Earth Systems
Response & Restoration

February 3, 2025

New Mexico Oil Conservation Division
506 W. Texas Ave
Artesia, NM 88210

RE: **Chavis 8'' Lateral (MAL-1-10-3-4-EXT)- Closure Request Report**
Incident Number: nAPP2432429248
GPS: 32.995402°, -104.017412°
Chaves County, New Mexico
ESRR Project No. 2685

To Whom It May Concern:

Earth Systems Response & Restoration (ESRR), on behalf of Kinetik Midstream (Kinetik), presents the following Closure Request Report (CRR) detailing excavation activities and subsequent soil sampling events associated with an inadvertent release of condensate at the Chavis 8'' Lateral (MAL-1-10-3-4-EXT) (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, Kinetik is requesting No Further Action (NFA) at the Site.

Site Location & Incident Description

The Site is located in Unit N, Section 22, Township 15 South, Range 29 East, in Chaves County, New Mexico (32.995402°, -104.017412°) and is associated with oil and gas exploration and production operations on Private Land (**Figure 1**).

On November 16, 2024, a corroded underground pipeline ruptured, causing the release of approximately 13 barrels (bbl) of condensate onto a Kinetik right-of-way (ROW) and adjacent pasture. A vacuum truck was immediately dispatched to the Site and recovered 11 bbls of fluids. Kinetik conducted initial site assessment activities and mapped the observed release footprint on November 16, 2024, hereafter referred to as the Area of Concern (AOC) (**Figure 2**). Initial excavation activities were immediately conducted directly around the flowline to perform repairs to the underground pipeline. Kinetik gave notice to the New Mexico Oil Conservation Division (NMOCD) on November 19, 2024, by Notification of Release (NOR) and a Corrective Action Form C-141 (Form C-141) and was subsequently assigned Incident Number nAPP2432429248.

Site Characterization

ESRR characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). The following proximities were estimated:

- Greater than 5 miles of any continuously flowing watercourse or any other significant watercourse;
- Between 1 and 5 miles of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- Greater than 5 miles of any occupied permanent residence, school, hospital, institution or church;
- Greater than 5 miles of any spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;

- Between 1 and 5 miles of any other freshwater well or spring;
- Between 1 and 5 miles of any incorporated municipal boundary or a defined municipal fresh water well field covered under a municipal ordinance;
- Between 1,000 feet and ½ mile of any wetland;
- Greater than 5 miles of any subsurface mine;
- Between 1 and 1,000 feet of any unstable area (i.e. high karst potential); and
- Between 1 and 5 miles of a 100-year floodplain.

Receptor details used to determine the Site characterization are included in **Figure 1A** and **Figure 1B**. **Referenced Well Record** is attached.

Based on the results from the desktop review, no depth to water wells were found within ½ mile and the Site has been designated with high karst potential. The following Closure Criteria was applied:

Constituents of Concern (COCs)	Closure Criteria‡
Chloride	600 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	100 mg/kg
Benzene	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	50 mg/kg

‡*The reclamation concentration requirements of 600 mg/kg Chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.*
TPH= Gasoline Range Organics + Diesel Range Organics + Oil Range Organics
Laboratory Analytical Methods used: Environmental Protection Agency (EPA) 300.0, EPA 8015 NM, EPA 8021 B

Delineation Activities

On November 20, 2024, ESRR conducted delineation activities to assess the presence or absence of residual soil impacts associated with the AOC. Five delineation boreholes (HA-1 through HA-5) were advanced via hand auger within and surrounding the AOC. Delineation activities were driven by field screening soil for chloride utilizing QuanTab® test strips. A minimum of four soil samples were collected from each delineation borehole, representing the highest observed field screening concentrations and the greatest depth. Delineation soil samples were placed directly into pre-cleaned jars, packed with minimal void space, labeled, and placed on ice. The delineation soil samples were transported under strict chain-of-custody procedures, to Eurofins in Carlsbad, New Mexico, for analysis of the COCs. **Photographic Documentation** of all activities are attached.

Laboratory analytical results for soil samples (HA-2 through HA-5) were compliant with Site Closure Criteria and/or the reclamation standard defining the horizontal periphery of the AOC.

Laboratory analytical results for soil sample (HA-1), collected within the AOC, indicated TPH-GRO+TPH-DRO/TPH was above the Site Closure Criteria and/or the reclamation standard up to 1-foot bgs. Elevated TPH-GRO+TPH-DRO/TPH concentrations were characterized by a concentration of 621 mg/kg, specifically for TPH-GRO and TPH-DRO. Laboratory results are summarized in **Table 1**, included in the attachments. The locations of all delineation soil samples are shown in **Figure 2**.

Remediation Activities

On December 23, 2024, excavation activities of identified impacts were performed via mechanical equipment based on laboratory analytical results associated with delineation soil sampling activities and visual observation. The excavation was vertically advanced to a depth of 3-feet bgs.

Following the removal of soil, ESRR collected 5-point composite soil samples at a sampling frequency of 200 square feet from the excavation floor (CS-1) and sidewalls (SW-1 and SW-2). The 5-point composite soil samples were comprised of five equivalent aliquots homogenized in a 1-gallon resealable plastic bag. The confirmation soil samples were handled, transported, and analyzed as previously described.

Laboratory analytical results indicated that concentrations of COCs for all final confirmation soil samples were below the applicable Site Closure Criteria and/or reclamation standard. Laboratory results are summarized in **Table 1**, included in the attachments. The locations of all final confirmation soil samples are shown in **Figure 3**.

Approximately 40 cubic yards (CY) of impacted soil was removed from the Site and transported to Lea Land in Hobbs, New Mexico under Kinetik approved manifests. Upon receipt of the final confirmation soil samples results, the excavation was backfilled with clean, locally sourced soil and the Site was restored to "as close to its original state" as possible. The final soil cover was contoured to match the Site's pre-existing grade to prevent ponding of water and erosion.

Closure Request

Based on laboratory analytical results for all final confirmation soil samples, Kinetik believes that residual soil impacts associated with the inadvertent release have been excavated and removed from the Site in accordance with Site Closure Criteria. Kinetik believes the completed remedial actions meet the requirements set forth in NMAC 19.15.29.13 regulations in order to be protective of human health, the environment, and groundwater. As such, NFA appears warranted at this time, and Kinetik respectfully requests Closure of this CRR associated with Incident Number nAPP2432429248.

If you have any questions or comments, please do not hesitate to contact Gilbert Moreno at (832) 541-7719 or gmoreno@earthsys.net. Documentation and correspondence notifications and Executed chain-of-custody forms and laboratory analytical reports are attached.

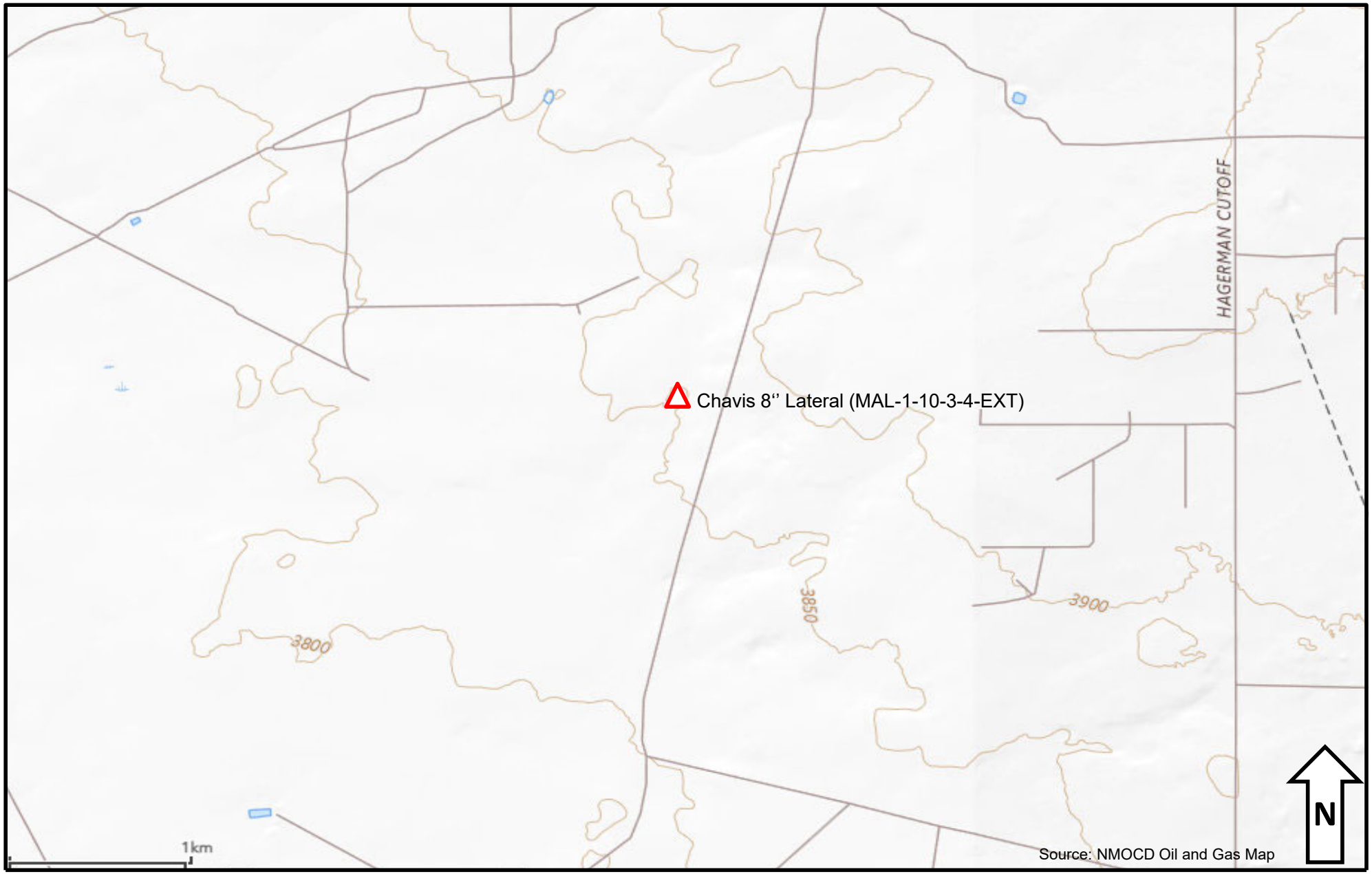
Sincerely,
EARTH SYSTEMS RESPONSE & RESTORATION

Gilbert Moreno
Carlsbad Operations Manager-Project Geologist

cc: Sebastian Orozco, Kinetik Midstream

Attachments:
- Figure 1 - Site Map
- Figure 1A - Ground Water
- Figure 1B - Karst Potential
- Figure 2 - Delineation Soil Sample Locations
- Figure 3 - Excavation Soil Sample Locations
- Referenced Well Record

Photographic Documentation
Table 1 - Soil Sample Analytical Results
NMOCD Email Documentation & Correspondance
Executed Chain-of-Custody Forms and Laboratory Analytical Reports

