project Manager: Andrew Parker Address: Dn-File City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: 20220103-Murchison-Rio States Project Location: Rio States Sampler Name: Christopher Turner		BILL TO P.O. #: 20220103-Murchison-Rio States Company: McNabb Partners Address: Attn: Andrew Parker City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		ANALYSIS REQUEST	
FOR LAB USE ONLY Lab I.D.: H244017 Sample I.D.: WS-06		(G)RAB OR (C)OMP. <input type="checkbox"/> # CONTAINERS: 1 MATRIX: <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> WASTEWATER <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE OTHER: _____ ACID/BASE: _____ ICE / COOL: <input checked="" type="checkbox"/> OTHER: _____	PRESERV: _____ SAMPLING: _____ DUE TIME: 07/24/24 15:02 TIME: 19:29	Chloride TPH (GRO+DRO+MRO) BTEX (Benzene)	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____
Retinquinshed By: <i>[Signature]</i> Date: 7-3-24 Time: _____ Relinquished By: <i>[Signature]</i> Date: 7/5/24 Time: _____ Received By: <i>[Signature]</i>		Observed Temp. °C: 26 Corrected Temp. °C: _____ Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact Checked By: <i>[Signature]</i>	Turnaround Time: _____ Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Bacteria (only) Sample Condition: <input type="checkbox"/> Cool <input type="checkbox"/> Intact Corrected Temp. °C: _____	REMARKS: * Customer requested Date changes to 7/11/24	



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

July 11, 2024

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

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 07/08/24 13:39.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene
Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: BS-01 6FT (H244041-01)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	07/10/2024	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*	21.3	10.0	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	310	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -01 0-2FT (H244041-02)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 96.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -01 2-4FT (H244041-03)

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	07/10/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/10/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 85.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -01 6FT (H244041-04)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 78.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -02 0-2FT (H244041-05)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	176	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	17.7	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -02 2-4FT (H244041-06)

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	07/10/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/10/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -02 6FT (H244041-07)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	07/10/2024	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	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -07 0-2FT (H244041-08)

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	07/10/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/10/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/10/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 85.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -07 2-4FT (H244041-09)

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	07/10/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/10/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	07/10/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 99.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -07 6FT (H244041-10)

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	07/10/2024	ND	1.98	98.9	2.00	0.839	
Toluene*	<0.050	0.050	07/10/2024	ND	2.18	109	2.00	0.774	
Ethylbenzene*	<0.050	0.050	07/10/2024	ND	2.23	111	2.00	0.885	
Total Xylenes*	<0.150	0.150	07/10/2024	ND	6.89	115	6.00	0.820	
Total BTEX	<0.300	0.300	07/10/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	07/10/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/10/2024	ND	186	93.2	200	1.26	
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45	
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND					

Surrogate: 1-Chlorooctane 88.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -10 0-2FT (H244041-11)

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	07/11/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/11/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/11/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/11/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/11/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	07/10/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 83.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	07/08/2024	Sampling Date:	07/08/2024
Reported:	07/11/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Alyssa Parras
Project Location:	EDDY CO., NM		

Sample ID: WS -10 2-4FT (H244041-12)

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	07/11/2024	ND	1.98	98.9	2.00	0.839		
Toluene*	<0.050	0.050	07/11/2024	ND	2.18	109	2.00	0.774		
Ethylbenzene*	<0.050	0.050	07/11/2024	ND	2.23	111	2.00	0.885		
Total Xylenes*	<0.150	0.150	07/11/2024	ND	6.89	115	6.00	0.820		
Total BTEX	<0.300	0.300	07/11/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/10/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	07/10/2024	ND	186	93.2	200	1.26		
DRO >C10-C28*	<10.0	10.0	07/10/2024	ND	180	90.2	200	2.45		
EXT DRO >C28-C36	<10.0	10.0	07/10/2024	ND						

Surrogate: 1-Chlorooctane 87.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

P.O. #20220103 - Marchison - Rio State
 Company: Mc Webb Partners
 Attn: amy@mcwebbpartners.com

Address: P.O. Box 103
 City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Phone #: (575) 393-2326
 Fax #: (575) 393-2476

Company Name: Mc Webb Partners
 Project Manager: Andrew Parker
 Address: On-File
 City: Hobbs, NM
 State: NM
 Zip: 88240

Project Name: 20220103 - Marchison - Rio State
 Project Location: Rio State 3

Project #: 20220103
 Project Owner: Mc Webb Partners

City: Hobbs, NM
 State: NM
 Zip: 88240

Lab I.D.	Sample I.D.	FOR LAB USE ONLY	MATRIX	PRESERV.	SAMPLING	ANALYSIS REQUEST
H2414001	BS-01	6FF	SOIL	X	07/08 9:55	Chloride
2	WS-81	0-2FF	SOIL	X	10:01	TPH (GRO+DR+MRO)
3	WS-01	2-4FF	SOIL	X	10:09	BTEX (Benzene)
4	WS-01	6FF	SOIL	X	10:14	
5	WS-02	0-2FF	SOIL	X	10:18	
6	WS-02	2-4FF	SOIL	X	10:25	
7	WS-02	6FF	SOIL	X	10:28	
8	WS-07	0-2FF	SOIL	X	10:31	
9	WS-07	2-4FF	SOIL	X	10:34	
10	WS-07	6FF	SOIL	X	10:40	

PLEASE NOTE: Liability and/or damages. Cardinal's liability and client's exclusive remedy for any claim arising under this contract or for 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 on contract, tort, or otherwise.

Relinquished By: *[Signature]* Date: 7-8-24
 Received By: *[Signature]* Date: 7-8-24
 Relinquished By: *[Signature]* Date: 7-8-24
 Received By: *[Signature]* Date: 7-8-24

Delivered By: (Circle One) Observed Temp. °C: 33.1
 Sampler - UPS - Bus - Other: Corrected Temp. °C: 33.1
 Sample Condition: Cool Intact Yes No
 Checked By: *[Signature]*
 Turnaround Time: Thermometer ID #140
 Standard: Bacteria (only) Sample Condition: Cool Intact Yes No
 Corrected Temp. °C: Yes No

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: McNabb Partners Project Manager: Andrew Parker Address: Dn-File City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____ Project #: _____ Project Owner: _____ Project Name: 20220105-Murchison-Rio State 3 Project Location: Rio State 3 Sampler Name: Christopher Turner		P.O. #: 20220105-Murchison-Rio State 3 Company: McNabb Partners Attn: Andrew McNabbPartners Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____	
FOR LAB USE ONLY Lab I.D. _____ Sample I.D. _____ H244001 11 W5-10 W5-10 6-2F# 2-4R		(G)RAB OR (C)OMP. # CONTAINERS _____ GROUNDWATER _____ WASTEWATER _____ MATRIX SOIL <input checked="" type="checkbox"/> <input type="checkbox"/> OIL _____ SLUDGE _____ OTHER: _____ ACID/BASE: ICE / COOL <input checked="" type="checkbox"/> OTHER: _____ PRESERV. _____ SAMPLING DATE 07/08 TIME 11:12 DATE 11:16 TIME _____	
Relinquished By: _____ Date: 7/8/21 Time: 13:39 Relinquished By: _____ Date: _____ Time: _____		Received By: APPA Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____	
Delivered By: (Circle One) UPS - Bus - Other: _____ Observed Temp. °C 5.6 Corrected Temp. °C _____ Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Checked By: APD (Initials)		Turnaround Time: _____ Thermometer ID #140 Correction Factor 0°C Standard Rush <input checked="" type="checkbox"/> Bacteria (only) Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Observed Temp. °C _____ Corrected Temp. °C _____	
REMARKS: _____ Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____			



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Dimitry Nikanorov
 McNabb Partners
 5014 W Carlsbad Hwy
 Hobbs, New Mexico 88240
 Generated 8/8/2024 1:14:16 PM Revision 1

JOB DESCRIPTION

RIO STATE #3
 Eddy CO NM

JOB NUMBER

890-6964-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
8/8/2024 1:14:16 PM
Revision 1

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client: McNabb Partners
Project/Site: RIO STATE #3

Laboratory Job ID: 890-6964-1
SDG: Eddy CO NM

Table of Contents

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	7
Surrogate Summary	12
QC Sample Results	13
QC Association Summary	18
Lab Chronicle	21
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	27

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Definitions/Glossary

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Eurofins Carlsbad

Case Narrative

Client: McNabb Partners
Project: RIO STATE #3

Job ID: 890-6964-1

Job ID: 890-6964-1

Eurofins Carlsbad

Job Narrative 890-6964-1

REVISION

The report being provided is a revision of the original report sent on 8/8/2024. The report (revision 1) is being revised due to Per client email, requesting sample ID correction.

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

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

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

Receipt

The samples were received on 7/30/2024 11:11 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BS - 01 (7') (890-6964-1), BS - 01 (8') (890-6964-2), BS - 01 (9') (890-6964-3), BS - 01 (10') (890-6964-4), BS - 01 (11') (890-6964-5) and BS - 01 (12') (890-6964-6).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: BS - 01 (7') (890-6964-1), BS - 01 (8') (890-6964-2), BS - 01 (9') (890-6964-3), BS - 01 (10') (890-6964-4), BS - 01 (11') (890-6964-5), (890-6964-A-1-A MS) and (890-6964-A-1-B MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-87078 and analytical batch 880-87131 was outside the control limits.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-87078 and analytical batch 880-87131 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BS - 01 (9') (890-6964-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The closing continuing calibration verification (CCVC) associated with batch 880-87133 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-87117/2-A) and (LCSD 880-87117/3-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-87117 and analytical batch 880-87133 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Eurofins Carlsbad

Case Narrative

Client: McNabb Partners
Project: RIO STATE #3

Job ID: 890-6964-1

Job ID: 890-6964-1 (Continued)

Eurofins Carlsbad

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-87117 and analytical batch 880-87133 was outside the control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-87117 and analytical batch 880-87133 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-87359 and analytical batch 880-87294 was outside the control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BS - 01 (8') (890-6964-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-87294/6). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-87294 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour limit, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-87294/21).

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

HPLC/IC

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Eurofins Carlsbad

Client Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (7')

Lab Sample ID: 890-6964-1

Date Collected: 07/30/24 08:30

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 7'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/31/24 09:48	07/31/24 11:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/31/24 09:48	07/31/24 11:45	1
Ethylbenzene	0.0216		0.00202		mg/Kg		07/31/24 09:48	07/31/24 11:45	1
m-Xylene & p-Xylene	0.0635		0.00404		mg/Kg		07/31/24 09:48	07/31/24 11:45	1
o-Xylene	0.0245		0.00202		mg/Kg		07/31/24 09:48	07/31/24 11:45	1
Xylenes, Total	0.0880		0.00404		mg/Kg		07/31/24 09:48	07/31/24 11:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	177	S1+	70 - 130	07/31/24 09:48	07/31/24 11:45	1
1,4-Difluorobenzene (Surr)	92		70 - 130	07/31/24 09:48	07/31/24 11:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.110		0.00404		mg/Kg			07/31/24 11:45	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/31/24 19:47	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U ** *1	50.0		mg/Kg		07/31/24 10:01	07/31/24 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U ** *1	50.0		mg/Kg		07/31/24 10:01	07/31/24 19:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/24 10:01	07/31/24 19:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	07/31/24 10:01	07/31/24 19:47	1
o-Terphenyl	100		70 - 130	07/31/24 10:01	07/31/24 19:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.3		5.02		mg/Kg			08/02/24 05:42	1

Client Sample ID: BS - 01 (8')

Lab Sample ID: 890-6964-2

Date Collected: 07/30/24 08:45

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 8'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/31/24 09:48	07/31/24 12:06	1
Toluene	0.241		0.00201		mg/Kg		07/31/24 09:48	07/31/24 12:06	1
Ethylbenzene	2.00		0.0502		mg/Kg		07/31/24 14:43	07/31/24 19:28	25
m-Xylene & p-Xylene	7.81		0.100		mg/Kg		07/31/24 14:43	07/31/24 19:28	25
o-Xylene	2.78		0.0502		mg/Kg		07/31/24 14:43	07/31/24 19:28	25
Xylenes, Total	10.6		0.100		mg/Kg		07/31/24 14:43	07/31/24 19:28	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130	07/31/24 09:48	07/31/24 12:06	1

Eurofins Carlsbad

Client Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (8')

Lab Sample ID: 890-6964-2

Date Collected: 07/30/24 08:45

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 8'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	370	S1+	70 - 130	07/31/24 14:43	07/31/24 19:28	25
1,4-Difluorobenzene (Surr)	90		70 - 130	07/31/24 09:48	07/31/24 12:06	1
1,4-Difluorobenzene (Surr)	110		70 - 130	07/31/24 14:43	07/31/24 19:28	25

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.8		0.100		mg/Kg			07/31/24 19:28	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2970		49.8		mg/Kg			08/02/24 15:39	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	899		49.8		mg/Kg		08/02/24 09:59	08/02/24 15:39	1
Diesel Range Organics (Over C10-C28)	2070		49.8		mg/Kg		08/02/24 09:59	08/02/24 15:39	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/02/24 09:59	08/02/24 15:39	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane	174	S1+	70 - 130	08/02/24 09:59	08/02/24 15:39	1			
o-Terphenyl	102		70 - 130	08/02/24 09:59	08/02/24 15:39	1			

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.7		4.98		mg/Kg			08/02/24 05:50	1

Client Sample ID: BS - 01 (9')

Lab Sample ID: 890-6964-3

Date Collected: 07/30/24 09:00

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 9'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/31/24 09:48	07/31/24 12:27	1
Toluene	0.247		0.00200		mg/Kg		07/31/24 09:48	07/31/24 12:27	1
Ethylbenzene	2.74		0.0498		mg/Kg		07/31/24 14:43	07/31/24 19:49	25
m-Xylene & p-Xylene	10.7		0.0996		mg/Kg		07/31/24 14:43	07/31/24 19:49	25
o-Xylene	3.70		0.0498		mg/Kg		07/31/24 14:43	07/31/24 19:49	25
Xylenes, Total	14.4		0.0996		mg/Kg		07/31/24 14:43	07/31/24 19:49	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	439	S1+	70 - 130	07/31/24 09:48	07/31/24 12:27	1
4-Bromofluorobenzene (Surr)	485	S1+	70 - 130	07/31/24 14:43	07/31/24 19:49	25
1,4-Difluorobenzene (Surr)	93		70 - 130	07/31/24 09:48	07/31/24 12:27	1
1,4-Difluorobenzene (Surr)	81		70 - 130	07/31/24 14:43	07/31/24 19:49	25