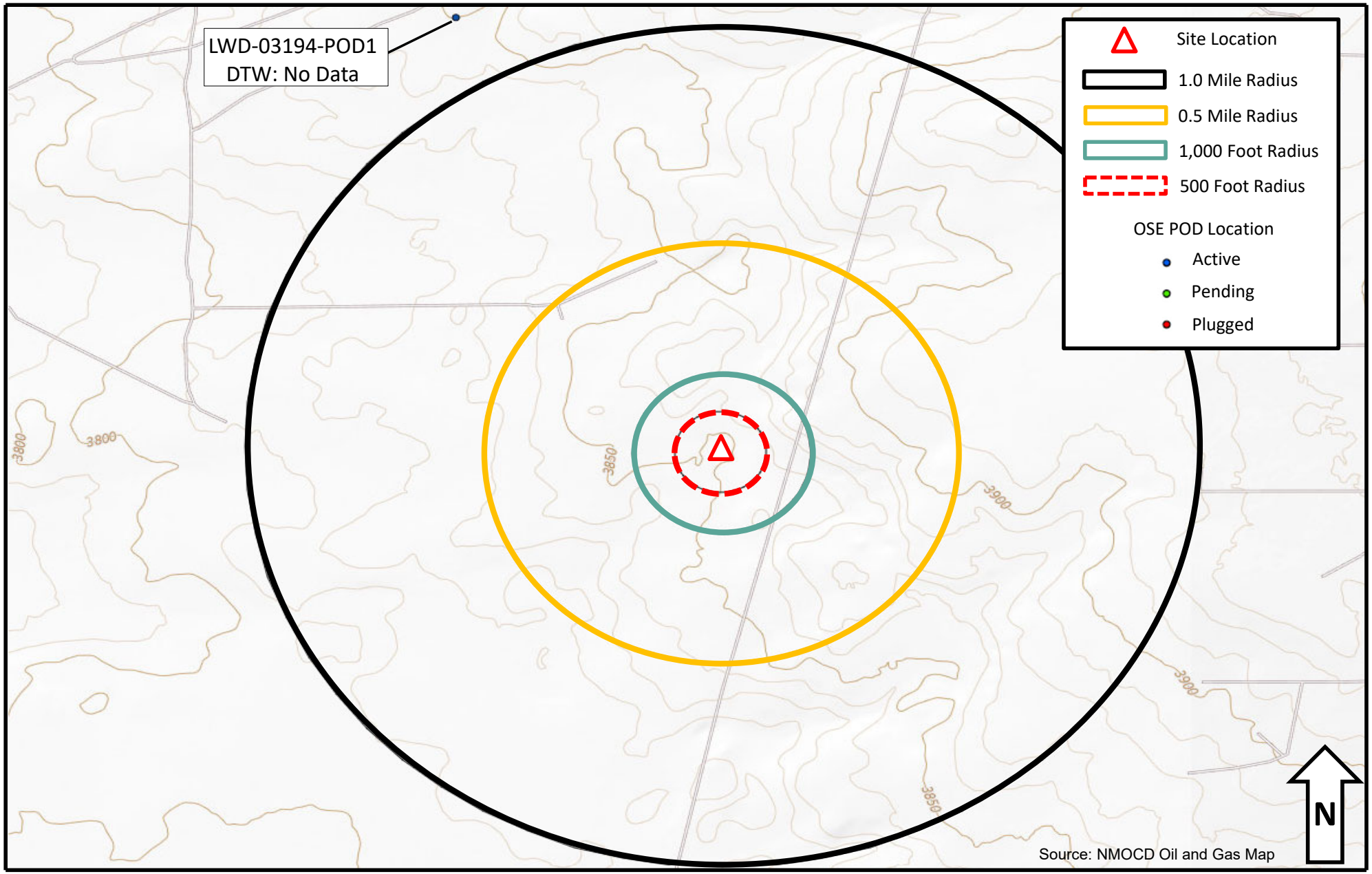


Earth Systems Response & Restoration

Figure 1 – Site Map

Kinetik Midstream – Chavis 8'' Lateral (MAL-1-10-3-4-EXT)
GPS: 32.995402, -104.017412
Chaves County, New Mexico

KINETIK



Earth Systems
Response & Restoration

Figure 1A – Ground Water

Kinetik Midstream – Chavis 8'' Lateral (MAL-1-10-3-4-EXT)
GPS: 32.995402, -104.017412
Chaves County, New Mexico

KINETIK

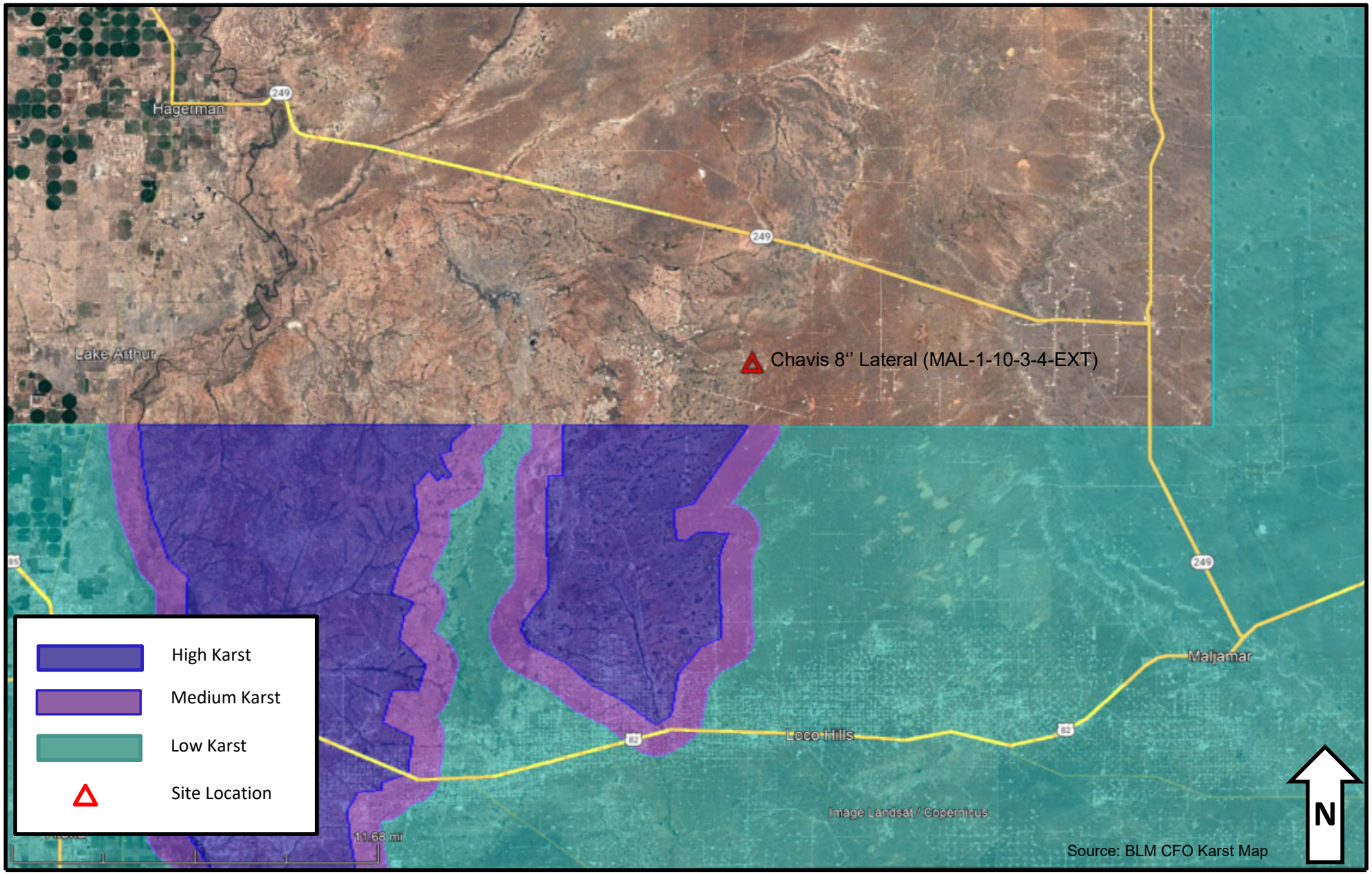


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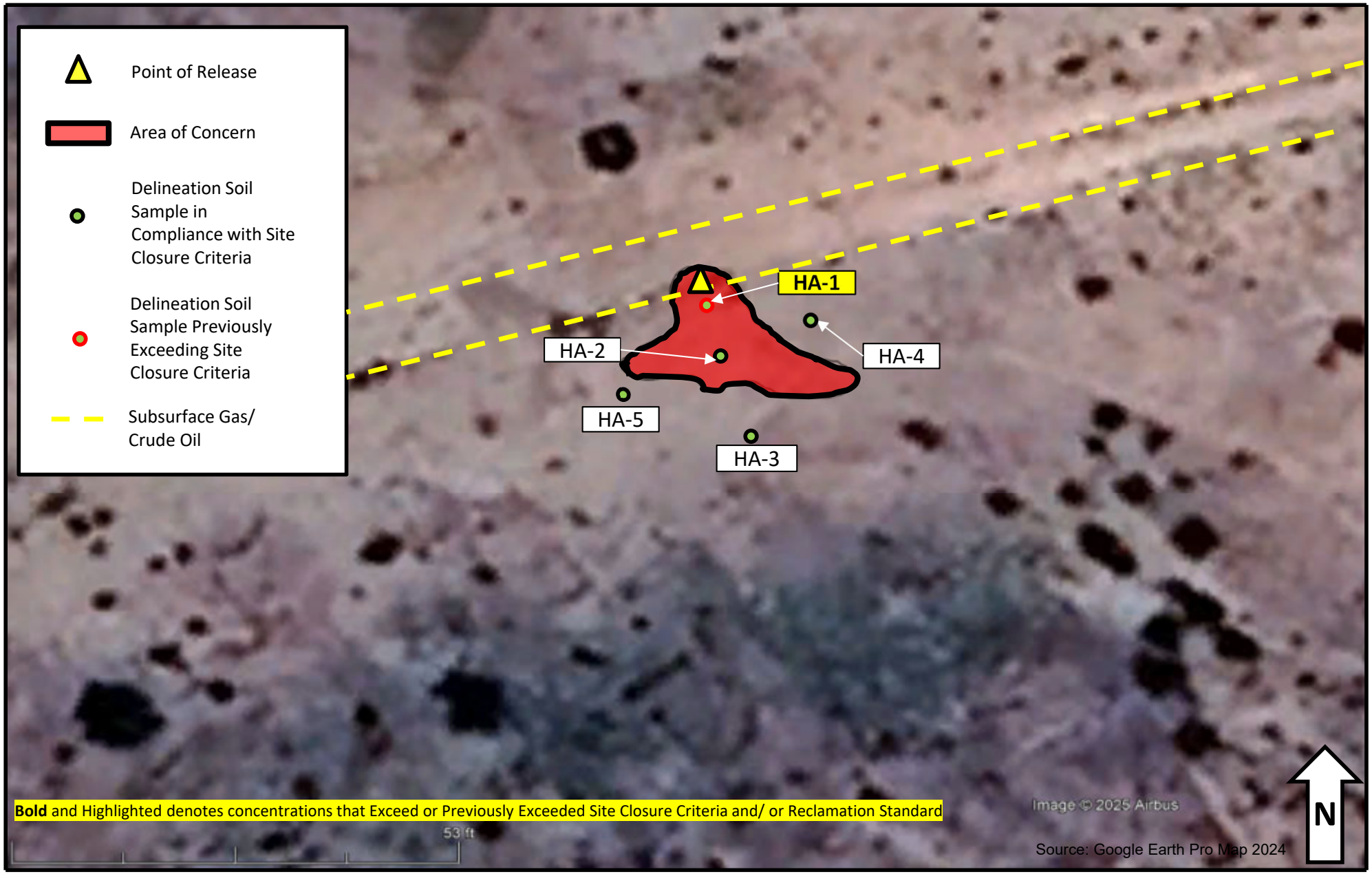
Figure 1B – Karst Potential

Kinetik Midstream – Chavis 8'' Lateral (MAL-1-10-3-4-EXT)
GPS: 32.995402, -104.017412
Chaves County, New Mexico

KINETIK



Bold and Highlighted denotes concentrations that Exceed or Previously Exceeded Site Closure Criteria and/ or Reclamation Standard

Source: Google Earth Pro Map 2024

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Figure 2 – Delineation Soil Sample Locations

Kinetik Midstream – Chavis 8'' Lateral (MAL-1-10-3-4-EXT)
GPS: 32.995402, -104.017412
Chaves County, New Mexico

KINETIK

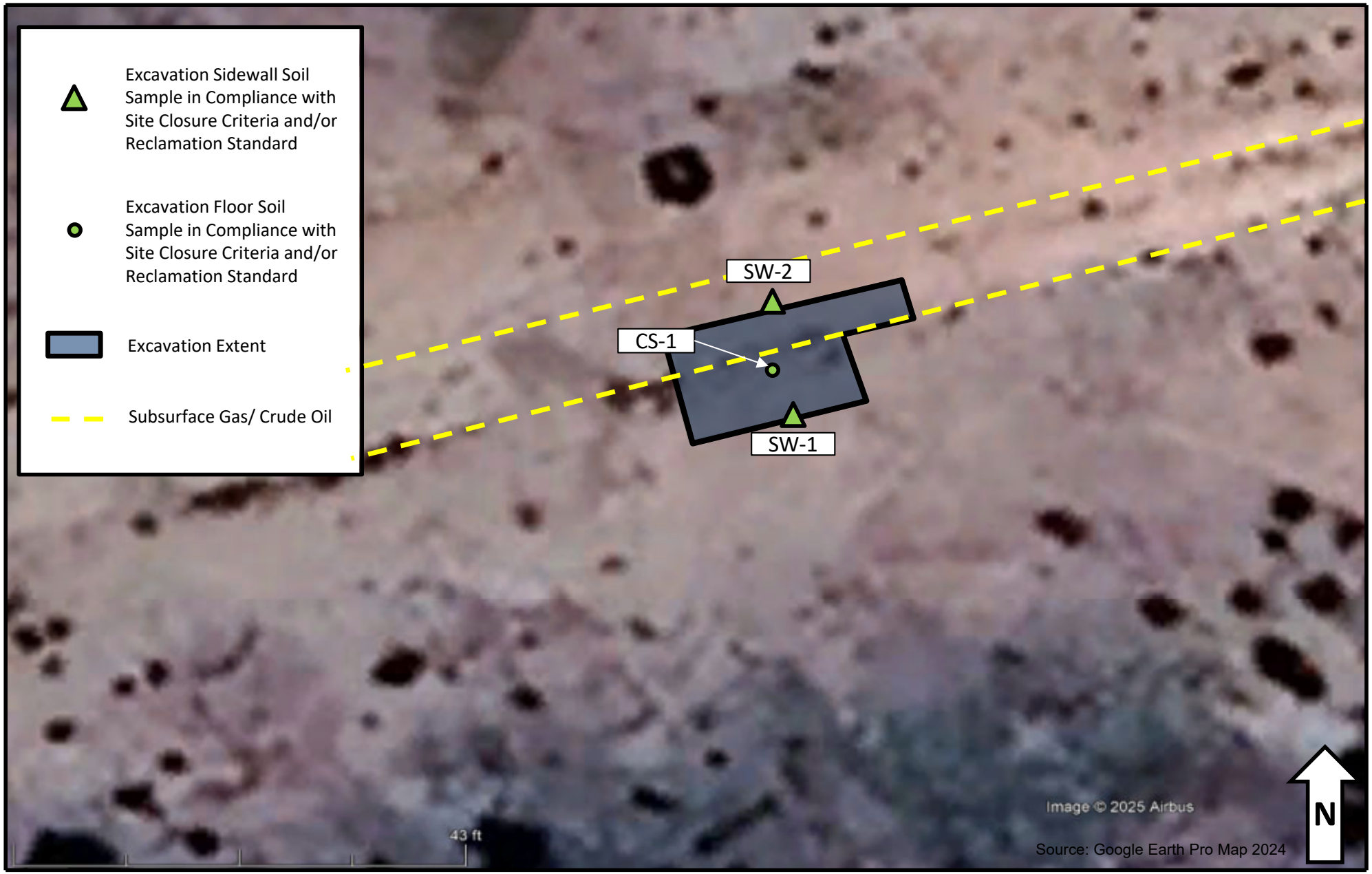

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Figure 3 – Excavation Soil Sample Locations

Kinetik Midstream – Chavis 8'' Lateral (MAL-1-10-3-4-EXT)
GPS: 32.995402, -104.017412
Chaves County, New Mexico

KINETIK

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
POD150.9	L-14514
WELL OWNER NAME(S)	PHONE (OPTIONAL)
EDGAR D MENDOZA SALAZAR	
WELL OWNER MAILING ADDRESS	CITY / STATE / ZIP
1203 N 1ST ST	LOVINGTON NM 88260

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	58	50.9	N
	LONGITUDE	103	19	40.8	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

PLSS 221 SEC 32 TOWNSHIP 15S RANDGE 36E

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD-1611	JOHN GOERTZEN	GOERTZEN DRILLING

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
08/9/18	08/10/18	208	208	77

COMPLETED WELL IS: ☐ ARTESIAN ☐ DRY HOLE ☑ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 77

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☐ OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	208	10	PVC		5		.010

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	22		CEMENT	14 80LB BAGS	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 10/29/15)

FILE NUMBER	L-14514	POD NUMBER	1	TRN NUMBER	628850
LOCATION	122 T15S R36E Sec 32			20765	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	2		TOPSOIL	Y ✓ N	
2	53		CALICHE	Y ✓ N	
53	68		SAND	Y ✓ N	
68	72		ROCK	Y ✓ N	
72	104		SANDSTONE	Y ✓ N	
104	125		SAND	✓ Y N	
125	150		SANDY CLAY	✓ Y N	
150	162		SAND	✓ Y N	
162	175		CLAY	✓ Y N	
175	185		SAND	✓ Y N	
185	202		GRAVEL	✓ Y N	
202	205		BLUE CLAY	✓ Y N	
205	208		RED BED	✓ Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

JOHN GOERTZEN — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

08/15/2018 — DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 10/29/2015)

FILE NUMBER	L-14514	POD NUMBER	1	TRN NUMBER	628850
LOCATION	122 T15S R36E Sec 32			20765	PAGE 2 OF 2

Chavis 8'' Lateral (MAL-1-10-3-4-EXT) - Closure Request Report
Incident Number: nAPP2432429248
GPS: 32.995402°, -104.017412°

PHOTO 1: Southeastern view after initial excavation and repairs made by Kinetik. 11/20/2024

PHOTO 2: Northwestern view during delineation activities. 11/20/2024

PHOTO 3: Northwestern view during delineation activities. 11/20/2024

PHOTO 4: Southwestern view of excavation extent. 12/27/2024

PHOTO 5: Southeastern view of excavation extent. 12/27/2024

PHOTO 6: Northeastern view after restoration activities. 1/15/2025

Earth Systems Response & Restoration

KINETIK

Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Chavis 8" Lateral (MAL-1-10-3-4-EXT)
Chaves County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			10	50	NE	NE	NE	100	600
Delineation Soil Samples - nAPP2432429248									
HA - 1	11/20/2024	0.5	0.36	18.2	187	434	<49.8	**621**	19.8
HA - 1	11/20/2024	2	0.216	12.8	<49.7	<49.7	<49.7	<49.7	<10.1
HA - 1	11/20/2024	4	<0.0201	<0.0402	<50.0	<50.0	<50.0	<50.0	<9.96
HA - 1	11/20/2024	6	<0.0202	<0.0403	<49.9	<49.9	<49.9	<49.9	12.9
HA - 2	11/20/2024	0.5	0.0272	0.33	<49.9	<49.9	<49.9	<49.9	<10.1
HA - 2	11/20/2024	2	<0.0202	0.213	<50.0	<50.0	<50.0	<50.0	<9.94
HA - 2	11/20/2024	4	<0.0201	<0.0402	<50.0	<50.0	<50.0	<50.0	<9.92
HA - 2	11/20/2024	6	<0.00200	0.00517	<49.9	<49.9	<49.9	<49.9	<10.0
HA - 3	11/20/2024	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<10.1
HA - 3	11/20/2024	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<9.96
HA - 3	11/20/2024	4	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	<9.92
HA - 4	11/20/2024	0.5	0.00796	0.0813	<49.9	<49.9	<49.9	<49.9	<10.1
HA - 4	11/20/2024	2	0.00285	0.0295	<49.9	<49.9	<49.9	<49.9	<9.94
HA - 4	11/20/2024	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<10.0
HA - 4	11/20/2024	6	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<10.0
HA - 5	11/20/2024	0.5	0.0129	0.111	<49.7	<49.7	<49.7	<49.7	<9.94
HA - 5	11/20/2024	2	0.00332	0.0297	<50.0	<50.0	<50.0	<50.0	<10.0
HA - 5	11/20/2024	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<10.1
HA - 5	11/20/2024	6	<0.00199	0.0138	<50.5	<50.5	<50.5	<50.5	<10.1
Excavation Soil Samples - nAPP2432429248									
CS-1	12/27/2024	3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	80.7
SW-1	12/27/2024	0-3	<0.00201	0.00569	<50.0	<50.0	<50.0	<50.0	97.7
SW-2	12/27/2024	0-3	<0.00200	0.0469	<49.8	76.0	<49.8	76.0	169

Notes:
bgs: below ground surface
mg/kg: milligrams per kilogram
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code
Text in ""grey"" represents excavated soil samples
Concentrations in **bold and highlighted** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard‡ for Soils Impacted by a Release
‡The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

Outlook

RE: [EXTERNAL] Re: nAPP2211550639 - Soil Sampling Activities

From Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Date Mon 12/30/2024 12:55 PM
To Gilbert Moreno <gmoreno@earthsys.net>
Cc sorozco@kinetik.com <sorozco@kinetik.com>; jorgetmmx@gmail.com <jorgetmmx@gmail.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Gilbert,

I will enter this into Incident Details. In the future, please make sure the 2 business day notification is entered into C-141N via Permitting. Please include this e-mail correspondence in the remediation and/or closure report. Regards

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, December 30, 2024 1:07 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Re: nAPP2211550639 - Soil Sampling Activities

As you are the reviewer of this incident (**nAPP2432429248)** I am forwarding to you Rob.

From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, December 30, 2024 12:11 PM
To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Cc: jorgetmmx@gmail.com; Sebastian Orozco <sorozco@kinetik.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: Re: [EXTERNAL] Re: nAPP2211550639 - Soil Sampling Activities

You don't often get email from gmoreno@earthsys.net. Learn why this is important

Hi Shelly,

Thanks for the quick response!

Understood. Just for clarification, this original email notification was sent abiding to the two-business day requirement and to help with record keeping. Unfortunately, the operator was unable to immediately submit a C-141N via Permitting while out of the office for the holidays but has since been submitted into Permitting. I plan to attach all correspondence in our final report.

Please let me know if this will be acceptable.

Thanks,

Gilbert Moreno | Carlsbad Operations Manager- Project Geologist
1910 Resource Ct | Carlsbad NM, 88220
O. 575.323.9034 M. (832) 541-7719 | gmoreno@earthsys.net

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, December 30, 2024 10:12 AM
To: Gilbert Moreno <gmoreno@earthsys.net>
Cc: jorgetmmx@gmail.com <jorgetmmx@gmail.com>; Sebastian Orozco <sorozco@kinetik.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] Re: nAPP2211550639 - Soil Sampling Activities

Hi Gilbert,

Thanks for the update but these need to be submitted as C-141N sampling notifications via Permitting at least two business days prior to sample collection.

Kind regards,

Shelly

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

From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, December 30, 2024 11:02 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: jorgetmmx@gmail.com; Sebastian Orozco <sorozco@kinetik.com>
Subject: [EXTERNAL] Re: nAPP2211550639 - Soil Sampling Activities

Good afternoon,

My apologies, the Notification of Sampling (C-141N) email below is for incident **nAPP2432429248** and NOT nAPP2211550639.

Gilbert Moreno | Carlsbad Operations Manager- Project Geologist
1910 Resource Ct | Carlsbad NM, 88220
O. 575.323.9034 M. (832) 541-7719 | gmoreno@earthsys.net

Earth Systems
Response & Restoration

From: Gilbert Moreno
Sent: Thursday, December 19, 2024 2:44 PM
To: ocd.enviro@emnrd.nm.gov <ocd.enviro@emnrd.nm.gov>
Cc: jorgetmmx@gmail.com <jorgetmmx@gmail.com>; Sebastian Orozco <sorozco@kinetik.com>
Subject: nAPP2211550639 - Soil Sampling Activities

Hello,

Earth Systems R & R anticipates conducting soil sampling activities at the CHAVIS 8'' LATERAL (MAL-1-10-3-4-EXT), December 27th, 2024. This email will be followed up with a Notification of Sampling (C-141N) for the proposed date.