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	17.4		0.0996		mg/Kg			07/31/24 19:49	1

Eurofins Carlsbad

Client Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (9')

Lab Sample ID: 890-6964-3

Date Collected: 07/30/24 09:00

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 9'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2220		49.8		mg/Kg			07/31/24 19:16	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	665	*+ *1	49.8		mg/Kg		07/30/24 14:57	07/31/24 19:16	1
Diesel Range Organics (Over C10-C28)	1550	*+ *1	49.8		mg/Kg		07/30/24 14:57	07/31/24 19:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/30/24 14:57	07/31/24 19:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130	07/30/24 14:57	07/31/24 19:16	1
o-Terphenyl	86		70 - 130	07/30/24 14:57	07/31/24 19:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	150		5.04		mg/Kg			08/02/24 05:58	1

Client Sample ID: BS - 01 (10')

Lab Sample ID: 890-6964-4

Date Collected: 07/30/24 09:15

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 10'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/31/24 09:48	07/31/24 12:47	1
Toluene	0.217		0.00199		mg/Kg		07/31/24 09:48	07/31/24 12:47	1
Ethylbenzene	2.33		0.0497		mg/Kg		07/31/24 14:43	07/31/24 20:09	25
m-Xylene & p-Xylene	8.40		0.0994		mg/Kg		07/31/24 14:43	07/31/24 20:09	25
o-Xylene	2.72		0.0497		mg/Kg		07/31/24 14:43	07/31/24 20:09	25
Xylenes, Total	11.1		0.0994		mg/Kg		07/31/24 14:43	07/31/24 20:09	25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	321	S1+	70 - 130	07/31/24 09:48	07/31/24 12:47	1
4-Bromofluorobenzene (Surr)	453	S1+	70 - 130	07/31/24 14:43	07/31/24 20:09	25
1,4-Difluorobenzene (Surr)	94		70 - 130	07/31/24 09:48	07/31/24 12:47	1
1,4-Difluorobenzene (Surr)	80		70 - 130	07/31/24 14:43	07/31/24 20:09	25

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	13.7		0.0994		mg/Kg			07/31/24 20:09	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1300		49.7		mg/Kg			07/31/24 19:32	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	343	*+ *1	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:32	1
Diesel Range Organics (Over C10-C28)	955	*+ *1	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:32	1

Eurofins Carlsbad

Client Sample Results

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Client Sample ID: BS - 01 (10')

Lab Sample ID: 890-6964-4

Date Collected: 07/30/24 09:15

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 10'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130				07/30/24 14:57	07/31/24 19:32	1
o-Terphenyl	86		70 - 130				07/30/24 14:57	07/31/24 19:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		4.99		mg/Kg			08/02/24 06:06	1

Client Sample ID: BS - 01 (11')

Lab Sample ID: 890-6964-5

Date Collected: 07/30/24 09:30

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 11'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
Toluene	0.00381		0.00199		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
Ethylbenzene	0.0443		0.00199		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
m-Xylene & p-Xylene	0.114		0.00398		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
o-Xylene	0.0347		0.00199		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
Xylenes, Total	0.149		0.00398		mg/Kg		07/31/24 09:48	07/31/24 13:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	229	S1+	70 - 130				07/31/24 09:48	07/31/24 13:08	1
1,4-Difluorobenzene (Surr)	93		70 - 130				07/31/24 09:48	07/31/24 13:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.197		0.00398		mg/Kg			07/31/24 13:08	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	97.1		49.7		mg/Kg			07/31/24 19:47	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U ** *1	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:47	1
Diesel Range Organics (Over C10-C28)	97.1	** *1	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:47	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		07/30/24 14:57	07/31/24 19:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				07/30/24 14:57	07/31/24 19:47	1
o-Terphenyl	79		70 - 130				07/30/24 14:57	07/31/24 19:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	138		5.02		mg/Kg			08/02/24 06:14	1

Eurofins Carlsbad

Client Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (12')

Lab Sample ID: 890-6964-6

Date Collected: 07/30/24 09:45

Matrix: Solid

Date Received: 07/30/24 11:11

Sample Depth: 12'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/31/24 09:48	07/31/24 13:29	1
Toluene	0.00586		0.00202		mg/Kg		07/31/24 09:48	07/31/24 13:29	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/31/24 09:48	07/31/24 13:29	1
m-Xylene & p-Xylene	0.00462		0.00404		mg/Kg		07/31/24 09:48	07/31/24 13:29	1
o-Xylene	0.00402		0.00202		mg/Kg		07/31/24 09:48	07/31/24 13:29	1
Xylenes, Total	0.00864		0.00404		mg/Kg		07/31/24 09:48	07/31/24 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	07/31/24 09:48	07/31/24 13:29	1
1,4-Difluorobenzene (Surr)	82		70 - 130	07/31/24 09:48	07/31/24 13:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0145		0.00404		mg/Kg			07/31/24 13:29	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/31/24 20:18	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U ** *1	50.0		mg/Kg		07/30/24 14:57	07/31/24 20:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U ** *1	50.0		mg/Kg		07/30/24 14:57	07/31/24 20:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/30/24 14:57	07/31/24 20:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	07/30/24 14:57	07/31/24 20:18	1
o-Terphenyl	80		70 - 130	07/30/24 14:57	07/31/24 20:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.26		5.04		mg/Kg			08/02/24 06:38	1

Surrogate Summary

Client: McNabb Partners
Project/Site: RIO STATE #3Job ID: 890-6964-1
SDG: Eddy CO NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-6964-1	BS - 01 (7')	177 S1+	92
890-6964-1 MS	BS - 01 (7')	191 S1+	94
890-6964-1 MSD	BS - 01 (7')	208 S1+	90
890-6964-2	BS - 01 (8')	143 S1+	90
890-6964-2	BS - 01 (8')	370 S1+	110
890-6964-3	BS - 01 (9')	439 S1+	93
890-6964-3	BS - 01 (9')	485 S1+	81
890-6964-4	BS - 01 (10')	321 S1+	94
890-6964-4	BS - 01 (10')	453 S1+	80
890-6964-5	BS - 01 (11')	229 S1+	93
890-6964-6	BS - 01 (12')	110	82
LCS 880-87116/1-A	Lab Control Sample	114	92
LCSD 880-87116/2-A	Lab Control Sample Dup	124	99
MB 880-87116/5-A	Method Blank	86	88

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-6964-1	BS - 01 (7')	88	100
890-6964-2	BS - 01 (8')	174 S1+	102
890-6964-3	BS - 01 (9')	142 S1+	86
890-6964-4	BS - 01 (10')	124	86
890-6964-5	BS - 01 (11')	91	79
890-6964-6	BS - 01 (12')	91	80
LCS 880-87078/2-A	Lab Control Sample	125	106
LCS 880-87117/2-A	Lab Control Sample	200 S1+	208 S1+
LCS 880-87359/2-A	Lab Control Sample	89	74
LCSD 880-87078/3-A	Lab Control Sample Dup	168 S1+	139 S1+
LCSD 880-87117/3-A	Lab Control Sample Dup	131 S1+	134 S1+
LCSD 880-87359/3-A	Lab Control Sample Dup	87	72
MB 880-87078/1-A	Method Blank	64 S1-	59 S1-
MB 880-87117/1-A	Method Blank	54 S1-	65 S1-
MB 880-87359/1-A	Method Blank	63 S1-	58 S1-

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

QC Sample Results

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-87116/5-A
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87116

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/31/24 09:48	07/31/24 11:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/31/24 09:48	07/31/24 11:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/31/24 09:48	07/31/24 11:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/31/24 09:48	07/31/24 11:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/31/24 09:48	07/31/24 11:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/31/24 09:48	07/31/24 11:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	07/31/24 09:48	07/31/24 11:24	1
1,4-Difluorobenzene (Surr)	88		70 - 130	07/31/24 09:48	07/31/24 11:24	1

Lab Sample ID: LCS 880-87116/1-A
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87116

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1127		mg/Kg		113	70 - 130
Toluene	0.100	0.1061		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1215		mg/Kg		122	70 - 130
m-Xylene & p-Xylene	0.200	0.2461		mg/Kg		123	70 - 130
o-Xylene	0.100	0.1243		mg/Kg		124	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-87116/2-A
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87116

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1107		mg/Kg		111	70 - 130	2	35
Toluene	0.100	0.1000		mg/Kg		100	70 - 130	6	35
Ethylbenzene	0.100	0.1056		mg/Kg		106	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.2212		mg/Kg		111	70 - 130	11	35
o-Xylene	0.100	0.1089		mg/Kg		109	70 - 130	13	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-6964-1 MS
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: BS - 01 (7')
Prep Type: Total/NA
Prep Batch: 87116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.1014		mg/Kg		101	70 - 130
Toluene	<0.00202	U	0.100	0.09237		mg/Kg		92	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 890-6964-1 MS
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: BS - 01 (7')
Prep Type: Total/NA
Prep Batch: 87116

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.0216		0.100	0.1269		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	0.0635		0.200	0.2938		mg/Kg		115	70 - 130
o-Xylene	0.0245		0.100	0.1289		mg/Kg		104	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	191	S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-6964-1 MSD
Matrix: Solid
Analysis Batch: 87103

Client Sample ID: BS - 01 (7')
Prep Type: Total/NA
Prep Batch: 87116

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00202	U	0.100	0.1022		mg/Kg		102	70 - 130	1	35
Toluene	<0.00202	U	0.100	0.09602		mg/Kg		96	70 - 130	4	35
Ethylbenzene	0.0216		0.100	0.1281		mg/Kg		106	70 - 130	1	35
m-Xylene & p-Xylene	0.0635		0.200	0.2897		mg/Kg		113	70 - 130	1	35
o-Xylene	0.0245		0.100	0.1268		mg/Kg		102	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	208	S1+	70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-87078/1-A
Matrix: Solid
Analysis Batch: 87131

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87078

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/30/24 14:57	07/31/24 11:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/30/24 14:57	07/31/24 11:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/30/24 14:57	07/31/24 11:54	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130	07/30/24 14:57	07/31/24 11:54	1
o-Terphenyl	59	S1-	70 - 130	07/30/24 14:57	07/31/24 11:54	1

Lab Sample ID: LCS 880-87078/2-A
Matrix: Solid
Analysis Batch: 87131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87078

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1101		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1115		mg/Kg		112	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 880-87078/2-A
Matrix: Solid
Analysis Batch: 87131

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87078

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	125		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-87078/3-A
Matrix: Solid
Analysis Batch: 87131

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87078

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1425	*+ *1	mg/Kg		143	70 - 130	26	20	
Diesel Range Organics (Over C10-C28)	1000	1386	*+ *1	mg/Kg		139	70 - 130	22	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	168	S1+	70 - 130
o-Terphenyl	139	S1+	70 - 130

Lab Sample ID: MB 880-87117/1-A
Matrix: Solid
Analysis Batch: 87133

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87117

Analyte	MB		RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier					Time	Time	Time	Time	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/31/24 10:01	07/31/24 11:39			1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/31/24 10:01	07/31/24 11:39			1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/31/24 10:01	07/31/24 11:39			1

Surrogate	MB		Limits	Prepared		Analyzed		Dil Fac
	%Recovery	Qualifier		Time	Time	Time	Time	
1-Chlorooctane	54	S1-	70 - 130	07/31/24 10:01	07/31/24 11:39			1
o-Terphenyl	65	S1-	70 - 130	07/31/24 10:01	07/31/24 11:39			1

Lab Sample ID: LCS 880-87117/2-A
Matrix: Solid
Analysis Batch: 87133

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87117

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec	
		Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	1000	1449	*+	mg/Kg		145	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	1934	*+	mg/Kg		193	70 - 130	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	200	S1+	70 - 130
o-Terphenyl	208	S1+	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-87117/3-A
Matrix: Solid
Analysis Batch: 87133

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87117

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1076	*1	mg/Kg		108	70 - 130	30	20
Diesel Range Organics (Over C10-C28)	1000	1238	*1	mg/Kg		124	70 - 130	44	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	131	S1+	70 - 130
o-Terphenyl	134	S1+	70 - 130

Lab Sample ID: MB 880-87359/1-A
Matrix: Solid
Analysis Batch: 87294

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 87359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/02/24 09:58	08/02/24 10:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/02/24 09:58	08/02/24 10:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/02/24 09:58	08/02/24 10:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	63	S1-	70 - 130	08/02/24 09:58	08/02/24 10:00	1
o-Terphenyl	58	S1-	70 - 130	08/02/24 09:58	08/02/24 10:00	1

Lab Sample ID: LCS 880-87359/2-A
Matrix: Solid
Analysis Batch: 87294

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 87359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	904.5		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	759.4		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	74		70 - 130

Lab Sample ID: LCSD 880-87359/3-A
Matrix: Solid
Analysis Batch: 87294

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 87359

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	862.0		mg/Kg		86	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	744.4		mg/Kg		74	70 - 130	2	20

Eurofins Carlsbad

QC Sample Results

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 880-87359/3-A
 Matrix: Solid
 Analysis Batch: 87294

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 87359

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	87		70 - 130
o-Terphenyl	72		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-87136/1-A
 Matrix: Solid
 Analysis Batch: 87209

Client Sample ID: Method Blank
 Prep Type: Soluble

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<5.00	U	5.00		mg/Kg			08/02/24 03:59	1

Lab Sample ID: LCS 880-87136/2-A
 Matrix: Solid
 Analysis Batch: 87209

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: LCSD 880-87136/3-A
 Matrix: Solid
 Analysis Batch: 87209

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit

Lab Sample ID: 890-6964-5 MS
 Matrix: Solid
 Analysis Batch: 87209

Client Sample ID: BS - 01 (11')
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits

Lab Sample ID: 890-6964-5 MSD
 Matrix: Solid
 Analysis Batch: 87209

Client Sample ID: BS - 01 (11')
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit

QC Association Summary

Client: McNabb Partners
Project/Site: RIO STATE #3Job ID: 890-6964-1
SDG: Eddy CO NM

GC VOA

Analysis Batch: 87103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	8021B	87116
890-6964-2	BS - 01 (8')	Total/NA	Solid	8021B	87116
890-6964-2	BS - 01 (8')	Total/NA	Solid	8021B	87116
890-6964-3	BS - 01 (9')	Total/NA	Solid	8021B	87116
890-6964-3	BS - 01 (9')	Total/NA	Solid	8021B	87116
890-6964-4	BS - 01 (10')	Total/NA	Solid	8021B	87116
890-6964-4	BS - 01 (10')	Total/NA	Solid	8021B	87116
890-6964-5	BS - 01 (11')	Total/NA	Solid	8021B	87116
890-6964-6	BS - 01 (12')	Total/NA	Solid	8021B	87116
MB 880-87116/5-A	Method Blank	Total/NA	Solid	8021B	87116
LCS 880-87116/1-A	Lab Control Sample	Total/NA	Solid	8021B	87116
LCS 880-87116/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87116
890-6964-1 MS	BS - 01 (7')	Total/NA	Solid	8021B	87116
890-6964-1 MSD	BS - 01 (7')	Total/NA	Solid	8021B	87116

Prep Batch: 87116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	5035	
890-6964-2	BS - 01 (8')	Total/NA	Solid	5035	
890-6964-2	BS - 01 (8')	Total/NA	Solid	5035	
890-6964-3	BS - 01 (9')	Total/NA	Solid	5035	
890-6964-3	BS - 01 (9')	Total/NA	Solid	5035	
890-6964-4	BS - 01 (10')	Total/NA	Solid	5035	
890-6964-4	BS - 01 (10')	Total/NA	Solid	5035	
890-6964-5	BS - 01 (11')	Total/NA	Solid	5035	
890-6964-6	BS - 01 (12')	Total/NA	Solid	5035	
MB 880-87116/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87116/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-87116/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6964-1 MS	BS - 01 (7')	Total/NA	Solid	5035	
890-6964-1 MSD	BS - 01 (7')	Total/NA	Solid	5035	

Analysis Batch: 87249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	Total BTEX	
890-6964-2	BS - 01 (8')	Total/NA	Solid	Total BTEX	
890-6964-3	BS - 01 (9')	Total/NA	Solid	Total BTEX	
890-6964-4	BS - 01 (10')	Total/NA	Solid	Total BTEX	
890-6964-5	BS - 01 (11')	Total/NA	Solid	Total BTEX	
890-6964-6	BS - 01 (12')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 87078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-3	BS - 01 (9')	Total/NA	Solid	8015NM Prep	
890-6964-4	BS - 01 (10')	Total/NA	Solid	8015NM Prep	
890-6964-5	BS - 01 (11')	Total/NA	Solid	8015NM Prep	
890-6964-6	BS - 01 (12')	Total/NA	Solid	8015NM Prep	
MB 880-87078/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87078/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

QC Association Summary

Client: McNabb Partners
Project/Site: RIO STATE #3Job ID: 890-6964-1
SDG: Eddy CO NM

GC Semi VOA (Continued)

Prep Batch: 87078 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-87078/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 87117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	8015NM Prep	
MB 880-87117/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87117/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87117/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 87131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-3	BS - 01 (9')	Total/NA	Solid	8015B NM	87078
890-6964-4	BS - 01 (10')	Total/NA	Solid	8015B NM	87078
890-6964-5	BS - 01 (11')	Total/NA	Solid	8015B NM	87078
890-6964-6	BS - 01 (12')	Total/NA	Solid	8015B NM	87078
MB 880-87078/1-A	Method Blank	Total/NA	Solid	8015B NM	87078
LCS 880-87078/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87078
LCSD 880-87078/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87078

Analysis Batch: 87133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	8015B NM	87117
MB 880-87117/1-A	Method Blank	Total/NA	Solid	8015B NM	87117
LCS 880-87117/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87117
LCSD 880-87117/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87117

Analysis Batch: 87265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Total/NA	Solid	8015 NM	
890-6964-2	BS - 01 (8')	Total/NA	Solid	8015 NM	
890-6964-3	BS - 01 (9')	Total/NA	Solid	8015 NM	
890-6964-4	BS - 01 (10')	Total/NA	Solid	8015 NM	
890-6964-5	BS - 01 (11')	Total/NA	Solid	8015 NM	
890-6964-6	BS - 01 (12')	Total/NA	Solid	8015 NM	

Analysis Batch: 87294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-2	BS - 01 (8')	Total/NA	Solid	8015B NM	87359
MB 880-87359/1-A	Method Blank	Total/NA	Solid	8015B NM	87359
LCS 880-87359/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87359
LCSD 880-87359/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87359

Prep Batch: 87359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-2	BS - 01 (8')	Total/NA	Solid	8015NM Prep	
MB 880-87359/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87359/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87359/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

QC Association Summary

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

HPLC/IC

Leach Batch: 87136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Soluble	Solid	DI Leach	
890-6964-2	BS - 01 (8')	Soluble	Solid	DI Leach	
890-6964-3	BS - 01 (9')	Soluble	Solid	DI Leach	
890-6964-4	BS - 01 (10')	Soluble	Solid	DI Leach	
890-6964-5	BS - 01 (11')	Soluble	Solid	DI Leach	
890-6964-6	BS - 01 (12')	Soluble	Solid	DI Leach	
MB 880-87136/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87136/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87136/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6964-5 MS	BS - 01 (11')	Soluble	Solid	DI Leach	
890-6964-5 MSD	BS - 01 (11')	Soluble	Solid	DI Leach	

Analysis Batch: 87209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6964-1	BS - 01 (7')	Soluble	Solid	300.0	87136
890-6964-2	BS - 01 (8')	Soluble	Solid	300.0	87136
890-6964-3	BS - 01 (9')	Soluble	Solid	300.0	87136
890-6964-4	BS - 01 (10')	Soluble	Solid	300.0	87136
890-6964-5	BS - 01 (11')	Soluble	Solid	300.0	87136
890-6964-6	BS - 01 (12')	Soluble	Solid	300.0	87136
MB 880-87136/1-A	Method Blank	Soluble	Solid	300.0	87136
LCS 880-87136/2-A	Lab Control Sample	Soluble	Solid	300.0	87136
LCSD 880-87136/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87136
890-6964-5 MS	BS - 01 (11')	Soluble	Solid	300.0	87136
890-6964-5 MSD	BS - 01 (11')	Soluble	Solid	300.0	87136

Lab Chronicle

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (7')

Lab Sample ID: 890-6964-1

Date Collected: 07/30/24 08:30

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 11:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 11:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	07/31/24 19:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87117	07/31/24 10:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87133	07/31/24 19:47	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 05:42	SMC	EET MID

Client Sample ID: BS - 01 (8')

Lab Sample ID: 890-6964-2

Date Collected: 07/30/24 08:45

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 12:06	MNR	EET MID
Total/NA	Prep	5035			4.98 g	5 mL	87116	07/31/24 14:43	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	87103	07/31/24 19:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 19:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	08/02/24 15:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	87359	08/02/24 09:59	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87294	08/02/24 15:39	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 05:50	SMC	EET MID

Client Sample ID: BS - 01 (9')

Lab Sample ID: 890-6964-3

Date Collected: 07/30/24 09:00

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 12:27	MNR	EET MID
Total/NA	Prep	5035			5.02 g	5 mL	87116	07/31/24 14:43	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	87103	07/31/24 19:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 19:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	07/31/24 19:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	87078	07/30/24 14:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87131	07/31/24 19:16	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 05:58	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: McNabb Partners
 Project/Site: RIO STATE #3

Job ID: 890-6964-1
 SDG: Eddy CO NM

Client Sample ID: BS - 01 (10')

Lab Sample ID: 890-6964-4

Date Collected: 07/30/24 09:15

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 12:47	MNR	EET MID
Total/NA	Prep	5035			5.03 g	5 mL	87116	07/31/24 14:43	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	87103	07/31/24 20:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 20:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	07/31/24 19:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	87078	07/30/24 14:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87131	07/31/24 19:32	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 06:06	SMC	EET MID

Client Sample ID: BS - 01 (11')

Lab Sample ID: 890-6964-5

Date Collected: 07/30/24 09:30

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 13:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 13:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	07/31/24 19:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	87078	07/30/24 14:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87131	07/31/24 19:47	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 06:14	SMC	EET MID

Client Sample ID: BS - 01 (12')

Lab Sample ID: 890-6964-6

Date Collected: 07/30/24 09:45

Matrix: Solid

Date Received: 07/30/24 11:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	87116	07/31/24 09:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	87103	07/31/24 13:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			87249	07/31/24 13:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			87265	07/31/24 20:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	87078	07/30/24 14:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	87131	07/31/24 20:18	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	87136	07/31/24 11:12	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	87209	08/02/24 06:38	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

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

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: McNabb Partners
Project/Site: RIO STATE #3

Job ID: 890-6964-1
SDG: Eddy CO NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6964-1	BS - 01 (7')	Solid	07/30/24 08:30	07/30/24 11:11	7'
890-6964-2	BS - 01 (8')	Solid	07/30/24 08:45	07/30/24 11:11	8'
890-6964-3	BS - 01 (9')	Solid	07/30/24 09:00	07/30/24 11:11	9'
890-6964-4	BS - 01 (10')	Solid	07/30/24 09:15	07/30/24 11:11	10'
890-6964-5	BS - 01 (11')	Solid	07/30/24 09:30	07/30/24 11:11	11'
890-6964-6	BS - 01 (12')	Solid	07/30/24 09:45	07/30/24 11:11	12'

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
 EL Paso, TX (915) 595-3443, Lubbock, TX (806) 794-1296
 Hobbs, NM (575) 382-7550, Carlsbad, NM (575) 988-3199
 Little Rock, AR (501) 224-5060



Environment Testing

Work Order No:

Page of

Project Manager:	Dimitry Nikanorov	Bill to: (if different)	
Company Name:	McNabb Partners	Company Name:	McNabb Partners
Address:	5014 W Carlsbad Hwy	Address:	
City, State ZIP:	Hobbs, NM 88240	City, State ZIP:	
Phone:	917-497-6890	Email:	dimitry@menabbpartners.com

Project Name:	Rio Stair #3	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:	Eddy Co, NM	Due Date:	
Project Location:	Dimitry Nikanorov	TAT starts the day received by the lab, if received by 4:00pm	
Sampler's Name:		Wet Ice:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
PO #:		Thermometer ID:	111007
SAMPLE RECEIPT		Temp Blank:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor:	-0.2
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Temperature Reading:	5.4
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Corrected Temperature:	5.2
Total Containers:			

Project Name:	Rio Stair #3	Pres. Code	
Project Number:	Eddy Co, NM	None: NO	DI Water: H ₂ O
Project Location:	Dimitry Nikanorov	Cool: Cool	MeOH: Me
Sampler's Name:		HCL: HC	HNO ₃
PO #:		H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT		H ₃ PO ₄ : HP	
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Zn Acetate+NaOH: Zn	
Total Containers:		NaOH+Ascorbic Acid: SAPC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
BS-01 (71)	S	7/30/24	0830	7'	Grab	1	Chloride		890-6964 Chain of Custody		
BS-01 (81)			0845	8'	Grab	1					
BS-01 (91)			0900	9'	Grab	1					
BS-01 (101)			0915	10'	Grab	1					
BS-01 (111)			0930	11'	Grab	1					
BS-01 (121)			0945	12'	Grab	1					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fa Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Tl Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	7/30 11:12			
3					
5					



Login Sample Receipt Checklist

Client: McNabb Partners

Job Number: 890-6964-1

SDG Number: Eddy CO NM

Login Number: 6964

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Login Sample Receipt Checklist

Client: McNabb Partners

Job Number: 890-6964-1
SDG Number: Eddy CO NM

Login Number: 6964
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 07/31/24 08:24 AM

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



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

September 20, 2024

DIMITRY NIKANOROV

MC NABB SERVICES

P. O. BOX 5753

HOBBS, NM 88240

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 09/18/24 13:27.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, written in a professional style.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 08 5' (H245673-01)

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	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	50.9	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 65.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 09 5' (H245673-02)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	36.1	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 76.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: BS - 01 12' (H245673-03)

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	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	GC-NC
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.9 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	12.0	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 80.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 08A 0-2' (H245673-04)

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	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 92.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 86.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.3 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 08A 2-5' (H245673-05)

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	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.0 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 84.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 09A 0-2' (H245673-06)

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	09/19/2024	ND	2.09	105	2.00	0.0246	
Toluene*	<0.050	0.050	09/19/2024	ND	1.95	97.3	2.00	0.246	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	1.96	97.8	2.00	0.872	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	5.82	97.0	6.00	0.340	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.8 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	202	101	200	0.914	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	189	94.6	200	1.66	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 88.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 09A 2-5' (H245673-07)

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	09/19/2024	ND	2.32	116	2.00	1.24	
Toluene*	<0.050	0.050	09/19/2024	ND	2.19	109	2.00	0.761	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	2.18	109	2.00	0.183	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	6.59	110	6.00	0.412	
Total BTEX	<0.300	0.300	09/19/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	198	99.2	200	0.771	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	200	100	200	0.725	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 98.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 01 6-9' (H245673-08)

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	09/19/2024	ND	2.32	116	2.00	1.24	
Toluene*	<0.050	0.050	09/19/2024	ND	2.19	109	2.00	0.761	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	2.18	109	2.00	0.183	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	6.59	110	6.00	0.412	
Total BTEX	<0.300	0.300	09/19/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	198	99.2	200	0.771	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	200	100	200	0.725	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 01 9-12' (H245673-09)

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	09/19/2024	ND	2.32	116	2.00	1.24		
Toluene*	<0.050	0.050	09/19/2024	ND	2.19	109	2.00	0.761		
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	2.18	109	2.00	0.183		
Total Xylenes*	<0.150	0.150	09/19/2024	ND	6.59	110	6.00	0.412		
Total BTEX	<0.300	0.300	09/19/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	09/19/2024	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	198	99.2	200	0.771		
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	200	100	200	0.725		
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND						

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 07 6-9' (H245673-10)