Proposed Time:	08:00-17:00 MST
Site Name:	CHAVIS 8'' LATERAL (MAL-1-10-3-4-EXT)
Incident Number:	nAPP2211550639
Sampling Surface Area:	400 sq. ft.
Samples to be collected:	6
Sampling Date(s):	12/27/2024
Who to Contact:	Gilbert Moreno (832) 541-7719
Site GPS:	32.995402,-104.017412

Gilbert Moreno | Carlsbad Operations Manager- Project Geologist
1910 Resource Ct | Carlsbad NM, 88220

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 415790

QUESTIONS

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 415790
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2432429248**
Incident Name	**NAPP2432429248 CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT) @ 0**
Incident Type	**Natural Gas Release**
Incident Status	**Initial C-141 Approved**

Location of Release Source	
Site Name	**Chavis 8" Lateral (MAL-1-10-3-4-EXT)**
Date Release Discovered	**11/16/2024**
Surface Owner	**Private**

Sampling Event General Information *Please answer all the questions in this group.*	
What is the sampling surface area in square feet	400
What is the estimated number of samples that will be gathered	6
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	12/27/2024
Time sampling will commence	08:00 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Gilbert Moreno (832) 541-7719
Please provide any information necessary for navigation to sampling site	32.995402,-104.017412

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 415790

CONDITIONS

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 415790
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
sorozco	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.	12/30/2024

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ANALYTICAL REPORT

PREPARED FOR

Attn: Gilbert Moreno
Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Generated 11/27/2024 11:32:26 AM

JOB DESCRIPTION

Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
Chaves County, NM

JOB NUMBER

890-7406-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

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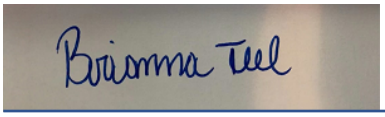
Job Notes

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



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

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT) SDG: Chaves County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery 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.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low 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.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Earth Systems Response and Restoration
Project: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1

Job ID: 890-7406-1 Eurofins Carlsbad

Job Narrative
890-7406-1

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

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

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

Receipt
The samples were received on 11/21/2024 8:02 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 5.0°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 1 (890-7406-1), HA - 1 (890-7406-2), HA - 1 (890-7406-3), HA - 1 (890-7406-4), HA - 1 (890-7406-5), HA - 1 (890-7406-6), HA - 2 (890-7406-7), HA - 2 (890-7406-8), HA - 2 (890-7406-9), HA - 2 (890-7406-10), HA - 2 (890-7406-11), HA - 2 (890-7406-12), HA - 3 (890-7406-13), HA - 3 (890-7406-14), HA - 3 (890-7406-15), HA - 3 (890-7406-16), HA - 3 (890-7406-17), HA - 4 (890-7406-18), HA - 4 (890-7406-19), HA - 4 (890-7406-20), HA - 4 (890-7406-21), HA - 4 (890-7406-22), HA - 4 (890-7406-23), HA - 5 (890-7406-24), HA - 5 (890-7406-25), HA - 5 (890-7406-26), HA - 5 (890-7406-27), HA - 5 (890-7406-28) and HA - 5 (890-7406-29).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-7406-3), HA - 1 (890-7406-5), HA - 1 (890-7406-6), HA - 2 (890-7406-7), HA - 2 (890-7406-9) and HA - 2 (890-7406-11). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 2 (890-7406-12), HA - 3 (890-7406-17), HA - 4 (890-7406-20) and HA - 5 (890-7406-24). Evidence of matrix interferences is not obvious.

Method 8021B: The laboratory control sample duplicate (LCSD) associated with preparation batch 880-96355 and analytical batch 880-96346 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 8021B: Surrogate recovery for the following sample was outside control limits: HA - 5 (890-7406-29). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-96356 and analytical batch 880-96345 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-7406-3), HA - 1 (890-7406-5), HA - 1 (890-7406-6), HA - 2 (890-7406-7), HA - 2 (890-7406-9) and HA - 2 (890-7406-11). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 2 (890-7406-12), HA - 3 (890-7406-13), HA - 3 (890-7406-15), HA - 3 (890-7406-17), HA - 4 (890-7406-18), HA - 4 (890-7406-20), HA - 4 (890-7406-22), HA - 4 (890-7406-23), HA - 5 (890-7406-24), HA - 5 (890-7406-26), (890-7406-A-12-B MS) and (890-7406-A-12-C MSD). Evidence of matrix interferences is not obvious.

Case Narrative

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1 (Continued) Eurofins Carlsbad

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-96301 and analytical batch 880-96433 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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.

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-1
Matrix: Solid
Date Collected: 11/20/24 12:00
Date Received: 11/21/24 08:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.360		0.199		mg/Kg		11/22/24 08:32	11/22/24 14:15	100
Toluene	3.84		0.199		mg/Kg		11/22/24 08:32	11/22/24 14:15	100
Ethylbenzene	6.58		0.199		mg/Kg		11/22/24 08:32	11/22/24 14:15	100
m-Xylene & p-Xylene	5.19		0.398		mg/Kg		11/22/24 08:32	11/22/24 14:15	100
o-Xylene	2.19		0.199		mg/Kg		11/22/24 08:32	11/22/24 14:15	100
Xylenes, Total	7.38		0.398		mg/Kg		11/22/24 08:32	11/22/24 14:15	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*11/22/24 08:32*	*11/22/24 14:15*	*100*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*11/22/24 08:32*	*11/22/24 14:15*	*100*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	18.2		0.398		mg/Kg			11/22/24 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	621		49.8		mg/Kg			11/21/24 23:55	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	187		49.8		mg/Kg		11/20/24 13:57	11/21/24 23:55	1
Diesel Range Organics (Over C10-C28)	434		49.8		mg/Kg		11/20/24 13:57	11/21/24 23:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/20/24 13:57	11/21/24 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*11/20/24 13:57*	*11/21/24 23:55*	*1*
o-Terphenyl	*73*		*70 - 130*	*11/20/24 13:57*	*11/21/24 23:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.8		9.92		mg/Kg			11/22/24 22:17	1

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-3
Matrix: Solid
Date Collected: 11/20/24 12:10
Date Received: 11/21/24 08:02
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.216		0.0198		mg/Kg		11/23/24 16:48	11/24/24 02:17	10
Toluene	3.37		0.0198		mg/Kg		11/23/24 16:48	11/24/24 02:17	10
Ethylbenzene	0.483		0.0198		mg/Kg		11/23/24 16:48	11/24/24 02:17	10
m-Xylene & p-Xylene	7.30		0.0396		mg/Kg		11/23/24 16:48	11/24/24 02:17	10
o-Xylene	1.48		0.0198		mg/Kg		11/23/24 16:48	11/24/24 02:17	10
Xylenes, Total	8.78		0.0396		mg/Kg		11/23/24 16:48	11/24/24 02:17	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*248*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 02:17*	*10*

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-3
Matrix: Solid
Date Collected: 11/20/24 12:10
Date Received: 11/21/24 08:02
Sample Depth: 2

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*64*	*S1-*	*70 - 130*	*11/23/24 16:48*	*11/24/24 02:17*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**12.8**		0.0396		mg/Kg			11/24/24 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/22/24 00:11	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	49.7		mg/Kg		11/20/24 13:57	11/22/24 00:11	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/20/24 13:57	11/22/24 00:11	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/20/24 13:57	11/22/24 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*11/20/24 13:57*	*11/22/24 00:11*	*1*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 00:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/22/24 22:42	1

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-5
Matrix: Solid
Date Collected: 11/20/24 12:20
Date Received: 11/21/24 08:02
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 02:38	10
Toluene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 02:38	10
Ethylbenzene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 02:38	10
m-Xylene & p-Xylene	<0.0402	U	0.0402		mg/Kg		11/23/24 16:48	11/24/24 02:38	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 02:38	10
Xylenes, Total	<0.0402	U	0.0402		mg/Kg		11/23/24 16:48	11/24/24 02:38	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*151*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 02:38*	*10*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/23/24 16:48*	*11/24/24 02:38*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0402	U	0.0402		mg/Kg			11/24/24 02:38	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			11/22/24 00:27	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-5
Matrix: Solid
Date Collected: 11/20/24 12:20
Date Received: 11/21/24 08:02
Sample Depth: 4

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	50.0		mg/Kg		11/20/24 13:57	11/22/24 00:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 00:27	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*11/20/24 13:57*	*11/22/24 00:27*	*1*
o-Terphenyl	*63*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 00:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg			11/22/24 22:50	1

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-6
Matrix: Solid
Date Collected: 11/20/24 12:25
Date Received: 11/21/24 08:02
Sample Depth: 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0202	U	0.0202		mg/Kg		11/23/24 16:48	11/24/24 02:58	10
Toluene	<0.0202	U	0.0202		mg/Kg		11/23/24 16:48	11/24/24 02:58	10
Ethylbenzene	<0.0202	U	0.0202		mg/Kg		11/23/24 16:48	11/24/24 02:58	10
m-Xylene & p-Xylene	<0.0403	U	0.0403		mg/Kg		11/23/24 16:48	11/24/24 02:58	10
o-Xylene	<0.0202	U	0.0202		mg/Kg		11/23/24 16:48	11/24/24 02:58	10
Xylenes, Total	<0.0403	U	0.0403		mg/Kg		11/23/24 16:48	11/24/24 02:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*147*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 02:58*	*10*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*11/23/24 16:48*	*11/24/24 02:58*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0403	U	0.0403		mg/Kg			11/24/24 02:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 00:43	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	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:43	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*11/20/24 13:57*	*11/22/24 00:43*	*1*
o-Terphenyl	*59*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 00:43*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-7406-6
Matrix: Solid
Date Collected: 11/20/24 12:25
Date Received: 11/21/24 08:02
Sample Depth: 6

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.9		9.92		mg/Kg			11/22/24 22:58	1

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-7
Matrix: Solid
Date Collected: 11/20/24 12:30
Date Received: 11/21/24 08:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0272		0.0199		mg/Kg		11/23/24 16:48	11/24/24 03:18	10
Toluene	0.0639		0.0199		mg/Kg		11/23/24 16:48	11/24/24 03:18	10
Ethylbenzene	0.0698		0.0199		mg/Kg		11/23/24 16:48	11/24/24 03:18	10
m-Xylene & p-Xylene	0.110		0.0398		mg/Kg		11/23/24 16:48	11/24/24 03:18	10
o-Xylene	0.0592		0.0199		mg/Kg		11/23/24 16:48	11/24/24 03:18	10
Xylenes, Total	0.169		0.0398		mg/Kg		11/23/24 16:48	11/24/24 03:18	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 03:18*	*10*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/23/24 16:48*	*11/24/24 03:18*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.330		0.0398		mg/Kg			11/24/24 03:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 00:59	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	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/20/24 13:57	11/22/24 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*11/20/24 13:57*	*11/22/24 00:59*	*1*
o-Terphenyl	*60*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 00:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/22/24 23:06	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-9
Matrix: Solid
Date Collected: 11/20/24 12:40
Date Received: 11/21/24 08:02
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0202	U	0.0202		mg/Kg		11/23/24 16:48	11/24/24 03:39	10
Toluene	**0.0454**		0.0202		mg/Kg		11/23/24 16:48	11/24/24 03:39	10
Ethylbenzene	**0.0468**		0.0202		mg/Kg		11/23/24 16:48	11/24/24 03:39	10
m-Xylene & p-Xylene	**0.0781**		0.0404		mg/Kg		11/23/24 16:48	11/24/24 03:39	10
o-Xylene	**0.0431**		0.0202		mg/Kg		11/23/24 16:48	11/24/24 03:39	10
Xylenes, Total	**0.121**		0.0404		mg/Kg		11/23/24 16:48	11/24/24 03:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 03:39*	*10*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/23/24 16:48*	*11/24/24 03:39*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.213**		0.0404		mg/Kg			11/24/24 03:39	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			11/22/24 01:15	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	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*11/20/24 13:57*	*11/22/24 01:15*	*1*
o-Terphenyl	*63*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 01:15*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			11/22/24 23:31	1