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	09/19/2024	ND	2.32	116	2.00	1.24	
Toluene*	<0.050	0.050	09/19/2024	ND	2.19	109	2.00	0.761	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	2.18	109	2.00	0.183	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	6.59	110	6.00	0.412	
Total BTEX	<0.300	0.300	09/19/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	198	99.2	200	0.771	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	200	100	200	0.725	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 79.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

Analytical Results For:

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

Received:	09/18/2024	Sampling Date:	09/18/2024
Reported:	09/20/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	20220103-MURCHISON - RIOSTATE3	Sample Received By:	Shalyn Rodriguez
Project Location:	EDDY CO., NM		

Sample ID: WS - 07 9-12' (H245673-11)

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	09/19/2024	ND	2.32	116	2.00	1.24	
Toluene*	<0.050	0.050	09/19/2024	ND	2.19	109	2.00	0.761	
Ethylbenzene*	<0.050	0.050	09/19/2024	ND	2.18	109	2.00	0.183	
Total Xylenes*	<0.150	0.150	09/19/2024	ND	6.59	110	6.00	0.412	
Total BTEX	<0.300	0.300	09/19/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	09/19/2024	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	09/19/2024	ND	198	99.2	200	0.771	
DRO >C10-C28*	<10.0	10.0	09/19/2024	ND	200	100	200	0.725	
EXT DRO >C28-C36	<10.0	10.0	09/19/2024	ND					

Surrogate: 1-Chlorooctane 94.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

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



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

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

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: *McKee Partners*
Project Manager: *Dimitry Nikanov*
Address: *On-File*

P.O. #: *20220108-murchison-ris*
Company: *Murchison Diff Co*
Attn: *Dimitry & Muriel Partners, Inc*

City: _____ State: _____ Zip: _____
Phone #: _____ Fax #: _____
Project #: _____ Project Owner: _____
Project Name: *20220108-Murchison - Rio State 3*
Project Location: *Rio State #3*

City: _____ State: _____ Zip: _____
Phone #: _____ Fax #: _____

Sampler Name: *Mr's Turner*

FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.		DATE	TIME	ANALYSIS REQUEST	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL				OTHER:
<i>H454073</i>															
	<i>BS-08</i>	<i>SF</i>	<i>C</i>									<i>09/18</i>	<i>4:34</i>	<i>X</i>	<i>Chloride</i>
	<i>BS-09</i>	<i>SF</i>	<i>1</i>										<i>4:53</i>	<i>X</i>	<i>TPH (GRO+DRO+MRO)</i>
	<i>BS-08A</i>	<i>D-2F</i>											<i>10:03</i>		
	<i>WS-08A</i>	<i>2-SF</i>											<i>10:01</i>		
	<i>WS-01A</i>	<i>0-2F</i>											<i>10:17</i>		
	<i>WS-09A</i>	<i>2-SF</i>											<i>10:22</i>		
	<i>WS-01</i>	<i>6-9FF</i>											<i>10:33</i>		
	<i>WS-01</i>	<i>9-12F</i>											<i>10:40</i>		
	<i>WS-07</i>	<i>6-9FF</i>											<i>10:46</i>		

PLEASE NOTE: Liability and Chain of Custody are the responsibility of the client. Cardinal Laboratories is not responsible for any claims arising from the use of this form. 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 subcontractors, affiliates or successors, arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based on any of the above stated reasons or otherwise.

Relinquished By: *[Signature]*
Date: *9/18/24*
Time: *13:27*

Received By: *[Signature]*
Date: _____
Time: _____

Verbal Result: Yes No Add'l Phone #:
All Results are emailed. Please provide Email address:
REMARKS: *clw@mckee.com*

Delivered By: (Circle One) UPS Bus Other: _____

Observed Temp. °C: *5.0* Sample Condition: Intact Cool Yes No

Corrected Temp. °C: *5.0* Checked By: *[Signature]*

Turnaround Time: *48 HR* Standard Rush

Thermometer ID #148 Bacteria (only) Sample Condition: Intact Cool Yes No

Correction Factor: _____ Corrected Temp. °C: _____

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

P.O. # 2320103 - Murchison - Rio State

Company: Murchison OI & Gas

Attn: Dimityr Ganchev

Company Name: McNabb Partners
Project Manager: Dimityr Nikanorov
Address: DN-FIRE
City: State: Zip:

Phone #: Fax #: Project Owner:

Project #: Project Name: 23220103 - Murchison - Rio State

Project Location: Rio State #3
Sampler Name: Christopher Turner

FOR LAB USE ONLY

Lab I.D. H2P073
Sample I.D. WS-07

9-12-24

(G)RAB OR (C)OMP. # CONTAINERS

1

MATRIX: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER

ACID/BASE: ICE / COOL, OTHER

DATE: 09/18 TIME: 10:53

Chloride, TPH (GRO+DRO+MRO), BTEX (Benzene)

Standard, Bacteria (only)

Turnaround Time: -0.10

Thermometer ID #140

Correction Factor: 0.0

Standard, Bacteria (only)

Turnaround Time: -0.10

Thermometer ID #140

Correction Factor: 0.0

Standard, Bacteria (only)

Turnaround Time: -0.10

Thermometer ID #140

Correction Factor: 0.0

Standard, Bacteria (only)

Turnaround Time: -0.10

Thermometer ID #140

Appendix C

Remediation Plan





Site Assessment and Remediation Work Plan

Murchison Oil & Gas, LLC

Rio State #3

Eddy County, New Mexico

Unit Letter "D", Section 36, Township 18 South, Range 24 East

Latitude 32.708155 North, Longitude 104.546172 West

NMOCD Incident # nAPP2202454641

Prepared For:

Murchison Oil & Gas
5325 Sierra Vista
Carlsbad, NM 88230

Prepared By:

Hungry Horse, LLC
4024 Plains Hwy
Lovington, NM 88260
Office: (575) 393-3386

June 2024

Handwritten signature of Bradley Wells in black ink.

Bradley Wells
Project Manager

bwells@hungry-horse.com

Handwritten signature of Daniel Dominguez in black ink.

Daniel Dominguez
Environmental Manager

ddominguez@hungry-horse.com

Table Of Contents

Background	1
NMOCD Site Classification	1
Initial Site Assessment and Delineation	2
Proposed Remediation Activities	2
Sampling Plan	3
Restoration, Reclamation, and Re-Vegetation	3
Limitations	3
Distribution	4

Figures

- Figure 1 – Topographic Map
- Figure 2 – OSE POD Locations Map
- Figure 3 – USGS Well Locations Map
- Figure 4 – January 19, 2022 & February 7, 2023 Sample Map
- Figure 5 – Delineation Sample Map

Tables

- Table 1 – Summary of Soil Sample Laboratory Analytical Results

Attachments

- Attachment I – Karst, Wetland, and Soil Maps
- Attachment II – Depth to Groundwater
- Attachment III – Field Data
- Attachment IV – Laboratory Analytical Results



HUNGRY HORSE, LLC

The following *Site Assessment and Remediation Work Plan* serves as a condensed update on proposed reclamation activities at the afore referenced Site.

Background:

The site is located in Unit Letter D (NW/NW), Section 36, Township 18 South, Range 24 East, approximately seventeen miles Southwest of Artesia, in Eddy County, New Mexico. The property is located on private land. Topographic Map, OSE POD Locations Map, and USGS Well Locations Map are included as Figure 1, Figure 2, and Figure 3, respectively.

The release occurred at a load line on an active well pad; Latitude 32.708155 North, Longitude 104.546172 West. The NMOCD Form C-141 indicated that on January 3, 2022 approximately 4.64 bbls of produced water and 68.44 bbls condensate were released when a load line valve froze and burst. A crew was dispatched to the release site and the valve was repaired. Approximately 11.6 bbls were recovered. Previously submitted pages of the NMOCD Form C-141 are available on the NMOCD Permitting Portal.

NMOCD Site Classification:

A search of the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) groundwater databases was completed in an effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Approximate depth to groundwater was determined using maintained and published water well data. Karst mapping indicates the site is located in a Karst designated area. Depth to groundwater information is provided as Attachment II and the results are depicted on Figures 2 and 3.

Three water wells are located within a half mile of the release area with depth to groundwater ranging from 364' to 379.17' bgs. However, as the site is located in a Karst designated area, the site will be remediated according to the strictest NMOCD Closure Criteria Utilizing this information, the NMOCD Closure Criteria for the Site were determined as follows:

Depth to Groundwater	Constituent	Method	Limit
<50'	Chloride	EPA 300.0 or SM4500 CLB	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg
	BTEX	EPA SW-846 Methods 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Methods 8021B or 8260B	10 mg/kg

A United States Department of Agriculture (USDA) Web Soil Survey was completed to determine soil types in the area of remediation. Web Soil Survey indicates the area is located in the Upton-Reagan association comprised of gravelly loam soils with 0 to 9 percent slopes. As the release occurred on an active well pad, no seeding will be required. Karst, Wetland, and Soil Maps are provided as Attachment I.



Initial Site Assessment and Delineation:

On January 19, 2022, RT Hicks Consultants, Ltd. conducted an initial site assessment and sampling activities of the release area. Based on these sampling activities, eighteen representative soil samples were selected for laboratory analysis. Soil samples SSA1 through SSA6, as well as a Background sample, were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated contaminant concentrations were below the NMOCD Closure Criteria in only three of the submitted samples, BG at 0-4' and 4.2' bgs and SSA3 at 4.2 bgs. The remaining soil samples all exhibited TPH concentrations in excess of NMOCD Closure Criteria.

On February 7, 2023, RT Hicks Consultants, Ltd. conducted additional sampling activities in and around the release area. Based on these sampling activities, twelve representative soil samples were selected for laboratory analysis. Soil samples SSA1, SSA2, SSA7, and SSA8, were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated contaminant concentrations were below the NMOCD Closure Criteria in SSA7 and SSA8. SSA1 and SSA2 all exhibited TPH concentrations in excess of NMOCD Closure Criteria.

On June 4, 2024, Hungry Horse conducted delineation sampling of the release area. Sixteen representative soil samples were submitted for laboratory analysis. Soil samples SP1 through SP4 and HZ1 through HZ4 were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated contaminant concentrations were below the NMOCD Closure Criteria in each of the submitted samples with the exception of SP2 at Surface, SP3 and SP4, at Surface and one-foot bgs, which exhibited TPH concentrations in excess of NMOCD Closure Criteria.

January 19, 2022 & February 7, 2023 Sample Map and Delineation Sample Map are provided as Figure 4 and Figure 5, respectively. Laboratory Analytical Data is provided as Attachment III.

Proposed Remediation Activities:

In accordance with NMOCD Regulations, and based upon laboratory analytical results, site characteristics, and field observations made during the initial site assessment, the following remediation activities are proposed in an effort to advance the site toward approved closure.

- Based upon laboratory analytical results received from RT Hicks Consultants, Ltd. sampling activities and Hungry Horse delineation sampling, the release area will be excavated to an approximate depth of five feet bgs. The proposed excavation area, approximately 2,000 sq. ft., is depicted on Figure 5.
- Excavated contaminated soil, including berms, approximately 500 cy, will be temporarily stockpiled onsite, atop plastic, before transport to an NMOCD approved disposal facility.
- Stormwater protection (i.e. berms, waddles, etc.) will be installed around the contaminated soil stockpile to prevent transportation of contaminated soils due to precipitation events. If the plastic is found to be damaged during remediation activities, five-point composite samples, representing no more than 200 square feet, will be



collected from beneath the plastic and analyzed for BTEX, TPH, and chloride to ensure surface soil has not been contaminated.

- Upon completion of excavation activities, five-point composite confirmation samples will be collected from the excavation floor and sidewalls; each sample representing no more than 200 square feet. Confirmation soil samples will be submitted to the laboratory for analysis of BTEX, TPH, and chloride.
- Upon receipt of laboratory analytical results from confirmation soil samples, demonstrating constituent contaminant levels are in excess of the strictest NMOCD Closure Criteria in the excavation floor and/or sidewalls, the area will be further excavated, vertically and/or horizontally, until laboratory analytical data indicates constituent contaminant levels are equal to or below the strictest NMOCD Closure Criteria in the excavation floor and sidewalls.
- Upon receiving laboratory analytical results from confirmation soil samples, demonstrating constituent contaminant levels are equal to or below NMOCD Closure Criteria, the excavation will be backfilled with locally sourced, clean, non-impacted, material. Berms will be rebuilt to contain 1.5 times the volume of the tank.
- Remediation activities are expected to be completed within 30 days of receiving NMOCD and NMBLM approval of this Site Assessment and Remediation Work Plan.

Sampling Plan:

Upon completion of excavation activities, confirmation five-point composite soil samples will be collected from the excavation floor and sidewalls; each sample representing no more than 200 square feet. This will ensure the lateral extents of soil contamination have been removed. Confirmation soil samples will be submitted to the laboratory for analysis of BTEX, TPH, and chloride.

Restoration, Reclamation, and Re-Vegetation:

Based upon laboratory analytical results from confirmation soil samples, the excavation will be backfilled with locally sourced, clean, non-impacted material. The area will be contoured to achieve erosion control and preserve surface water flow. As the affected area is located on an active well pad, and no area off pad was affected, no seeding will be required.

Limitations:

Hungry Horse, LLC, has prepared this *Site Assessment and Remediation Work Plan* to the best of its ability. No other warranty, expressed or implied, is made or intended. Hungry Horse has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Hungry Horse has not conducted an independent examination of the facts contained in referenced materials and statements. Hungry Horse has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Hungry Horse notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.



Distribution:

Murchison Oil & Gas

5325 Sierra Vista
Carlsbad, NM 88230

New Mexico Energy, Minerals and Natural Resources Department

Oil Conservation Division, District 2
811 S. First St.
Artesia, NM 88210

Yates Ranch Property, LLP

PO Box 1394
Artesia, NM 88211

Figures

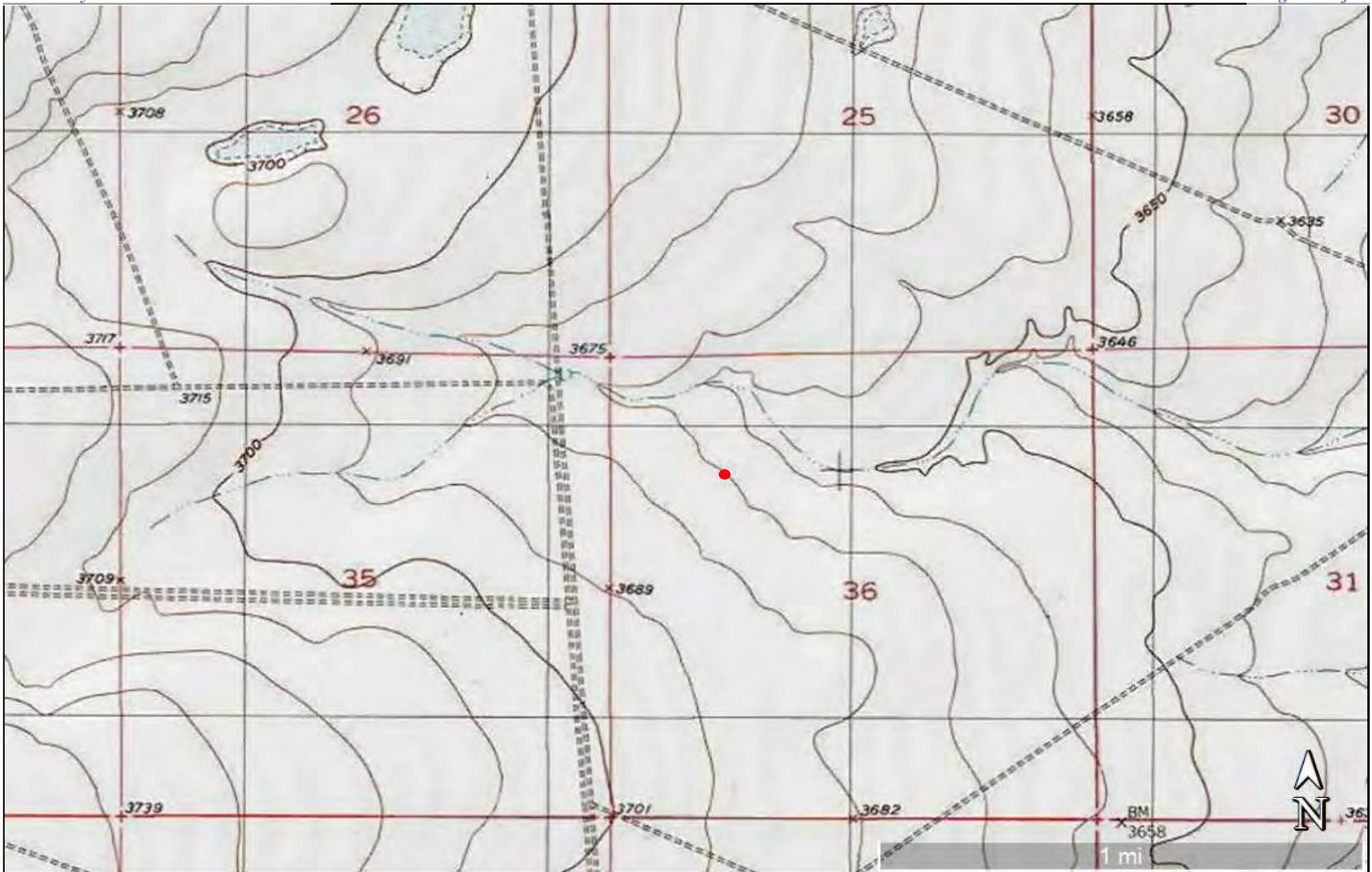


Figure 1

Topographic Map
Murchison Oil & Gas
Rio State #3
GPS: 32.708155, -104.546172
Eddy County

Legend:

● Rio State #3 Location

Drafted: dd
Checked: bw
Date: 4/15/24





1:9,028

Figure 2

OSE POD Locations Map
Murchison Oil & Gas
Rio State #3
GPS: 32.708155, -104.546172
Eddy County

Legend:

- Rio State #3 Location
- Unknown OSE Water Well



Drafted: dd
Checked: bw
Date: 4/15/24



Figure 3

USGS Well Locations Map
 Murchison Oil & Gas
 Rio State #3
 GPS: 32.708155, -104.546172
 Eddy County

Legend:

- Rio State #3 Location
- USGS Well Location



Drafted: dd
 Checked: bw
 Date: 4/15/24



Figure 4

January 19, 2022 & February 7, 2023 Sample Map
 Murchison Oil & Gas
 Rio State #3
 GPS: 32.708155, -104.546172
 Eddy County

Legend:

- Release Area
- SSA1 Sample Location

Drafted: dd
 Checked: bw
 Date: 4/16/24





Figure 5

Delineation Sample Map
Murchison Oil & Gas
Rio State #3
GPS: 32.708155, -104.546172
Eddy County

Legend:

-  Proposed Excavation Area
-  Delineation Sample Location
-  Horizontal Sample Location

Drafted: dd
Checked: bw
Date: 6/3/24



Table

TABLE 1
Summary of Soil Sample Laboratory Analytical Results
Murchison Oil & Gas
Rio State #3
NMOCD Ref. #: nAPP2202454641

Sample ID	Date	Depth (ft)	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SSA1	1/19/22	0-2	In-Situ	<0.050	<0.300	891	2,160	3,051	25.4	3,076.4	32.0
	1/19/22	2-4	In-Situ	<0.050	<0.300	415	928	1,343	11.2	1,354.2	16.0
	1/19/22	0-4	In-Situ	<0.500	112	1,540	3,750	5,290	21.6	5,311.6	<16.0
	1/19/22	4.2	In-Situ	<0.500	77.5	691	1,760	2,451	<10.0	2,451	<16.0
	2/7/23	0-2	In-Situ	<0.025	3.99	1,390	2,170	3,560	<10.0	3,560	<16.0
	2/7/23	2-4	In-Situ	<0.500	17.1	290	467	757	<10.0	757	48.0
	2/7/23	4.2	In-Situ	<0.500	21.1	504	704	1,208	<10.0	1,208	32.0
SSA2	1/19/22	0-2	In-Situ	<0.050	<0.300	2,620	4,010	6,630	38.3	6,668.3	48.0
	1/19/22	2-4	In-Situ	<0.050	<0.300	914	1,780	2,694	14.1	2,708.1	<16.0
	1/19/22	0-4	In-Situ	<0.500	136	2,860	7,150	10,010	38.2	10,048.2	<16.0
	1/19/22	4.2	In-Situ	<0.500	102	1,260	3,150	4,410	21.2	4,431.2	<16.0
	2/7/23	0-2	In-Situ	<0.500	12.3	2,560	3,570	6,130	29.2	6,159.2	64.0
	2/7/23	2-4	In-Situ	<0.500	59.6	2,600	3,050	5,650	26.6	5,676.6	32.0
	2/7/23	4.2	In-Situ	<0.500	43.5	1,710	2,050	3,760	18.3	3,778	48.0
SSA3	1/19/22	0-4	In-Situ	<0.050	4.53	28.3	123	151	<10.0	151	<16.0
	1/19/22	4.2	In-Situ	<0.050	2.04	10.5	54.0	64.5	10.8	75.3	<16.0
SSA4	1/19/22	0-4	In-Situ	<0.050	4.05	134	602	736	<10.0	736	16.0
	1/19/22	4.2	In-Situ	<0.050	9.57	58.0	219	277	15.2	292.2	48.0
SSA5	1/19/22	0-4	In-Situ	<0.050	1.67	37.5	221	259	<10.0	259	32.0
	1/19/22	4.2	In-Situ	<0.050	3.89	13.8	102	115.8	<10.0	115.8	48.0
SSA6	1/19/22	0-4	In-Situ	<0.050	6.82	51.8	366	418	10.4	428	<16.0
	1/19/22	4.2	In-Situ	<0.050	4.43	62.4	329	391.4	12.4	403.8	16.0
SSA7	2/7/23	0-2	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
	2/7/23	2-4	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
	2/7/23	4.2	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
SSA8	2/7/23	0-2	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	16.0
	2/7/23	2-4	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
	2/7/23	4.2	In-Situ	<0.025	<0.150	<10.0	<10.0	<20.0	<10.0	<30.0	32.0
BG	1/19/22	0-4	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
	1/19/22	4.2	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
NMOCD Closure Criteria				10	50	-	-	NA	-	100	600

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

TABLE 1
Summary of Soil Sample Laboratory Analytical Results
Murchison Oil & Gas
Rio State #3
NMOCD Ref. #: nAPP2202454641

Sample ID	Date	Depth (ft)	Soil Status	Benzene (mg/kg)	BTEX (mg/kg)	GRO C ₆ -C ₁₀ (mg/kg)	DRO C ₁₀ -C ₂₈ (mg/kg)	GRO + DRO C ₆ -C ₂₈ (mg/kg)	ORO C ₂₈ -C ₃₆ (mg/kg)	TPH C ₆ -C ₃₆ (mg/kg)	Chloride (mg/kg)
SP1	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	48.0
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	160
SP2	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	101	101	34.9	135.9	800
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	80.0
SP3	6/4/24	Surf	In-Situ	<0.050	<0.300	105	4,960	5,065	267	5,332	400
	6/4/24	1	In-Situ	<0.050	<0.300	243	1,090	1,333	<10.0	1,333	80.0
SP4	6/4/24	Surf	In-Situ	<0.050	0.630	65.2	3,420	3,485.2	467	3,952.2	16.0
	6/4/24	1	In-Situ	<0.050	19.4	797	1,650	2,447	24.1	2,471.1	32.0
HZ1	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
HZ2	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
HZ3	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
HZ4	6/4/24	Surf	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
	6/4/24	1	In-Situ	<0.050	<0.300	<10.0	<10.0	<20.0	<10.0	<30.0	<16.0
NMOCD Closure Criteria				10	50	-	-	NA	-	100	600

NOTES:

- = Sample not analyzed for that constituent.

Bold text denotes a concentration that exceeds the NMOCD Closure Criteria

Attachment I
Karst, Wetland, and Soil Maps

Rio State #3



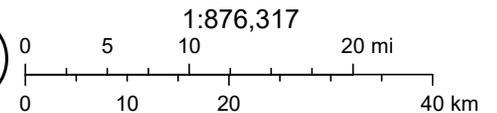
4/17/2024

- | | |
|--|---|
| Karst Type | ■ Volcanic |
| ■ Carbonate | World Imagery |
| ■ Erosional | Low Resolution 15m Imagery |
| ■ Gypsum | High Resolution 60cm Imagery |

High Resolution 30cm Imagery

Citations

150m Resolution Metadata



U.S. Geological Survey Open-File Report 2004-1352, Caves and Karst in the U.S. National Park Service, AGI Karst Map of the U.S., Earthstar Geographics



Rio State #3



April 17, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

Soil Map—Eddy Area, New Mexico
(Rio State #3)

104° 33' 40" W

104° 31' 51" W

32° 42' 58" N

32° 42' 58" N

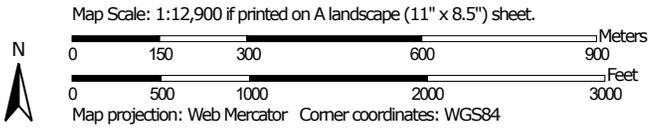


32° 41' 59" N

32° 41' 59" N

104° 33' 40" W

104° 31' 51" W



Soil Map—Eddy Area, New Mexico
(Rio State #3)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico

Survey Area Data: Version 19, Sep 7, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
PM	Pima silt loam, 0 to 1 percent slopes	79.3	9.7%
RE	Reagan-Upton association, 0 to 9 percent slopes	7.2	0.9%
UG	Upton gravelly loam, 0 to 9 percent slopes	21.1	2.6%
UR	Upton-Reagan complex, 0 to 9 percent slopes	712.4	86.9%
Totals for Area of Interest		820.0	100.0%

Eddy Area, New Mexico

UR—Upton-Reagan complex, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 1w65

Elevation: 1,100 to 5,400 feet

Mean annual precipitation: 6 to 15 inches

Mean annual air temperature: 60 to 70 degrees F

Frost-free period: 180 to 240 days

Farmland classification: Not prime farmland

Map Unit Composition

Upton and similar soils: 55 percent

Reagan and similar soils: 35 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Upton

Setting

Landform: Ridges, fans

Landform position (three-dimensional): Side slope, rise

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Residuum weathered from limestone

Typical profile

H1 - 0 to 9 inches: gravelly loam

H2 - 9 to 13 inches: gravelly loam

H3 - 13 to 21 inches: cemented

H4 - 21 to 60 inches: very gravelly loam

Properties and qualities

Slope: 0 to 9 percent

Depth to restrictive feature: 7 to 20 inches to petrocalcic

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high (0.01 to 0.60 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 75 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Map Unit Description: Upton-Reagan complex, 0 to 9 percent slopes---Eddy Area, New Mexico

Rio State #3

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R070BC025NM - Shallow
Hydric soil rating: No

Description of Reagan

Setting

Landform: Fan remnants, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 60 inches: loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water supply, 0 to 60 inches: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: B
Ecological site: R070BC007NM - Loamy
Hydric soil rating: No

Minor Components

Pima

Percent of map unit: 5 percent
Ecological site: R070BC017NM - Bottomland
Hydric soil rating: No

Reagan

Percent of map unit: 5 percent
Ecological site: R070BC007NM - Loamy

Map Unit Description: Upton-Reagan complex, 0 to 9 percent slopes---Eddy Area, New Mexico

Rio State #3

Hydric soil rating: No

Data Source Information

Soil Survey Area: Eddy Area, New Mexico
Survey Area Data: Version 19, Sep 7, 2023

Attachment II

Depth to Groundwater



New Mexico Office of the State Engineer
Wells with Well Log Information

No wells found.