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-11
Matrix: Solid
Date Collected: 11/20/24 12:50
Date Received: 11/21/24 08:02
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 03:59	10
Toluene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 03:59	10
Ethylbenzene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 03:59	10
m-Xylene & p-Xylene	<0.0402	U	0.0402		mg/Kg		11/23/24 16:48	11/24/24 03:59	10
o-Xylene	<0.0201	U	0.0201		mg/Kg		11/23/24 16:48	11/24/24 03:59	10
Xylenes, Total	<0.0402	U	0.0402		mg/Kg		11/23/24 16:48	11/24/24 03:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*153*	*S1+*	*70 - 130*	*11/23/24 16:48*	*11/24/24 03:59*	*10*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-11
Matrix: Solid
Date Collected: 11/20/24 12:50
Date Received: 11/21/24 08:02
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*11/23/24 16:48*	*11/24/24 03:59*	*10*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0402	U	0.0402		mg/Kg			11/24/24 03:59	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			11/22/24 01:31	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	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/22/24 01:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*11/20/24 13:57*	*11/22/24 01:31*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*11/20/24 13:57*	*11/22/24 01:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92		mg/Kg			11/22/24 23:39	1

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-12
Matrix: Solid
Date Collected: 11/20/24 12:55
Date Received: 11/21/24 08:02
Sample Depth: 6

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		11/22/24 08:32	11/22/24 11:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:32	1
m-Xylene & p-Xylene	**0.00517**		0.00399		mg/Kg		11/22/24 08:32	11/22/24 11:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:32	1
Xylenes, Total	**0.00517**		0.00399		mg/Kg		11/22/24 08:32	11/22/24 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*11/22/24 08:32*	*11/22/24 11:32*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/22/24 08:32*	*11/22/24 11:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00517**		0.00399		mg/Kg			11/22/24 11:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 18:10	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-7406-12
Matrix: Solid
Date Collected: 11/20/24 12:55
Date Received: 11/21/24 08:02
Sample Depth: 6

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	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 18:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		11/21/24 16:11	11/22/24 18:10	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*11/21/24 16:11*	*11/22/24 18:10*	*1*
o-Terphenyl	*62*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 18:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/22/24 23:47	1

Client Sample ID: HA - 3

Lab Sample ID: 890-7406-13
Matrix: Solid
Date Collected: 11/20/24 13:00
Date Received: 11/21/24 08:02
Sample Depth: 0.5

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		11/22/24 08:32	11/22/24 16:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 16:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 16:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 16:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 16:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*11/22/24 08:32*	*11/22/24 16:09*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*11/22/24 08:32*	*11/22/24 16:09*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/22/24 16:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 19:00	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	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*11/21/24 16:11*	*11/22/24 19:00*	*1*
o-Terphenyl	*59*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 19:00*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 3
Lab Sample ID: 890-7406-13
Date Collected: 11/20/24 13:00
Matrix: Solid
Date Received: 11/21/24 08:02
Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/22/24 23:55	1

Client Sample ID: HA - 3
Lab Sample ID: 890-7406-15
Date Collected: 11/20/24 13:10
Matrix: Solid
Date Received: 11/21/24 08:02
Sample Depth: 2

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		11/22/24 08:32	11/22/24 16:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 16:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*11/22/24 08:32*	*11/22/24 16:30*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*11/22/24 08:32*	*11/22/24 16:30*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/22/24 16:30	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			11/22/24 19:17	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	50.0		mg/Kg		11/21/24 16:11	11/22/24 19:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 19:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*11/21/24 16:11*	*11/22/24 19:17*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 19:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg			11/23/24 00:03	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-7406-17
Matrix: Solid
Date Collected: 11/20/24 13:20
Date Received: 11/21/24 08:02
Sample Depth: 4

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		11/22/24 08:32	11/22/24 16:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 16:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 16:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*11/22/24 08:32*	*11/22/24 16:50*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/22/24 08:32*	*11/22/24 16:50*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			11/22/24 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/22/24 19:35	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	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 19:35	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 19:35	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*11/21/24 16:11*	*11/22/24 19:35*	*1*
o-Terphenyl	*59*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 19:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92		mg/Kg			11/23/24 00:12	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-18
Matrix: Solid
Date Collected: 11/20/24 13:25
Date Received: 11/21/24 08:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00796**	***+**	0.00201		mg/Kg		11/22/24 08:32	11/22/24 17:11	1
Toluene	**0.0289**		0.00201		mg/Kg		11/22/24 08:32	11/22/24 17:11	1
Ethylbenzene	**0.0194**		0.00201		mg/Kg		11/22/24 08:32	11/22/24 17:11	1
m-Xylene & p-Xylene	**0.0181**		0.00402		mg/Kg		11/22/24 08:32	11/22/24 17:11	1
o-Xylene	**0.00693**		0.00201		mg/Kg		11/22/24 08:32	11/22/24 17:11	1
Xylenes, Total	**0.0250**		0.00402		mg/Kg		11/22/24 08:32	11/22/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*11/22/24 08:32*	*11/22/24 17:11*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-18
Matrix: Solid
Date Collected: 11/20/24 13:25
Date Received: 11/21/24 08:02
Sample Depth: 0.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/22/24 08:32*	*11/22/24 17:11*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0813**		0.00402		mg/Kg			11/22/24 17:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 19:50	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	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:50	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*11/21/24 16:11*	*11/22/24 19:50*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 19:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/23/24 00:36	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-20
Matrix: Solid
Date Collected: 11/20/24 13:35
Date Received: 11/21/24 08:02
Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.00285**		0.00199		mg/Kg		11/22/24 08:32	11/22/24 17:31	1
Toluene	**0.00677**		0.00199		mg/Kg		11/22/24 08:32	11/22/24 17:31	1
Ethylbenzene	**0.00669**		0.00199		mg/Kg		11/22/24 08:32	11/22/24 17:31	1
m-Xylene & p-Xylene	**0.00932**		0.00398		mg/Kg		11/22/24 08:32	11/22/24 17:31	1
o-Xylene	**0.00391**		0.00199		mg/Kg		11/22/24 08:32	11/22/24 17:31	1
Xylenes, Total	**0.0132**		0.00398		mg/Kg		11/22/24 08:32	11/22/24 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*	*11/22/24 08:32*	*11/22/24 17:31*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*11/22/24 08:32*	*11/22/24 17:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0295**		0.00398		mg/Kg			11/22/24 17:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			11/22/24 20:07	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-20
Matrix: Solid
Date Collected: 11/20/24 13:35
Date Received: 11/21/24 08:02
Sample Depth: 2

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	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 20:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 20:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/21/24 16:11	11/22/24 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*11/21/24 16:11*	*11/22/24 20:07*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 20:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			11/23/24 00:44	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-22
Matrix: Solid
Date Collected: 11/20/24 13:45
Date Received: 11/21/24 08:02
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		11/22/24 08:32	11/22/24 17:51	1
Toluene	<0.00198	U	0.00198		mg/Kg		11/22/24 08:32	11/22/24 17:51	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		11/22/24 08:32	11/22/24 17:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		11/22/24 08:32	11/22/24 17:51	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		11/22/24 08:32	11/22/24 17:51	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		11/22/24 08:32	11/22/24 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*11/22/24 08:32*	*11/22/24 17:51*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*11/22/24 08:32*	*11/22/24 17:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			11/22/24 17:51	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			11/22/24 20:23	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	50.0		mg/Kg		11/21/24 16:11	11/22/24 20:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 20:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*11/21/24 16:11*	*11/22/24 20:23*	*1*
o-Terphenyl	*66*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 20:23*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-22
Matrix: Solid
Date Collected: 11/20/24 13:45
Date Received: 11/21/24 08:02
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/23/24 01:08	1

Client Sample ID: HA - 4

Lab Sample ID: 890-7406-23
Matrix: Solid
Date Collected: 11/20/24 13:50
Date Received: 11/21/24 08:02
Sample Depth: 6

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		11/22/24 08:32	11/22/24 18:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 18:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 18:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 18:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 18:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*11/22/24 08:32*	*11/22/24 18:12*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/22/24 08:32*	*11/22/24 18:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/22/24 18:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/22/24 20:40	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	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 20:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 20:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/21/24 16:11	11/22/24 20:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*11/21/24 16:11*	*11/22/24 20:40*	*1*
o-Terphenyl	*61*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 20:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/23/24 01:17	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 5

Date Collected: 11/20/24 13:55
Date Received: 11/21/24 08:02
Sample Depth: 0.5

Lab Sample ID: 890-7406-24
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0129	*+	0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:32	1
Toluene	0.0394		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:32	1
Ethylbenzene	0.0184		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:32	1
m-Xylene & p-Xylene	0.0242		0.00399		mg/Kg		11/22/24 08:32	11/22/24 18:32	1
o-Xylene	0.0161		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:32	1
Xylenes, Total	0.0403		0.00399		mg/Kg		11/22/24 08:32	11/22/24 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*11/22/24 08:32*	*11/22/24 18:32*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/22/24 08:32*	*11/22/24 18:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.111		0.00399		mg/Kg			11/22/24 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			11/22/24 20:56	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	49.7		mg/Kg		11/21/24 16:11	11/22/24 20:56	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		11/21/24 16:11	11/22/24 20:56	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/21/24 16:11	11/22/24 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*11/21/24 16:11*	*11/22/24 20:56*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 20:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			11/23/24 06:18	1

Client Sample ID: HA - 5

Date Collected: 11/20/24 14:05
Date Received: 11/21/24 08:02
Sample Depth: 2

Lab Sample ID: 890-7406-26
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.00332		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:53	1
Toluene	0.00818		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:53	1
Ethylbenzene	0.00485		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:53	1
m-Xylene & p-Xylene	0.00847		0.00401		mg/Kg		11/22/24 08:32	11/22/24 18:53	1
o-Xylene	0.00483		0.00200		mg/Kg		11/22/24 08:32	11/22/24 18:53	1
Xylenes, Total	0.0133		0.00401		mg/Kg		11/22/24 08:32	11/22/24 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*11/22/24 08:32*	*11/22/24 18:53*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7406-26
Matrix: Solid
Date Collected: 11/20/24 14:05
Date Received: 11/21/24 08:02
Sample Depth: 2

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/22/24 08:32*	*11/22/24 18:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0297**		0.00401		mg/Kg			11/22/24 18:53	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			11/22/24 21:11	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	50.0		mg/Kg		11/21/24 16:11	11/22/24 21:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 21:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*11/21/24 16:11*	*11/22/24 21:11*	*1*
o-Terphenyl	*65*	*S1-*	*70 - 130*	*11/21/24 16:11*	*11/22/24 21:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/23/24 06:27	1

Client Sample ID: HA - 5

Lab Sample ID: 890-7406-28
Matrix: Solid
Date Collected: 11/20/24 14:15
Date Received: 11/21/24 08:02
Sample Depth: 4

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		11/22/24 08:32	11/22/24 19:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 19:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 19:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 19:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:32	11/22/24 19:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/22/24 08:32	11/22/24 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*11/22/24 08:32*	*11/22/24 19:13*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*11/22/24 08:32*	*11/22/24 19:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			11/22/24 19:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			11/25/24 12:45	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-7406-28
Matrix: Solid
Date Collected: 11/20/24 14:15
Date Received: 11/21/24 08:02
Sample Depth: 4

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	<49.8	U	49.8		mg/Kg		11/23/24 19:25	11/25/24 12:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		11/23/24 19:25	11/25/24 12:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/23/24 19:25	11/25/24 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*11/23/24 19:25*	*11/25/24 12:45*	*1*
o-Terphenyl	*74*		*70 - 130*	*11/23/24 19:25*	*11/25/24 12:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/23/24 06:35	1

Client Sample ID: HA - 5

Lab Sample ID: 890-7406-29
Matrix: Solid
Date Collected: 11/20/24 14:20
Date Received: 11/21/24 08:02
Sample Depth: 6

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		11/22/24 08:35	11/22/24 11:22	1
Toluene	<0.00199	U F1	0.00199		mg/Kg		11/22/24 08:35	11/22/24 11:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/22/24 08:35	11/22/24 11:22	1
m-Xylene & p-Xylene	**0.0109**	**F1**	0.00398		mg/Kg		11/22/24 08:35	11/22/24 11:22	1
o-Xylene	**0.00293**	**F1**	0.00199		mg/Kg		11/22/24 08:35	11/22/24 11:22	1
Xylenes, Total	**0.0138**	**F1**	0.00398		mg/Kg		11/22/24 08:35	11/22/24 11:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/22/24 08:35*	*11/22/24 11:22*	*1*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*	*11/22/24 08:35*	*11/22/24 11:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0138**		0.00398		mg/Kg			11/22/24 11:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			11/25/24 13:34	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	<50.5	U	50.5		mg/Kg		11/23/24 19:25	11/25/24 13:34	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		11/23/24 19:25	11/25/24 13:34	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		11/23/24 19:25	11/25/24 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*11/23/24 19:25*	*11/25/24 13:34*	*1*
o-Terphenyl	*79*		*70 - 130*	*11/23/24 19:25*	*11/25/24 13:34*	*1*

Client Sample Results

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-29
Date Collected: 11/20/24 14:20
Matrix: Solid
Date Received: 11/21/24 08:02
Sample Depth: 6

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			11/23/24 06:43	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-7406-1	HA - 1	124	93
890-7406-3	HA - 1	248 S1+	64 S1-
890-7406-5	HA - 1	151 S1+	96
890-7406-6	HA - 1	147 S1+	95
890-7406-7	HA - 2	153 S1+	96
890-7406-9	HA - 2	149 S1+	97
890-7406-11	HA - 2	153 S1+	95
890-7406-12	HA - 2	131 S1+	96
890-7406-12 MS	HA - 2	119	96
890-7406-12 MSD	HA - 2	119	96
890-7406-13	HA - 3	100	82
890-7406-15	HA - 3	122	98
890-7406-17	HA - 3	132 S1+	96
890-7406-18	HA - 4	127	96
890-7406-20	HA - 4	132 S1+	95
890-7406-22	HA - 4	126	98
890-7406-23	HA - 4	128	96
890-7406-24	HA - 5	136 S1+	97
890-7406-26	HA - 5	129	97
890-7406-28	HA - 5	126	96
890-7406-29	HA - 5	63 S1-	118
890-7406-29 MS	HA - 5	96	101
890-7406-29 MSD	HA - 5	103	103
LCS 880-96355/1-A	Lab Control Sample	117	96
LCS 880-96356/1-A	Lab Control Sample	92	105
LCS 880-96443/1-A	Lab Control Sample	120	95
LCSD 880-96355/2-A	Lab Control Sample Dup	118	97
LCSD 880-96356/2-A	Lab Control Sample Dup	95	104
LCSD 880-96443/2-A	Lab Control Sample Dup	124	95
MB 880-96355/5-A	Method Blank	122	93
MB 880-96356/5-A	Method Blank	107	87
MB 880-96443/25-A	Method Blank	128	92

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	1CO1 (70-130)	OTPH1 (70-130)
890-7406-1	HA - 1	84	73
890-7406-3	HA - 1	80	61 S1-
890-7406-5	HA - 1	82	63 S1-
890-7406-6	HA - 1	76	59 S1-
890-7406-7	HA - 2	80	60 S1-
890-7406-9	HA - 2	83	63 S1-
890-7406-11	HA - 2	86	66 S1-

Surrogate Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
890-7406-12	HA - 2	82	62 S1-								
890-7406-12 MS	HA - 2	75	64 S1-								
890-7406-12 MSD	HA - 2	74	62 S1-								
890-7406-13	HA - 3	79	59 S1-								
890-7406-15	HA - 3	83	64 S1-								
890-7406-17	HA - 3	77	59 S1-								
890-7406-18	HA - 4	87	66 S1-								
890-7406-20	HA - 4	83	64 S1-								
890-7406-22	HA - 4	89	66 S1-								
890-7406-23	HA - 4	80	61 S1-								
890-7406-24	HA - 5	87	67 S1-								
890-7406-26	HA - 5	87	65 S1-								
890-7406-28	HA - 5	94	74								
890-7406-28 MS	HA - 5	87	74								
890-7406-28 MSD	HA - 5	87	74								
890-7406-29	HA - 5	106	79								
LCS 880-96192/2-A	Lab Control Sample	101	93								
LCS 880-96301/2-A	Lab Control Sample	108	99								
LCS 880-96448/2-A	Lab Control Sample	90	82								
LCSD 880-96192/3-A	Lab Control Sample Dup	94	84								
LCSD 880-96301/3-A	Lab Control Sample Dup	100	89								
LCSD 880-96448/3-A	Lab Control Sample Dup	90	80								
MB 880-96192/1-A	Method Blank	95	78								
MB 880-96301/1-A	Method Blank	99	80								
MB 880-96448/1-A	Method Blank	87	72								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96355/5-A
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96355

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 11:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:32	11/22/24 11:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/24 08:32	11/22/24 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*11/22/24 08:32*	*11/22/24 11:10*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*11/22/24 08:32*	*11/22/24 11:10*	*1*

Lab Sample ID: LCS 880-96355/1-A
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96355

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1296		mg/Kg		130	70 - 130
Toluene	0.100	0.1221		mg/Kg		122	70 - 130
Ethylbenzene	0.100	0.1195		mg/Kg		120	70 - 130
m-Xylene & p-Xylene	0.200	0.2511		mg/Kg		126	70 - 130
o-Xylene	0.100	0.1220		mg/Kg		122	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-96355/2-A
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96355

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1307	*+	mg/Kg		131	70 - 130	1	35
Toluene	0.100	0.1225		mg/Kg		123	70 - 130	0	35
Ethylbenzene	0.100	0.1211		mg/Kg		121	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2517		mg/Kg		126	70 - 130	0	35
o-Xylene	0.100	0.1230		mg/Kg		123	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-7406-12 MS
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *+	0.0996	0.1181		mg/Kg		119	70 - 130
Toluene	<0.00200	U	0.0996	0.1111		mg/Kg		112	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: 890-7406-12 MS
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96355

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.0996	0.1097		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.00517		0.199	0.2283		mg/Kg		112	70 - 130
o-Xylene	<0.00200	U	0.0996	0.1114		mg/Kg		112	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-7406-12 MSD
Matrix: Solid
Analysis Batch: 96346

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96355

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U *+	0.100	0.1211		mg/Kg		121	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.1132		mg/Kg		113	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.1120		mg/Kg		112	70 - 130	2	35
m-Xylene & p-Xylene	0.00517		0.200	0.2322		mg/Kg		113	70 - 130	2	35
o-Xylene	<0.00200	U	0.100	0.1124		mg/Kg		112	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 880-96356/5-A
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96356

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:35	11/22/24 11:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:35	11/22/24 11:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:35	11/22/24 11:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/22/24 08:35	11/22/24 11:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/22/24 08:35	11/22/24 11:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/22/24 08:35	11/22/24 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*11/22/24 08:35*	*11/22/24 11:01*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*11/22/24 08:35*	*11/22/24 11:01*	*1*

Lab Sample ID: LCS 880-96356/1-A
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1144		mg/Kg		114	70 - 130
Toluene	0.100	0.1025		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1042		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	0.200	0.2068		mg/Kg		103	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: LCS 880-96356/1-A
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96356

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1052		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-96356/2-A
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96356

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1225		mg/Kg		123	70 - 130	7	35
Toluene			0.100	0.1121		mg/Kg		112	70 - 130	9	35
Ethylbenzene			0.100	0.1136		mg/Kg		114	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2249		mg/Kg		112	70 - 130	8	35
o-Xylene			0.100	0.1142		mg/Kg		114	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-7406-29 MS
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: HA - 5
Prep Type: Total/NA
Prep Batch: 96356

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0996	0.1059		mg/Kg		96	70 - 130		
Toluene	<0.00199	U F1	0.0996	0.09642	F1	mg/Kg		63	70 - 130		
Ethylbenzene	<0.00199	U	0.0996	0.09761		mg/Kg		71	70 - 130		
m-Xylene & p-Xylene	0.0109	F1	0.199	0.1947	F1	mg/Kg		14	70 - 130		
o-Xylene	0.00293	F1	0.0996	0.09886	F1	mg/Kg		54	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-7406-29 MSD
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: HA - 5
Prep Type: Total/NA
Prep Batch: 96356

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1148		mg/Kg		104	70 - 130	8	35
Toluene	<0.00199	U F1	0.100	0.1045		mg/Kg		71	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.100	0.1061		mg/Kg		79	70 - 130	8	35
m-Xylene & p-Xylene	0.0109	F1	0.200	0.2116	F1	mg/Kg		22	70 - 130	8	35
o-Xylene	0.00293	F1	0.100	0.1082	F1	mg/Kg		63	70 - 130	9	35

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: 890-7406-29 MSD
Matrix: Solid
Analysis Batch: 96345

Client Sample ID: HA - 5
Prep Type: Total/NA
Prep Batch: 96356

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-96443/25-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96443

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/23/24 16:48	11/23/24 19:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/23/24 16:48	11/23/24 19:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/23/24 16:48	11/23/24 19:56	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/23/24 16:48	11/23/24 19:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/23/24 16:48	11/23/24 19:56	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/23/24 16:48	11/23/24 19:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	128		70 - 130	11/23/24 16:48	11/23/24 19:56	1
1,4-Difluorobenzene (Surr)	92		70 - 130	11/23/24 16:48	11/23/24 19:56	1

Lab Sample ID: LCS 880-96443/1-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96443

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1181		mg/Kg		118	70 - 130		
Toluene			0.100	0.1104		mg/Kg		110	70 - 130		
Ethylbenzene			0.100	0.1117		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2294		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1125		mg/Kg		112	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-96443/2-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96443

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1265		mg/Kg		127	70 - 130	7	35
Toluene			0.100	0.1175		mg/Kg		117	70 - 130	6	35
Ethylbenzene			0.100	0.1191		mg/Kg		119	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2454		mg/Kg		123	70 - 130	7	35
o-Xylene			0.100	0.1203		mg/Kg		120	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: LCSD 880-96443/2-A
Matrix: Solid
Analysis Batch: 96439

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96443

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-96192/1-A
Matrix: Solid
Analysis Batch: 96260

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96192

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		11/20/24 13:57	11/21/24 01:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/21/24 01:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/20/24 13:57	11/21/24 01:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	11/20/24 13:57	11/21/24 01:05	1
o-Terphenyl	78		70 - 130	11/20/24 13:57	11/21/24 01:05	1

Lab Sample ID: LCS 880-96192/2-A
Matrix: Solid
Analysis Batch: 96260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1043		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	819.1		mg/Kg		82	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-96192/3-A
Matrix: Solid
Analysis Batch: 96260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96192

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1025		mg/Kg		102	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	806.3		mg/Kg		81	70 - 130	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	84		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: MB 880-96301/1-A
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96301

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		11/21/24 16:11	11/22/24 10:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 10:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/21/24 16:11	11/22/24 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*11/21/24 16:11*	*11/22/24 10:45*	*1*
o-Terphenyl	*80*		*70 - 130*	*11/21/24 16:11*	*11/22/24 10:45*	*1*

Lab Sample ID: LCS 880-96301/2-A
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96301

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1112		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	964.1		mg/Kg		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: LCSD 880-96301/3-A
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96301

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1063		mg/Kg		106	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	1000	850.0		mg/Kg		85	70 - 130	13	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*89*		*70 - 130*

Lab Sample ID: 890-7406-12 MS
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96301

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	995	817.2		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	995	689.2	F1	mg/Kg		69	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: 890-7406-12 MS
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96301

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	64	S1-	70 - 130

Lab Sample ID: 890-7406-12 MSD
Matrix: Solid
Analysis Batch: 96433

Client Sample ID: HA - 2
Prep Type: Total/NA
Prep Batch: 96301

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	995	821.9		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	995	674.6	F1	mg/Kg		68	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	74		70 - 130
o-Terphenyl	62	S1-	70 - 130

Lab Sample ID: MB 880-96448/1-A
Matrix: Solid
Analysis Batch: 96449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96448

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		11/23/24 19:25	11/25/24 09:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/24 19:25	11/25/24 09:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/24 19:25	11/25/24 09:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	11/23/24 19:25	11/25/24 09:50	1
o-Terphenyl	72		70 - 130	11/23/24 19:25	11/25/24 09:50	1

Lab Sample ID: LCS 880-96448/2-A
Matrix: Solid
Analysis Batch: 96449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96448

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	992.8		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	819.3		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	82		70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

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

Lab Sample ID: LCSD 880-96448/3-A
Matrix: Solid
Analysis Batch: 96449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 96448