UTMNA83 Radius Search (in meters):

Easting (X): 542535

Northing (Y): 3619022

Radius: 805

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

4/17/24 1:09 PM

WELLS WITH WELL LOG INFORMATION



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)					(NAD83 UTM in meters)
Well Tag	POD Number	Q64 Q16 Q4	Sec	Tws	Rng	X	Y
	RA 08148	3 3 1	36	18S	24E	542252	3618748*

Driller License:

Driller Company:

Driller Name:

Drill Start Date:

Drill Finish Date:

Plug Date:

Log File Date:

PCW Rev Date:

Source:

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 8.00

Depth Well: 508 feet

Depth Water:

*UTM location was derived from PLSS - see Help

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

4/17/24 1:27 PM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(NAD83 UTM in meters)		
Well Tag	POD Number	(quarters are smallest to largest)	Q64 Q16 Q4	Sec	Tws	Rng	X	Y
RA 11061	POD1		4 2 35	18S	24E	541949 3618852*		

Driller License:		Driller Company:	
Driller Name: UNKNOWN DRILLER			
Drill Start Date:	Drill Finish Date:	12/31/1982	Plug Date:
Log File Date:	PCW Rev Date:		Source:
Pump Type:	Pipe Discharge Size:		Estimated Yield: 400 GPM
Casing Size: 5.00	Depth Well:	450 feet	Depth Water: 364 feet

*UTM location was derived from PLSS - see Help

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

4/17/24 1:28 PM

POINT OF DIVERSION SUMMARY



USGS Home
 Contact USGS
 Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States

Click to hide News Bulletins

- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for the Nation

! Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
 site_no list =

- 324217104325401

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 324217104325401 18S.24E.35.24444

Eddy County, New Mexico
 Latitude 32°42'17", Longitude 104°32'54" NAD27
 Land-surface elevation 3,689 feet above NGVD29
 The depth of the well is 450.00 feet below land surface.
 This well is completed in the Roswell Basin aquifer system (S400RSWLBS) national aquifer.
 This well is completed in the Artesia Group (313ARTS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1990-02-20			D 62610		3324.50	NGVD29	P	S		
1990-02-20			D 62611		3326.10	NAVD88	P	S		
1990-02-20			D 72019	364.50			P	S		
1994-02-21			D 62610		3317.37	NGVD29		S		
1994-02-21			D 62611		3318.97	NAVD88		S		
1994-02-21			D 72019	371.63				S		
1999-02-02			D 62610		3309.83	NGVD29	1	S	USGS	
1999-02-02			D 62611		3311.43	NAVD88	1	S	USGS	
1999-02-02			D 72019	379.17			1	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet

Section	Code	Description
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status		The reported water-level measurement represents a static level
Status	1	Static
Status	P	Pumping
Method of measurement	S	Steel-tape measurement.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions or Comments](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: Groundwater for USA: Water Levels

URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>



Page Contact Information: [USGS Water Data Support Team](#)

Page Last Modified: 2024-04-17 15:31:15 EDT

0.31 0.26 nadww01

Attachment III Field Data

Sample Log

Hungry Horse, LLC

Project: Rio State #3

Karst Yes Water <50'

Standard TPH 100mg/kg, Chloride 600mg/kg

Date: 6-4-24

GPS: 32.708155, -104.546172

Sampler: Jerry Heidelberg

Sample ID	Depth	PID/Odor	Chloride	GPS	
HZ1	Surf	NO	1.4 @ 30x4 = 120		
	1'		1.6 @ 36x4 = 144		
HZ2	Surf		0.8 > 100		
	1'		1.2 > 100		
HZ3	Surf		1.6 @ 36x4 = 144		
	1'		1.4 @ 30x4 = 120		
HZ4	Surf		1.2 @ > 100		
	1'		1.4 @ 30x4 = 120		
SP1	Surf	NO	1.4 @ 30x4 = 120		
	1'	NO	3.4 @ 114x4 = 456		
	2'				
	3'				
	4'				
	6'				
	8'				
	10'				
	12'				
	SP2	Surf	yes	5.0 @ 227x4 = 908	
		1'	yes	1.8 @ 43x4 = 172	
		2'		2.6 @ 73x4 = 292	
3'					
4'					
6'					
SP3	Surf	yes	3.6 @ 125x4 = 500		
	1'	yes	1.8 @ 43x4 = 172		
	2'				
	3'				
	4'				
	6'				
	10'				

Sample Point = SP1 @ ## etc

Floor = FL1 etc

Sidewall = SW1 etc

Horizontal = HZ1 etc

Refusal = SP1 @ 4'-R

GPS Sample Points, Center of Comp Areas

Test Trench = TT1 @ ##

Resamples = SP1b @ 5' or SW #1b

Stockpile = Stockpile #1

Attachment IV

Laboratory Analytical Results



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

February 15, 2022

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: RIO STATE #3 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/14/22 11:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/14/2022	Sampling Date:	01/19/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 0-2' (H220560-01)

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/15/2022	ND	432	108	400	0.00		

Sample ID: SSA - 1 @ 2-4' (H220560-02)

Chloride, SM4500CI-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	02/15/2022	ND	432	108	400	0.00		

Sample ID: SSA - 2 @ 0-2' (H220560-03)

Chloride, SM4500CI-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	02/15/2022	ND	432	108	400	0.00		

Sample ID: SSA - 2 @ 2-4' (H220560-04)

Chloride, SM4500CI-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	02/15/2022	ND	432	108	400	0.00		

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

February 15, 2022

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: RIO STATE #3 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/14/22 11:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/14/2022	Sampling Date:	01/19/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 0-2' (H220561-01)

TPH 8015M	mg/kg	Analyzed By: CK					I-03, S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	891	10.0	02/15/2022	ND	208	104	200	0.994		
DRO >C10-C28*	2160	10.0	02/15/2022	ND	225	112	200	3.80		
EXT DRO >C28-C36	25.4	10.0	02/15/2022	ND						

Surrogate: 1-Chlorooctane 254 % 66.9-136
 Surrogate: 1-Chlorooctadecane 136 % 59.5-142

Sample ID: SSA - 1 @ 2-4' (H220561-02)

TPH 8015M	mg/kg	Analyzed By: CK					I-03, S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	415	10.0	02/15/2022	ND	208	104	200	0.994		
DRO >C10-C28*	928	10.0	02/15/2022	ND	225	112	200	3.80		
EXT DRO >C28-C36	11.2	10.0	02/15/2022	ND						

Surrogate: 1-Chlorooctane 175 % 66.9-136
 Surrogate: 1-Chlorooctadecane 135 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/14/2022	Sampling Date:	01/19/2022
Reported:	02/15/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 0-2' (H220561-03)

TPH 8015M	mg/kg	Analyzed By: CK					I-03, S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	2620	10.0	02/15/2022	ND	208	104	200	0.994		
DRO >C10-C28*	4010	10.0	02/15/2022	ND	225	112	200	3.80		
EXT DRO >C28-C36	38.3	10.0	02/15/2022	ND						

Surrogate: 1-Chlorooctane 429 % 66.9-136
 Surrogate: 1-Chlorooctadecane 147 % 59.5-142

Sample ID: SSA - 2 @ 2-4' (H220561-04)

TPH 8015M	mg/kg	Analyzed By: CK					I-03, S-04			
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	914	10.0	02/15/2022	ND	208	104	200	0.994		
DRO >C10-C28*	1780	10.0	02/15/2022	ND	225	112	200	3.80		
EXT DRO >C28-C36	14.1	10.0	02/15/2022	ND						

Surrogate: 1-Chlorooctane 248 % 66.9-136
 Surrogate: 1-Chlorooctadecane 139 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
I-03 This result was extracted outside of the EPA recommended holding time of 14 days.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: <u>RT Hicks Consultants</u>		P.O. #:	
Project Manager: <u>Kristin Pope</u>		Company: <u>RT Hicks</u>	
Address: <u>901 Rio Grande Blvd NW, E-142</u>		Attn: <u>Randy</u>	
City: <u>Albuquerque</u> State: <u>NM</u> Zip: <u>87104</u>		Address:	
Phone #: <u>575-302-6755</u> Fax #:		City:	
Project #:		State: Zip:	
Project Name: <u>Rio St. #3 Release</u>		Project Owner: <u>Murchison</u>	
Project Location: <u>Eddy Co.</u>		Phone #: <u>505-246-5004</u>	
Sampler Name: <u>Kristin Pope</u>		Fax #:	
FOR LAB USE ONLY			
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	MATRIX
		# CONTAINERS	
		<input type="checkbox"/> GROUNDWATER	PRESERV.
		<input type="checkbox"/> WASTEWATER	
		<input type="checkbox"/> SOIL	
		<input type="checkbox"/> OIL	
		<input type="checkbox"/> SLUDGE	
		OTHER :	
		ACID/BASE:	
		<input type="checkbox"/> ICE / COOL	SAMPLING
		OTHER :	
		DATE	
		TIME	
		TPH 80/15M	

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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: Kristin Pope Date: 2/14/22 Received By: [Signature]
 Time: 9:41

Delivered By: (Circle One) 3.3e 2-0.5e Sample Condition: Cool Intact
 Sampler - UPS - Bus - Other: 2xe #113 Yes No

REMARKS: Email to kristin@rthicksconsult.com, R@...

Please fax within 30 days of receipt to (575) 393-2476



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

January 28, 2022

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: RIO STATE #3 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 01/24/22 11:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: BG @ 0-4' BGS (H220256-01)

BTEX 8021B		mg/kg		Analyzed By: MS/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10	
Toluene*	<0.050	0.050	01/27/2022	ND	2.03	102	2.00	0.677	
Ethylbenzene*	<0.050	0.050	01/27/2022	ND	2.04	102	2.00	0.527	
Total Xylenes*	<0.150	0.150	01/27/2022	ND	6.21	103	6.00	0.448	
Total BTEX	<0.300	0.300	01/27/2022	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 69.9-140

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	01/26/2022	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	01/27/2022	ND	216	108	200	2.30	
DRO >C10-C28*	<10.0	10.0	01/27/2022	ND	254	127	200	12.5	
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND					

Surrogate: 1-Chlorooctane 79.6 % 66.9-136

Surrogate: 1-Chlorooctadecane 77.9 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 0-4' BGS (H220256-02)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/28/2022	ND	2.14	107	2.00	1.10		
Toluene*	4.57	0.500	01/28/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	18.0	0.500	01/28/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	89.5	1.50	01/28/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	112	3.00	01/28/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 395 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/26/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1540	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	3750	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	21.6	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 341 % 66.9-136

Surrogate: 1-Chlorooctadecane 78.5 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 0-4' BGS (H220256-03)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/28/2022	ND	2.14	107	2.00	1.10		
Toluene*	7.00	0.500	01/28/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	21.2	0.500	01/28/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	108	1.50	01/28/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	136	3.00	01/28/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 424 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/26/2022	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	2860	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	7150	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	38.2	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 378 % 66.9-136

Surrogate: 1-Chlorooctadecane 87.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 3 @ 0-4' BGS (H220256-04)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10		
Toluene*	0.074	0.050	01/27/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	0.791	0.050	01/27/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	3.66	0.150	01/27/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	4.53	0.300	01/27/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 313 % 69.9-140

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	01/26/2022	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*	28.3	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	126	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 97.0 % 66.9-136

Surrogate: 1-Chlorooctadecane 83.7 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 4 @ 0-4' BGS (H220256-05)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10		
Toluene*	0.050	0.050	01/27/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	0.823	0.050	01/27/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	3.18	0.150	01/27/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	4.05	0.300	01/27/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 294 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	134	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	602	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 145 % 66.9-136

Surrogate: 1-Chlorooctadecane 86.8 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 5 @ 0-4' BGS (H220256-06)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10		
Toluene*	<0.050	0.050	01/27/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	0.314	0.050	01/27/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	1.35	0.150	01/27/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	1.67	0.300	01/27/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 201 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	37.5	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	221	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 104 % 66.9-136

Surrogate: 1-Chlorooctadecane 82.7 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 6 @ 0-4' BGS (H220256-07)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10		
Toluene*	0.117	0.050	01/27/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	1.14	0.050	01/27/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	5.56	0.150	01/27/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	6.82	0.300	01/27/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 409 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	51.8	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	366	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	10.4	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 121 % 66.9-136

Surrogate: 1-Chlorooctadecane 95.9 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 4.2' BGS (H220256-08)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/28/2022	ND	2.14	107	2.00	1.10		
Toluene*	2.77	0.500	01/28/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	12.4	0.500	01/28/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	62.3	1.50	01/28/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	77.5	3.00	01/28/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 338 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	691	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	1760	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 285 % 66.9-136

Surrogate: 1-Chlorooctadecane 102 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 4.2' BGS (H220256-09)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.500	0.500	01/28/2022	ND	2.14	107	2.00	1.10		
Toluene*	4.05	0.500	01/28/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	15.3	0.500	01/28/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	83.0	1.50	01/28/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	102	3.00	01/28/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 381 % 69.9-140

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1260	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	3150	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	21.2	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 245 % 66.9-136

Surrogate: 1-Chlorooctadecane 98.9 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 3 @ 4.2' BGS (H220256-10)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/27/2022	ND	2.14	107	2.00	1.10		
Toluene*	<0.050	0.050	01/27/2022	ND	2.03	102	2.00	0.677	GC-NC1	
Ethylbenzene*	0.383	0.050	01/27/2022	ND	2.04	102	2.00	0.527	GC-NC1	
Total Xylenes*	1.66	0.150	01/27/2022	ND	6.21	103	6.00	0.448	GC-NC1	
Total BTEX	2.04	0.300	01/27/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 219 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	10.5	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	54.0	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	10.8	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 92.7 % 66.9-136

Surrogate: 1-Chlorooctadecane 90.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 4 @ 4.2' BGS (H220256-11)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/28/2022	ND	2.14	107	2.00	1.10	
Toluene*	0.170	0.050	01/28/2022	ND	2.03	102	2.00	0.677	GC-NC1
Ethylbenzene*	1.57	0.050	01/28/2022	ND	2.04	102	2.00	0.527	GC-NC1
Total Xylenes*	7.82	0.150	01/28/2022	ND	6.21	103	6.00	0.448	GC-NC1
Total BTEX	9.57	0.300	01/28/2022	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 487 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	58.0	10.0	01/27/2022	ND	216	108	200	2.30	
DRO >C10-C28*	219	10.0	01/27/2022	ND	254	127	200	12.5	
EXT DRO >C28-C36	15.2	10.0	01/27/2022	ND					