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1011		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	788.9		mg/Kg		79	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: 890-7406-28 MS
Matrix: Solid
Analysis Batch: 96449

Client Sample ID: HA - 5
Prep Type: Total/NA
Prep Batch: 96448

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	1010	923.8		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	1010	790.5		mg/Kg		77	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Lab Sample ID: 890-7406-28 MSD
Matrix: Solid
Analysis Batch: 96449

Client Sample ID: HA - 5
Prep Type: Total/NA
Prep Batch: 96448

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	1010	944.1		mg/Kg		94	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	1010	784.5		mg/Kg		77	70 - 130	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96359/1-A
Matrix: Solid
Analysis Batch: 96370

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/22/24 21:53	1

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-96359/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.1		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-96359/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	255.6		mg/Kg		102	90 - 110	0	20

Lab Sample ID: 890-7406-1 MS — **Client Sample ID: HA - 1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	19.8		248	269.9		mg/Kg		101	90 - 110		

Lab Sample ID: 890-7406-1 MSD — **Client Sample ID: HA - 1**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	19.8		248	270.4		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-7406-17 MS — **Client Sample ID: HA - 3**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<9.92	U	248	255.3		mg/Kg		102	90 - 110		

Lab Sample ID: 890-7406-17 MSD — **Client Sample ID: HA - 3**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96370

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<9.92	U	248	255.6		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-96376/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96380

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			11/23/24 02:38	1

Lab Sample ID: LCS 880-96376/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 96380

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.5		mg/Kg		99	90 - 110		

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-96376/3-A
Matrix: Solid
Analysis Batch: 96380

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	247.9		mg/Kg		99	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

GC VOA

Analysis Batch: 96345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-29	HA - 5	Total/NA	Solid	8021B	96356
MB 880-96356/5-A	Method Blank	Total/NA	Solid	8021B	96356
LCS 880-96356/1-A	Lab Control Sample	Total/NA	Solid	8021B	96356
LCSD 880-96356/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96356
890-7406-29 MS	HA - 5	Total/NA	Solid	8021B	96356
890-7406-29 MSD	HA - 5	Total/NA	Solid	8021B	96356

Analysis Batch: 96346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	8021B	96355
890-7406-12	HA - 2	Total/NA	Solid	8021B	96355
890-7406-13	HA - 3	Total/NA	Solid	8021B	96355
890-7406-15	HA - 3	Total/NA	Solid	8021B	96355
890-7406-17	HA - 3	Total/NA	Solid	8021B	96355
890-7406-18	HA - 4	Total/NA	Solid	8021B	96355
890-7406-20	HA - 4	Total/NA	Solid	8021B	96355
890-7406-22	HA - 4	Total/NA	Solid	8021B	96355
890-7406-23	HA - 4	Total/NA	Solid	8021B	96355
890-7406-24	HA - 5	Total/NA	Solid	8021B	96355
890-7406-26	HA - 5	Total/NA	Solid	8021B	96355
890-7406-28	HA - 5	Total/NA	Solid	8021B	96355
MB 880-96355/5-A	Method Blank	Total/NA	Solid	8021B	96355
LCS 880-96355/1-A	Lab Control Sample	Total/NA	Solid	8021B	96355
LCSD 880-96355/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96355
890-7406-12 MS	HA - 2	Total/NA	Solid	8021B	96355
890-7406-12 MSD	HA - 2	Total/NA	Solid	8021B	96355

Prep Batch: 96355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	5035	
890-7406-12	HA - 2	Total/NA	Solid	5035	
890-7406-13	HA - 3	Total/NA	Solid	5035	
890-7406-15	HA - 3	Total/NA	Solid	5035	
890-7406-17	HA - 3	Total/NA	Solid	5035	
890-7406-18	HA - 4	Total/NA	Solid	5035	
890-7406-20	HA - 4	Total/NA	Solid	5035	
890-7406-22	HA - 4	Total/NA	Solid	5035	
890-7406-23	HA - 4	Total/NA	Solid	5035	
890-7406-24	HA - 5	Total/NA	Solid	5035	
890-7406-26	HA - 5	Total/NA	Solid	5035	
890-7406-28	HA - 5	Total/NA	Solid	5035	
MB 880-96355/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96355/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96355/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7406-12 MS	HA - 2	Total/NA	Solid	5035	
890-7406-12 MSD	HA - 2	Total/NA	Solid	5035	

Prep Batch: 96356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-29	HA - 5	Total/NA	Solid	5035	
MB 880-96356/5-A	Method Blank	Total/NA	Solid	5035	

QC Association Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

GC VOA (Continued)

Prep Batch: 96356 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-96356/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96356/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7406-29 MS	HA - 5	Total/NA	Solid	5035	
890-7406-29 MSD	HA - 5	Total/NA	Solid	5035	

Analysis Batch: 96439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-3	HA - 1	Total/NA	Solid	8021B	96443
890-7406-5	HA - 1	Total/NA	Solid	8021B	96443
890-7406-6	HA - 1	Total/NA	Solid	8021B	96443
890-7406-7	HA - 2	Total/NA	Solid	8021B	96443
890-7406-9	HA - 2	Total/NA	Solid	8021B	96443
890-7406-11	HA - 2	Total/NA	Solid	8021B	96443
MB 880-96443/25-A	Method Blank	Total/NA	Solid	8021B	96443
LCS 880-96443/1-A	Lab Control Sample	Total/NA	Solid	8021B	96443
LCSD 880-96443/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96443

Prep Batch: 96443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-3	HA - 1	Total/NA	Solid	5035	
890-7406-5	HA - 1	Total/NA	Solid	5035	
890-7406-6	HA - 1	Total/NA	Solid	5035	
890-7406-7	HA - 2	Total/NA	Solid	5035	
890-7406-9	HA - 2	Total/NA	Solid	5035	
890-7406-11	HA - 2	Total/NA	Solid	5035	
MB 880-96443/25-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96443/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96443/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 96537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	Total BTEX	
890-7406-3	HA - 1	Total/NA	Solid	Total BTEX	
890-7406-5	HA - 1	Total/NA	Solid	Total BTEX	
890-7406-6	HA - 1	Total/NA	Solid	Total BTEX	
890-7406-7	HA - 2	Total/NA	Solid	Total BTEX	
890-7406-9	HA - 2	Total/NA	Solid	Total BTEX	
890-7406-11	HA - 2	Total/NA	Solid	Total BTEX	
890-7406-12	HA - 2	Total/NA	Solid	Total BTEX	
890-7406-13	HA - 3	Total/NA	Solid	Total BTEX	
890-7406-15	HA - 3	Total/NA	Solid	Total BTEX	
890-7406-17	HA - 3	Total/NA	Solid	Total BTEX	
890-7406-18	HA - 4	Total/NA	Solid	Total BTEX	
890-7406-20	HA - 4	Total/NA	Solid	Total BTEX	
890-7406-22	HA - 4	Total/NA	Solid	Total BTEX	
890-7406-23	HA - 4	Total/NA	Solid	Total BTEX	
890-7406-24	HA - 5	Total/NA	Solid	Total BTEX	
890-7406-26	HA - 5	Total/NA	Solid	Total BTEX	
890-7406-28	HA - 5	Total/NA	Solid	Total BTEX	
890-7406-29	HA - 5	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

GC Semi VOA

Prep Batch: 96192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	8015NM Prep	
890-7406-3	HA - 1	Total/NA	Solid	8015NM Prep	
890-7406-5	HA - 1	Total/NA	Solid	8015NM Prep	
890-7406-6	HA - 1	Total/NA	Solid	8015NM Prep	
890-7406-7	HA - 2	Total/NA	Solid	8015NM Prep	
890-7406-9	HA - 2	Total/NA	Solid	8015NM Prep	
890-7406-11	HA - 2	Total/NA	Solid	8015NM Prep	
MB 880-96192/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96192/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96192/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	8015B NM	96192
890-7406-3	HA - 1	Total/NA	Solid	8015B NM	96192
890-7406-5	HA - 1	Total/NA	Solid	8015B NM	96192
890-7406-6	HA - 1	Total/NA	Solid	8015B NM	96192
890-7406-7	HA - 2	Total/NA	Solid	8015B NM	96192
890-7406-9	HA - 2	Total/NA	Solid	8015B NM	96192
890-7406-11	HA - 2	Total/NA	Solid	8015B NM	96192
MB 880-96192/1-A	Method Blank	Total/NA	Solid	8015B NM	96192
LCS 880-96192/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96192
LCSD 880-96192/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96192

Prep Batch: 96301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-12	HA - 2	Total/NA	Solid	8015NM Prep	
890-7406-13	HA - 3	Total/NA	Solid	8015NM Prep	
890-7406-15	HA - 3	Total/NA	Solid	8015NM Prep	
890-7406-17	HA - 3	Total/NA	Solid	8015NM Prep	
890-7406-18	HA - 4	Total/NA	Solid	8015NM Prep	
890-7406-20	HA - 4	Total/NA	Solid	8015NM Prep	
890-7406-22	HA - 4	Total/NA	Solid	8015NM Prep	
890-7406-23	HA - 4	Total/NA	Solid	8015NM Prep	
890-7406-24	HA - 5	Total/NA	Solid	8015NM Prep	
890-7406-26	HA - 5	Total/NA	Solid	8015NM Prep	
MB 880-96301/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96301/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96301/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7406-12 MS	HA - 2	Total/NA	Solid	8015NM Prep	
890-7406-12 MSD	HA - 2	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Total/NA	Solid	8015 NM	
890-7406-3	HA - 1	Total/NA	Solid	8015 NM	
890-7406-5	HA - 1	Total/NA	Solid	8015 NM	
890-7406-6	HA - 1	Total/NA	Solid	8015 NM	
890-7406-7	HA - 2	Total/NA	Solid	8015 NM	
890-7406-9	HA - 2	Total/NA	Solid	8015 NM	
890-7406-11	HA - 2	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

GC Semi VOA (Continued)

Analysis Batch: 96326 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-12	HA - 2	Total/NA	Solid	8015 NM	
890-7406-13	HA - 3	Total/NA	Solid	8015 NM	
890-7406-15	HA - 3	Total/NA	Solid	8015 NM	
890-7406-17	HA - 3	Total/NA	Solid	8015 NM	
890-7406-18	HA - 4	Total/NA	Solid	8015 NM	
890-7406-20	HA - 4	Total/NA	Solid	8015 NM	
890-7406-22	HA - 4	Total/NA	Solid	8015 NM	
890-7406-23	HA - 4	Total/NA	Solid	8015 NM	
890-7406-24	HA - 5	Total/NA	Solid	8015 NM	
890-7406-26	HA - 5	Total/NA	Solid	8015 NM	
890-7406-28	HA - 5	Total/NA	Solid	8015 NM	
890-7406-29	HA - 5	Total/NA	Solid	8015 NM	

Analysis Batch: 96433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-12	HA - 2	Total/NA	Solid	8015B NM	96301
890-7406-13	HA - 3	Total/NA	Solid	8015B NM	96301
890-7406-15	HA - 3	Total/NA	Solid	8015B NM	96301
890-7406-17	HA - 3	Total/NA	Solid	8015B NM	96301
890-7406-18	HA - 4	Total/NA	Solid	8015B NM	96301
890-7406-20	HA - 4	Total/NA	Solid	8015B NM	96301
890-7406-22	HA - 4	Total/NA	Solid	8015B NM	96301
890-7406-23	HA - 4	Total/NA	Solid	8015B NM	96301
890-7406-24	HA - 5	Total/NA	Solid	8015B NM	96301
890-7406-26	HA - 5	Total/NA	Solid	8015B NM	96301
MB 880-96301/1-A	Method Blank	Total/NA	Solid	8015B NM	96301
LCS 880-96301/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96301
LCSD 880-96301/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96301
890-7406-12 MS	HA - 2	Total/NA	Solid	8015B NM	96301
890-7406-12 MSD	HA - 2	Total/NA	Solid	8015B NM	96301