Surrogate: 1-Chlorooctane 116 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 5 @ 4.2' BGS (H220256-12)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/26/2022	ND	2.10	105	2.00	3.67		
Toluene*	<0.050	0.050	01/26/2022	ND	2.01	100	2.00	3.55	GC-NC	
Ethylbenzene*	0.845	0.050	01/26/2022	ND	2.02	101	2.00	3.98	GC-NC1	
Total Xylenes*	3.04	0.150	01/26/2022	ND	6.11	102	6.00	4.08	GC-NC1	
Total BTEX	3.89	0.300	01/26/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 291 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	13.8	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	102	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	<10.0	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 103 % 66.9-136

Surrogate: 1-Chlorooctadecane 97.0 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 6 @ 4.2' BGS (H220256-13)

BTEX 8021B		mg/kg		Analyzed By: MS/				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/26/2022	ND	2.10	105	2.00	3.67		
Toluene*	<0.050	0.050	01/26/2022	ND	2.01	100	2.00	3.55	GC-NC	
Ethylbenzene*	0.956	0.050	01/26/2022	ND	2.02	101	2.00	3.98	GC-NC1	
Total Xylenes*	3.47	0.150	01/26/2022	ND	6.11	102	6.00	4.08	GC-NC1	
Total BTEX	4.43	0.300	01/26/2022	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 359 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	62.4	10.0	01/27/2022	ND	216	108	200	2.30		
DRO >C10-C28*	329	10.0	01/27/2022	ND	254	127	200	12.5		
EXT DRO >C28-C36	12.4	10.0	01/27/2022	ND						

Surrogate: 1-Chlorooctane 124 % 66.9-136

Surrogate: 1-Chlorooctadecane 94.9 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	01/24/2022	Sampling Date:	01/19/2022
Reported:	01/28/2022	Sampling Type:	Soil
Project Name:	RIO STATE #3 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: BG @ 4.2' BGS (H220256-14)

BTEX 8021B		mg/kg		Analyzed By: MS/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/26/2022	ND	2.10	105	2.00	3.67		
Toluene*	0.134	0.050	01/26/2022	ND	2.01	100	2.00	3.55	GC-NC1	
Ethylbenzene*	<0.050	0.050	01/26/2022	ND	2.02	101	2.00	3.98		
Total Xylenes*	<0.150	0.150	01/26/2022	ND	6.11	102	6.00	4.08		
Total BTEX	<0.300	0.300	01/26/2022	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 69.9-140

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	01/26/2022	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	01/26/2022	ND	197	98.6	200	2.47		
DRO >C10-C28*	<10.0	10.0	01/26/2022	ND	227	113	200	3.90		
EXT DRO >C28-C36	<10.0	10.0	01/26/2022	ND						

Surrogate: 1-Chlorooctane 90.2 % 66.9-136

Surrogate: 1-Chlorooctadecane 88.2 % 59.5-142

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

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

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: R. T. Hicks Consultants
 Project Manager: R. T. Hicks Consultants
 Address: 901 Rio Grande Blvd NW, Suite F-142
 City: Albuquerque State: NM Zip: 87104
 Phone #: 505-266-5004 Fax #: Attn: Randy Hicks
 Project #: Project Owner: Murchison
 Project Name: Rio State #3 release
 Project Location: Eddy County
 Sampler Name: Kristin Pope
 P.O. #: Company: R. T. Hicks Consultants
 Address: City: State: Zip: Phone #: Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.			
1	BA @ 0-4 PL B&S	C	1								11/9/22	0908	TPH 80150 BTEX Chloride
2	55A-1 0-4 PL B&S	C	1								0920	0937	RIP
3	55A-2 0-4 PL B&S	C	1								0949	1000	
4	55A-3 0-4 PL B&S	C	1								1010	1018	
5	55A-4 0-4 PL B&S	C	1										
6	55A-5 0-4 PL B&S	C	1										
7	55A-6 0-4 PL B&S	C	1										

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be 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: Kristin Pope Date: 1-24-22 Received By: [Signature] Date: 1-25-22

Delivered By: (Circle One) UPS - Bus - Other: 2:30 P.M. 1-25-22

Sample Condition Cool Intact Yes [X] No []

Checked By: [Signature]

REMARKS: Email to kristin@rthicksconsult.com

Phone Result: Yes [] No [] Add'l Phone #: Fax Result: Yes [] No [] Add'l Fax #:

† Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326



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

February 13, 2023

KRISTIN POPE

R T HICKS CONSULTANTS

901 RIO GRANDE BLVD SUITE F-142

ALBUQUERQUE, NM 87104

RE: RIO STATE #003 RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/08/23 11:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 0-2' (H230547-01)

BTEX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	02/10/2023	ND	1.89	94.4	2.00	5.21	
Toluene*	0.067	0.025	02/10/2023	ND	2.07	103	2.00	3.93	
Ethylbenzene*	0.379	0.025	02/10/2023	ND	2.13	106	2.00	4.69	
Total Xylenes*	3.54	0.075	02/10/2023	ND	6.29	105	6.00	4.19	
Total BTEX	3.99	0.150	02/10/2023	ND					

Surrogate: Dibromofluoromethane 99.8 % 86.7-111
 Surrogate: Toluene-d8 111 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 234 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	1390	10.0	02/10/2023	ND	189	94.7	200	1.45		
DRO >C10-C28*	2170	10.0	02/10/2023	ND	177	88.7	200	8.70		
EXT DRO >C28-C36	<10.0	10.0	02/10/2023	ND						

Surrogate: 1-Chlorooctane 229 % 48.2-134
 Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 2-4' (H230547-02)

BTEX 8260B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/10/2023	ND	1.89	94.4	2.00	5.21	
Toluene*	0.966	0.500	02/10/2023	ND	2.07	103	2.00	3.93	
Ethylbenzene*	3.11	0.500	02/10/2023	ND	2.13	106	2.00	4.69	
Total Xylenes*	13.0	1.50	02/10/2023	ND	6.29	105	6.00	4.19	
Total BTEX	17.1	3.00	02/10/2023	ND					

Surrogate: Dibromofluoromethane 101 % 86.7-111
 Surrogate: Toluene-d8 102 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 113 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	290	10.0	02/10/2023	ND	189	94.7	200	1.45	
DRO >C10-C28*	467	10.0	02/10/2023	ND	177	88.7	200	8.70	
EXT DRO >C28-C36	<10.0	10.0	02/10/2023	ND					

Surrogate: 1-Chlorooctane 131 % 48.2-134
 Surrogate: 1-Chlorooctadecane 120 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 1 @ 4.2' (H230547-03)

BTEX 8260B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/10/2023	ND	1.89	94.4	2.00	5.21	
Toluene*	1.71	0.500	02/10/2023	ND	2.07	103	2.00	3.93	
Ethylbenzene*	4.13	0.500	02/10/2023	ND	2.13	106	2.00	4.69	
Total Xylenes*	15.2	1.50	02/10/2023	ND	6.29	105	6.00	4.19	
Total BTEX	21.1	3.00	02/10/2023	ND					

Surrogate: Dibromofluoromethane 97.9 % 86.7-111
 Surrogate: Toluene-d8 99.0 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 114 % 88.2-108

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	504	10.0	02/09/2023	ND	196	98.0	200	0.636	QM-07
DRO >C10-C28*	704	10.0	02/09/2023	ND	183	91.6	200	0.694	QM-07
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND					

Surrogate: 1-Chlorooctane 140 % 48.2-134
 Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 0-2' (H230547-04)

BTEX 8260B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/10/2023	ND	1.89	94.4	2.00	5.21	
Toluene*	0.843	0.500	02/10/2023	ND	2.07	103	2.00	3.93	
Ethylbenzene*	1.57	0.500	02/10/2023	ND	2.13	106	2.00	4.69	
Total Xylenes*	9.88	1.50	02/10/2023	ND	6.29	105	6.00	4.19	
Total BTEX	12.3	3.00	02/10/2023	ND					

Surrogate: Dibromofluoromethane 99.9 % 86.7-111
 Surrogate: Toluene-d8 102 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 120 % 88.2-108

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2560	10.0	02/09/2023	ND	196	98.0	200	0.636	
DRO >C10-C28*	3570	10.0	02/09/2023	ND	183	91.6	200	0.694	
EXT DRO >C28-C36	29.2	10.0	02/09/2023	ND					

Surrogate: 1-Chlorooctane 338 % 48.2-134
 Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 2-4' (H230547-05)

BTEX 8260B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/10/2023	ND	1.90	94.9	2.00	4.02	
Toluene*	4.99	0.500	02/10/2023	ND	2.07	104	2.00	3.63	
Ethylbenzene*	7.67	0.500	02/10/2023	ND	2.13	106	2.00	3.88	
Total Xylenes*	47.0	1.50	02/10/2023	ND	6.25	104	6.00	4.30	
Total BTEX	59.6	3.00	02/10/2023	ND					

Surrogate: Dibromofluoromethane 98.5 % 86.7-111
 Surrogate: Toluene-d8 101 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 117 % 88.2-108

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	2600	10.0	02/09/2023	ND	196	98.0	200	0.636	
DRO >C10-C28*	3050	10.0	02/09/2023	ND	183	91.6	200	0.694	
EXT DRO >C28-C36	26.6	10.0	02/09/2023	ND					

Surrogate: 1-Chlorooctane 313 % 48.2-134
 Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 2 @ 4.2' (H230547-06)

BTEX 8260B		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.500	0.500	02/10/2023	ND	1.90	94.9	2.00	4.02	
Toluene*	3.15	0.500	02/10/2023	ND	2.07	104	2.00	3.63	
Ethylbenzene*	5.67	0.500	02/10/2023	ND	2.13	106	2.00	3.88	
Total Xylenes*	34.7	1.50	02/10/2023	ND	6.25	104	6.00	4.30	
Total BTEX	43.5	3.00	02/10/2023	ND					

Surrogate: Dibromofluoromethane 96.8 % 86.7-111
 Surrogate: Toluene-d8 98.5 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 117 % 88.2-108

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	1710	10.0	02/09/2023	ND	196	98.0	200	0.636	
DRO >C10-C28*	2050	10.0	02/09/2023	ND	183	91.6	200	0.694	
EXT DRO >C28-C36	18.6	10.0	02/09/2023	ND					

Surrogate: 1-Chlorooctane 242 % 48.2-134
 Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 7 @ 0-2' (H230547-07)

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02		
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63		
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88		
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30		
Total BTEX	<0.150	0.150	02/10/2023	ND						

Surrogate: Dibromofluoromethane 93.4 % 86.7-111
 Surrogate: Toluene-d8 103 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 99.8 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/09/2023	ND	196	98.0	200	0.636		
DRO >C10-C28*	<10.0	10.0	02/09/2023	ND	183	91.6	200	0.694		
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND						

Surrogate: 1-Chlorooctane 87.6 % 48.2-134
 Surrogate: 1-Chlorooctadecane 95.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 7 @ 2-4' (H230547-08)

BTEX 8260B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02	
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63	
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88	
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30	
Total BTEX	<0.150	0.150	02/10/2023	ND					

Surrogate: Dibromofluoromethane 94.9 % 86.7-111
 Surrogate: Toluene-d8 102 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 99.8 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	02/09/2023	ND	196	98.0	200	0.636	
DRO >C10-C28*	<10.0	10.0	02/09/2023	ND	183	91.6	200	0.694	
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND					

Surrogate: 1-Chlorooctane 90.5 % 48.2-134
 Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 7 @ 4.2' (H230547-09)

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02		
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63		
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88		
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30		
Total BTEX	<0.150	0.150	02/10/2023	ND						

Surrogate: Dibromofluoromethane 94.6 % 86.7-111
 Surrogate: Toluene-d8 100 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 99.2 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/09/2023	ND	196	98.0	200	0.636		
DRO >C10-C28*	<10.0	10.0	02/09/2023	ND	183	91.6	200	0.694		
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND						

Surrogate: 1-Chlorooctane 90.0 % 48.2-134
 Surrogate: 1-Chlorooctadecane 95.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 8 @ 0-2' (H230547-10)

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02		
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63		
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88		
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30		
Total BTEX	<0.150	0.150	02/10/2023	ND						

Surrogate: Dibromofluoromethane 96.3 % 86.7-111
 Surrogate: Toluene-d8 102 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 101 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/09/2023	ND	196	98.0	200	0.636		
DRO >C10-C28*	<10.0	10.0	02/09/2023	ND	183	91.6	200	0.694		
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND						

Surrogate: 1-Chlorooctane 88.6 % 48.2-134
 Surrogate: 1-Chlorooctadecane 95.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 8 @ 2-4' (H230547-11)

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02		
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63		
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88		
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30		
Total BTEX	<0.150	0.150	02/10/2023	ND						

Surrogate: Dibromofluoromethane 94.7 % 86.7-111
 Surrogate: Toluene-d8 103 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 100 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/09/2023	ND	196	98.0	200	0.636		
DRO >C10-C28*	<10.0	10.0	02/09/2023	ND	183	91.6	200	0.694		
EXT DRO >C28-C36	<10.0	10.0	02/09/2023	ND						

Surrogate: 1-Chlorooctane 88.4 % 48.2-134
 Surrogate: 1-Chlorooctadecane 94.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

R T HICKS CONSULTANTS
 KRISTIN POPE
 901 RIO GRANDE BLVD SUITE F-142
 ALBUQUERQUE NM, 87104
 Fax To: NONE

Received:	02/08/2023	Sampling Date:	02/07/2023
Reported:	02/13/2023	Sampling Type:	Soil
Project Name:	RIO STATE #003 RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	MURCHISON- EDDY CO.		

Sample ID: SSA - 8 @ 4.2' (H230547-12)

BTEX 8260B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.025	0.025	02/10/2023	ND	1.90	94.9	2.00	4.02		
Toluene*	<0.025	0.025	02/10/2023	ND	2.07	104	2.00	3.63		
Ethylbenzene*	<0.025	0.025	02/10/2023	ND	2.13	106	2.00	3.88		
Total Xylenes*	<0.075	0.075	02/10/2023	ND	6.25	104	6.00	4.30		
Total BTEX	<0.150	0.150	02/10/2023	ND						

Surrogate: Dibromofluoromethane 92.1 % 86.7-111
 Surrogate: Toluene-d8 100 % 89.3-110
 Surrogate: 4-Bromofluorobenzene 99.3 % 88.2-108

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	02/09/2023	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	02/10/2023	ND	196	98.0	200	0.636		
DRO >C10-C28*	<10.0	10.0	02/10/2023	ND	183	91.6	200	0.694		
EXT DRO >C28-C36	<10.0	10.0	02/10/2023	ND						

Surrogate: 1-Chlorooctane 95.4 % 48.2-134
 Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
** Samples not received at proper temperature of 6°C or below.
*** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: R.T. Hicks Consultants
 Project Manager: Kristin Pope
 Address: 901 Rio Grande Blvd NW, Suite F-142
 City: Albuquerque State: NM Zip: 87104
 Phone #: 505-266-5004 Fax #: 505-266-5004
 Project #:
 Project Name: *Rio St. #003 Release*
 Project Location: Eddy County
 Sampler Name: Kristin Pope
 P.O. #:
 Company: RT Hicks
 Attn: Randy
 Address:
 City:
 State: Zip:
 Phone #:
 Fax #:
 PRESERV:
 SAMPLING:
 FOR LAB USE ONLY

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	REMARKS
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
4230547	1	SA-1 @ 0-2	1						2/1/23	0941	Chloride	
	2	SA-1 @ 2-4	1							0943	TPH 8015M	
	3	SA-1 @ 4,2	1							1000	BTEX	
	4	SA-2 @ 0-2	1							1008		
	5	SA-2 @ 2-4	1							1012		
	6	SA-2 @ 4,2	1							1024		
	7	SA-7 @ 0-2	1							1028		
	8	SA-7 @ 2-4	1							1033		
	9	SA-7 @ 4,2	1							1036		
	10	SA-8 @ 0-2	1									

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims resulting from negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors 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: *Kristin Pope* Date: *9/18/23* Received By: *Kristin Pope*
 Relinquished By: *Kristin Pope* Date: *8-8-23* Received By: *Jamara Debbise*
 Delivered By: (Circle One) UPS Bus Other:
 Corrected Temp. °C: *4.2* Sample Condition: Intact Cool Yes No Yes No
 Turnaround Time: Standard Rush Bacteria (only) Sample Condition Cool Intact Yes No Yes No Corrected Temp. °C
 Verbal Result: Yes No Add'l Phone #:
 All Results are emailed. Please provide Email address: *kristin@rthicksconsult.com, R@rthicksconsult.com*
 REMARKS:
 † Cardinal cannot accept verbal changes. Please email changes to *celey.keene@cardinalabsmm.com*



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

June 12, 2024

DANIEL DOMINGUEZ

Hungry Horse Environmental

P.O. Box 1058

Hobbs, NM 88240

RE: RIO STATE #3

Enclosed are the results of analyses for samples received by the laboratory on 06/05/24 16:28.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 1 - SURF (H243207-01)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/07/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	193	96.3	200	1.94	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	214	107	200	0.944	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 1 - 1' (H243207-02)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	06/07/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	193	96.3	200	1.94	
DRO >C10-C28*	<10.0	10.0	06/07/2024	ND	214	107	200	0.944	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 74.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.0 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 2 - SURF (H243207-03)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	193	96.3	200	1.94	
DRO >C10-C28*	101	10.0	06/07/2024	ND	214	107	200	0.944	
EXT DRO >C28-C36	34.9	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 2 - 2' (H243207-04)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/07/2024	ND	193	96.3	200	1.94	
DRO >C10-C28*	<10.0	10.0	06/07/2024	ND	214	107	200	0.944	
EXT DRO >C28-C36	<10.0	10.0	06/07/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 3 - SURF (H243207-05)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	GC-NC
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 131 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	400	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	105	10.0	06/07/2024	ND	193	96.3	200	1.94		
DRO >C10-C28*	4960	10.0	06/07/2024	ND	214	107	200	0.944		
EXT DRO >C28-C36	267	10.0	06/07/2024	ND						

Surrogate: 1-Chlorooctane 159 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 3 - 1' (H243207-06)

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	1.70	85.0	2.00	4.80		
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	GC-NC	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	GC-NC	
Total Xylenes*	0.535	0.150	06/07/2024	ND	6.32	105	6.00	10.1	GC-NC1	
Total BTEX	0.535	0.300	06/07/2024	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 285 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	06/07/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	243	10.0	06/06/2024	ND	176	87.8	200	5.10		
DRO >C10-C28*	1090	10.0	06/06/2024	ND	168	83.8	200	2.73		
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND						

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.1 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 4 - SURF (H243207-07)

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	06/10/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/10/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	0.107	0.050	06/10/2024	ND	2.08	104	2.00	9.39	GC-NC1
Total Xylenes*	0.524	0.150	06/10/2024	ND	6.32	105	6.00	10.1	GC-NC1
Total BTEX	0.630	0.300	06/10/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 146 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	65.2	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	3420	10.0	06/06/2024	ND	168	83.8	200	2.73	QM-07
EXT DRO >C28-C36	467	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 85.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.2 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: SP 4 - 1' (H243207-08)

BTEX 8021B		mg/kg		Analyzed By: JH				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.200	0.200	06/10/2024	ND	1.70	85.0	2.00	4.80		
Toluene*	<0.200	0.200	06/10/2024	ND	1.91	95.4	2.00	4.35	GC-NC	
Ethylbenzene*	2.60	0.200	06/10/2024	ND	2.08	104	2.00	9.39	GC-NC1	
Total Xylenes*	16.8	0.600	06/10/2024	ND	6.32	105	6.00	10.1	GC-NC1	
Total BTEX	19.4	1.20	06/10/2024	ND					GC-NC1	

Surrogate: 4-Bromofluorobenzene (PID) 266 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	06/07/2024	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS				S-04		
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	797	10.0	06/06/2024	ND	176	87.8	200	5.10		
DRO >C10-C28*	1650	10.0	06/06/2024	ND	168	83.8	200	2.73		
EXT DRO >C28-C36	24.2	10.0	06/06/2024	ND						

Surrogate: 1-Chlorooctane 180 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 1 - SURF (H243207-09)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 84.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.9 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 1 - 1' (H243207-10)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received: 06/05/2024
 Reported: 06/12/2024
 Project Name: RIO STATE #3
 Project Number: MURCHISON
 Project Location: UL/ D SEC 36 T18S - R24E

Sampling Date: 06/04/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: HZ 2 - SURF (H243207-11)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 84.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 2 - 1' (H243207-12)

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	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 63.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 62.5 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 3 - SURF (H243207-13)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 58.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 59.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 3 - 1' (H243207-14)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 66.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 64.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 4 - SURF (H243207-15)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 73.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.7 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

Hungry Horse Environmental
 DANIEL DOMINGUEZ
 P.O. Box 1058
 Hobbs NM, 88240
 Fax To: (505) 391-4585

Received:	06/05/2024	Sampling Date:	06/04/2024
Reported:	06/12/2024	Sampling Type:	Soil
Project Name:	RIO STATE #3	Sampling Condition:	Cool & Intact
Project Number:	MURCHISON	Sample Received By:	Shalyn Rodriguez
Project Location:	UL/ D SEC 36 T18S - R24E		

Sample ID: HZ 4 - 1' (H243207-16)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/07/2024	ND	1.70	85.0	2.00	4.80	
Toluene*	<0.050	0.050	06/07/2024	ND	1.91	95.4	2.00	4.35	
Ethylbenzene*	<0.050	0.050	06/07/2024	ND	2.08	104	2.00	9.39	
Total Xylenes*	<0.150	0.150	06/07/2024	ND	6.32	105	6.00	10.1	
Total BTEX	<0.300	0.300	06/07/2024	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	06/07/2024	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/06/2024	ND	176	87.8	200	5.10	
DRO >C10-C28*	<10.0	10.0	06/06/2024	ND	168	83.8	200	2.73	
EXT DRO >C28-C36	<10.0	10.0	06/06/2024	ND					

Surrogate: 1-Chlorooctane 65.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 63.4 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Hungry Horse LLC
 Project Manager: Daniel Dominguez
 Address: 4024 Plains Hwy
 City: Lovington State: NM Zip: 88260
 Phone #: 575 393-3386 Fax #:
 Project #: Project Owner: Murchison Oil & Gas
 Project Name: Rio State #3
 Project Location: U/L D Sec 36 T18S - R24E
 Sampler Name: Jerry Heidelberg
 P.O. #:
 Company: Murchison Oil & Gas
 Attn: Greg Boans
 Address: 5325 Sierra Vista
 City: Carlsbad
 State: NM Zip: 88230
 Phone #: 575 706-0667
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride	TPH	BTEX 8021
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					
1043207			1						6/4/24		X	X	X	
	SP1-Surf	G	1	X					6/4/24		X	X	X	
	SP1-1'	G	1	X					6/4/24		X	X	X	
	SP2-Surf	G	1	X					6/4/24		X	X	X	
	SP2-2'	G	1	X					6/4/24		X	X	X	
	SP3-Surf	G	1	X					6/4/24		X	X	X	
	SP3-1'	G	1	X					6/4/24		X	X	X	
	SP4-Surf	G	1	X					6/4/24		X	X	X	
	SP4-1'	G	1	X					6/4/24		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: *[Signature]*
 Date: 6/5/24
 Time: 16:28
 Received By: *[Signature]*
 Date:
 Time:
 Sample Condition: Cool Intact
 Checked By: *[Signature]*

REMARKS:
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 Email results to: pm@hungry-horse.com
 gboans@jdmil.com

Delivered By: (Circle One) *801 #1140*
 Sampler - UPS - Bus - Other:
 Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

BILL TO

ANALYSIS REQUEST

Company Name: Hungry Horse LLC
 Project Manager: Daniel Dominguez
 Address: 4024 Plains Hwy
 City: Lovington State: NM Zip: 88260
 Phone #: 575 393-3386 Fax #:
 Project #: Project Owner: Murchison Oil & Gas
 Project Name: Rio State #3
 Project Location: U/L D Sec 36 T18S - R24E
 Sampler Name: Jerry Heidelberg
 P.O. #:
 Company: Murchison Oil & Gas
 Attn: Greg Boans
 Address: 5325 Sierra Vista
 City: Carlsbad
 State: NM Zip: 88230
 Phone #: 575 706-0667
 Fax #:

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	Chloride	TPH	BTEX 8021
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
9	HZ1-Surf	G	1	X							6/4/24		X		X
10	HZ1-1'	G	1	X							6/4/24		X		X
11	HZ2-Surf	G	1	X							6/4/24		X		X
12	HZ2-1'	G	1	X							6/4/24		X		X
13	HZ3-Surf	G	1	X							6/4/24		X		X
14	HZ3-1'	G	1	X							6/4/24		X		X
15	HZ4-Surf	G	1	X							6/4/24		X		X
16	HZ4-1'	G	1	X							6/4/24		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: *[Signature]*
 Date: 4/6/24
 Time: 1:28
 Received By: *[Signature]*
 Date:
 Time:
 Delivered By: (Circle One) *-8-1c*
 Sampler - UPS - Bus - Other: *#14D*

Sample Condition: Cool Intact
 Yes No
 CHECKED BY: *[Signature]*

REMARKS:
 Email results to: pm@hungry-horse.com
 gboans@idmii.com
 Phone Result: Yes No Add'l Phone #:
 Fax Result: Yes No Add'l Fax #:
 Cardinal cannot accept verbal changes. Please fax written changes to 575-393-2476

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 386999

QUESTIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2202454641
Incident Name	NAPP2202454641 RIO STATE 3 @ 30-015-33690
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-33690] RIO STATE #003

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	RIO STATE 3
Date Release Discovered	01/03/2022
Surface Owner	Private

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

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Freeze Other (Specify) Produced Water Released: 5 BBL Recovered: 0 BBL Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Cause: Freeze Other (Specify) Condensate Released: 69 BBL Recovered: 12 BBL Lost: 57 BBL.
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)	Load line valve froze and burst.

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

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

QUESTIONS, Page 2

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

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

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Cindy Cottrell Title: Regulatory Coordinator Email: ccottrell@jdmii.com Date: 09/26/2024
--	---

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 3

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID:	15363
	Action Number:	386999
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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	U.S. Geological Survey
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 500 and 1000 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 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
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

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

Chloride (EPA 300.0 or SM4500 Cl B)	800
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	10048
GRO+DRO (EPA SW-846 Method 8015M)	10010
BTEX (EPA SW-846 Method 8021B or 8260B)	136
Benzene (EPA SW-846 Method 8021B or 8260B)	1

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

On what estimated date will the remediation commence	06/25/2024
On what date will (or did) the final sampling or liner inspection occur	09/18/2024
On what date will (or was) the remediation complete(d)	09/25/2024
What is the estimated surface area (in square feet) that will be reclaimed	1635
What is the estimated volume (in cubic yards) that will be reclaimed	600
What is the estimated surface area (in square feet) that will be remediated	1635
What is the estimated volume (in cubic yards) that will be remediated	600

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

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

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

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

QUESTIONS, Page 4

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No

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: Cindy Cottrell Title: Regulatory Coordinator Email: ccottrell@jdmii.com Date: 09/26/2024
--	---

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, Page 5

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only

Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.

Requesting a deferral of the remediation closure due date with the approval of this submission	No
--	----

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

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

QUESTIONS, Page 6

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID:	15363
	Action Number:	386999
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	383715
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/18/2024
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	1000

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1635
What was the total volume (cubic yards) remediated	600
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1635
What was the total volume (in cubic yards) reclaimed	600
Summarize any additional remediation activities not included by answers (above)	Backfilled excavated pad site with clean caliche and contoured for erosion control.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Cindy Cottrell Title: Regulatory Coordinator Email: ccottrell@jdmii.com Date: 09/26/2024
--	---

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 7

Action 386999

QUESTIONS (continued)

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation 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 386999

CONDITIONS

Operator: Murchison Oil and Gas, LLC 7250 Dallas Parkway Plano, TX 75024	OGRID: 15363
	Action Number: 386999
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
bhall	Remediation closure approved.	9/30/2024
bhall	A reclamation report will not be accepted until reclamation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	9/30/2024
bhall	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	9/30/2024
bhall	Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC for the samples collected on 6/26/2024. Failure to provide proper sampling notice is a compliance issue and OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC.	9/30/2024