Prep Batch: 96448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-28	HA - 5	Total/NA	Solid	8015NM Prep	
890-7406-29	HA - 5	Total/NA	Solid	8015NM Prep	
MB 880-96448/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96448/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96448/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7406-28 MS	HA - 5	Total/NA	Solid	8015NM Prep	
890-7406-28 MSD	HA - 5	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-28	HA - 5	Total/NA	Solid	8015B NM	96448
890-7406-29	HA - 5	Total/NA	Solid	8015B NM	96448
MB 880-96448/1-A	Method Blank	Total/NA	Solid	8015B NM	96448
LCS 880-96448/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96448
LCSD 880-96448/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96448
890-7406-28 MS	HA - 5	Total/NA	Solid	8015B NM	96448
890-7406-28 MSD	HA - 5	Total/NA	Solid	8015B NM	96448

QC Association Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

HPLC/IC

Leach Batch: 96359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Soluble	Solid	DI Leach	
890-7406-3	HA - 1	Soluble	Solid	DI Leach	
890-7406-5	HA - 1	Soluble	Solid	DI Leach	
890-7406-6	HA - 1	Soluble	Solid	DI Leach	
890-7406-7	HA - 2	Soluble	Solid	DI Leach	
890-7406-9	HA - 2	Soluble	Solid	DI Leach	
890-7406-11	HA - 2	Soluble	Solid	DI Leach	
890-7406-12	HA - 2	Soluble	Solid	DI Leach	
890-7406-13	HA - 3	Soluble	Solid	DI Leach	
890-7406-15	HA - 3	Soluble	Solid	DI Leach	
890-7406-17	HA - 3	Soluble	Solid	DI Leach	
890-7406-18	HA - 4	Soluble	Solid	DI Leach	
890-7406-20	HA - 4	Soluble	Solid	DI Leach	
890-7406-22	HA - 4	Soluble	Solid	DI Leach	
890-7406-23	HA - 4	Soluble	Solid	DI Leach	
MB 880-96359/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96359/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96359/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7406-1 MS	HA - 1	Soluble	Solid	DI Leach	
890-7406-1 MSD	HA - 1	Soluble	Solid	DI Leach	
890-7406-17 MS	HA - 3	Soluble	Solid	DI Leach	
890-7406-17 MSD	HA - 3	Soluble	Solid	DI Leach	

Analysis Batch: 96370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-1	HA - 1	Soluble	Solid	300.0	96359
890-7406-3	HA - 1	Soluble	Solid	300.0	96359
890-7406-5	HA - 1	Soluble	Solid	300.0	96359
890-7406-6	HA - 1	Soluble	Solid	300.0	96359
890-7406-7	HA - 2	Soluble	Solid	300.0	96359
890-7406-9	HA - 2	Soluble	Solid	300.0	96359
890-7406-11	HA - 2	Soluble	Solid	300.0	96359
890-7406-12	HA - 2	Soluble	Solid	300.0	96359
890-7406-13	HA - 3	Soluble	Solid	300.0	96359
890-7406-15	HA - 3	Soluble	Solid	300.0	96359
890-7406-17	HA - 3	Soluble	Solid	300.0	96359
890-7406-18	HA - 4	Soluble	Solid	300.0	96359
890-7406-20	HA - 4	Soluble	Solid	300.0	96359
890-7406-22	HA - 4	Soluble	Solid	300.0	96359
890-7406-23	HA - 4	Soluble	Solid	300.0	96359
MB 880-96359/1-A	Method Blank	Soluble	Solid	300.0	96359
LCS 880-96359/2-A	Lab Control Sample	Soluble	Solid	300.0	96359
LCSD 880-96359/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96359
890-7406-1 MS	HA - 1	Soluble	Solid	300.0	96359
890-7406-1 MSD	HA - 1	Soluble	Solid	300.0	96359
890-7406-17 MS	HA - 3	Soluble	Solid	300.0	96359
890-7406-17 MSD	HA - 3	Soluble	Solid	300.0	96359

Leach Batch: 96376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-24	HA - 5	Soluble	Solid	DI Leach	

QC Association Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

HPLC/IC (Continued)

Leach Batch: 96376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-26	HA - 5	Soluble	Solid	DI Leach	
890-7406-28	HA - 5	Soluble	Solid	DI Leach	
890-7406-29	HA - 5	Soluble	Solid	DI Leach	
MB 880-96376/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96376/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96376/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 96380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7406-24	HA - 5	Soluble	Solid	300.0	96376
890-7406-26	HA - 5	Soluble	Solid	300.0	96376
890-7406-28	HA - 5	Soluble	Solid	300.0	96376
890-7406-29	HA - 5	Soluble	Solid	300.0	96376
MB 880-96376/1-A	Method Blank	Soluble	Solid	300.0	96376
LCS 880-96376/2-A	Lab Control Sample	Soluble	Solid	300.0	96376
LCSD 880-96376/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96376

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 1
Lab Sample ID: 890-7406-1
Date Collected: 11/20/24 12:00
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	96346	11/22/24 14:15	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 14:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/21/24 23:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/21/24 23:55	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 22:17	SMC	EET MID

Client Sample ID: HA - 1
Lab Sample ID: 890-7406-3
Date Collected: 11/20/24 12:10
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 02:17	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 02:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 00:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 00:11	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 22:42	SMC	EET MID

Client Sample ID: HA - 1
Lab Sample ID: 890-7406-5
Date Collected: 11/20/24 12:20
Matrix: Solid
Date Received: 11/21/24 08:02

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	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 02:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 02:38	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 00:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 00:27	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 22:50	SMC	EET MID

Client Sample ID: HA - 1
Lab Sample ID: 890-7406-6
Date Collected: 11/20/24 12:25
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 02:58	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 02:58	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 1
Lab Sample ID: 890-7406-6
Date Collected: 11/20/24 12:25
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			96326	11/22/24 00:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 00:43	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 22:58	SMC	EET MID

Client Sample ID: HA - 2
Lab Sample ID: 890-7406-7
Date Collected: 11/20/24 12:30
Matrix: Solid
Date Received: 11/21/24 08:02

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	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 03:18	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 03:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 00:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 00:59	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 23:06	SMC	EET MID

Client Sample ID: HA - 2
Lab Sample ID: 890-7406-9
Date Collected: 11/20/24 12:40
Matrix: Solid
Date Received: 11/21/24 08:02

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	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 03:39	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 03:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 01:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 01:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 23:31	SMC	EET MID

Client Sample ID: HA - 2
Lab Sample ID: 890-7406-11
Date Collected: 11/20/24 12:50
Matrix: Solid
Date Received: 11/21/24 08:02

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	96443	11/23/24 16:48	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	96439	11/24/24 03:59	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/24/24 03:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 01:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96192	11/20/24 13:57	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96260	11/22/24 01:31	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 2
Lab Sample ID: 890-7406-11
Date Collected: 11/20/24 12:50
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 23:39	SMC	EET MID

Client Sample ID: HA - 2
Lab Sample ID: 890-7406-12
Date Collected: 11/20/24 12:55
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 11:32	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 11:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 18:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 18:10	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 23:47	SMC	EET MID

Client Sample ID: HA - 3
Lab Sample ID: 890-7406-13
Date Collected: 11/20/24 13:00
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 16:09	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 16:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 19:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 19:00	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/22/24 23:55	SMC	EET MID

Client Sample ID: HA - 3
Lab Sample ID: 890-7406-15
Date Collected: 11/20/24 13:10
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 16:30	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 16:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 19:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 19:17	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 00:03	SMC	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 3
Lab Sample ID: 890-7406-17
Date Collected: 11/20/24 13:20
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 16:50	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 16:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 19:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 19:35	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 00:12	SMC	EET MID

Client Sample ID: HA - 4
Lab Sample ID: 890-7406-18
Date Collected: 11/20/24 13:25
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 17:11	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 17:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 19:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 19:50	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 00:36	SMC	EET MID

Client Sample ID: HA - 4
Lab Sample ID: 890-7406-20
Date Collected: 11/20/24 13:35
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 17:31	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 17:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 20:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 20:07	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 00:44	SMC	EET MID

Client Sample ID: HA - 4
Lab Sample ID: 890-7406-22
Date Collected: 11/20/24 13:45
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 17:51	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 17:51	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 4
Lab Sample ID: 890-7406-22
Date Collected: 11/20/24 13:45
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			96326	11/22/24 20:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 20:23	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 01:08	SMC	EET MID

Client Sample ID: HA - 4
Lab Sample ID: 890-7406-23
Date Collected: 11/20/24 13:50
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 18:12	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 18:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 20:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 20:40	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	96359	11/22/24 09:02	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96370	11/23/24 01:17	SMC	EET MID

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-24
Date Collected: 11/20/24 13:55
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 18:32	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 18:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 20:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 20:56	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	96376	11/22/24 11:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96380	11/23/24 06:18	SMC	EET MID

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-26
Date Collected: 11/20/24 14:05
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 18:53	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 18:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/22/24 21:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96301	11/21/24 16:11	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96433	11/22/24 21:11	TKC	EET MID

Lab Chronicle

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, NM

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-26
Date Collected: 11/20/24 14:05
Matrix: Solid
Date Received: 11/21/24 08:02

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	96376	11/22/24 11:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96380	11/23/24 06:27	SMC	EET MID

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-28
Date Collected: 11/20/24 14:15
Matrix: Solid
Date Received: 11/21/24 08:02

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	96355	11/22/24 08:32	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96346	11/22/24 19:13	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 19:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/25/24 12:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	96448	11/23/24 19:25	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96449	11/25/24 12:45	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	96376	11/22/24 11:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96380	11/23/24 06:35	SMC	EET MID

Client Sample ID: HA - 5
Lab Sample ID: 890-7406-29
Date Collected: 11/20/24 14:20
Matrix: Solid
Date Received: 11/21/24 08:02

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	96356	11/22/24 08:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96345	11/22/24 11:22	EL	EET MID
Total/NA	Analysis	Total BTEX		1			96537	11/22/24 11:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			96326	11/25/24 13:34	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	96448	11/23/24 19:25	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96449	11/25/24 13:34	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	96376	11/22/24 11:15	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96380	11/23/24 06:43	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7406-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)
SDG: Chaves County, 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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, 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: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-R-EXT)

Job ID: 890-7406-1
SDG: Chaves County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7406-1	HA - 1	Solid	11/20/24 12:00	11/21/24 08:02	0.5
890-7406-3	HA - 1	Solid	11/20/24 12:10	11/21/24 08:02	2
890-7406-5	HA - 1	Solid	11/20/24 12:20	11/21/24 08:02	4
890-7406-6	HA - 1	Solid	11/20/24 12:25	11/21/24 08:02	6
890-7406-7	HA - 2	Solid	11/20/24 12:30	11/21/24 08:02	0.5
890-7406-9	HA - 2	Solid	11/20/24 12:40	11/21/24 08:02	2
890-7406-11	HA - 2	Solid	11/20/24 12:50	11/21/24 08:02	4
890-7406-12	HA - 2	Solid	11/20/24 12:55	11/21/24 08:02	6
890-7406-13	HA - 3	Solid	11/20/24 13:00	11/21/24 08:02	0.5
890-7406-15	HA - 3	Solid	11/20/24 13:10	11/21/24 08:02	2
890-7406-17	HA - 3	Solid	11/20/24 13:20	11/21/24 08:02	4
890-7406-18	HA - 4	Solid	11/20/24 13:25	11/21/24 08:02	0.5
890-7406-20	HA - 4	Solid	11/20/24 13:35	11/21/24 08:02	2
890-7406-22	HA - 4	Solid	11/20/24 13:45	11/21/24 08:02	4
890-7406-23	HA - 4	Solid	11/20/24 13:50	11/21/24 08:02	6
890-7406-24	HA - 5	Solid	11/20/24 13:55	11/21/24 08:02	0.5
890-7406-26	HA - 5	Solid	11/20/24 14:05	11/21/24 08:02	2
890-7406-28	HA - 5	Solid	11/20/24 14:15	11/21/24 08:02	4
890-7406-29	HA - 5	Solid	11/20/24 14:20	11/21/24 08:02	6

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 4

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT	**Turn Around**	
Project Number:	2685	☑ Routine ☐ Rush	
Project Location:	Chaves County, NM	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	Tum007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

ANALYSIS REQUEST

890-7406 Chain of Custody

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH -NM	Chloride-NM	BTEX-NM	Hold	Sample Comments
HA-1	S	11.20.24	12:00	0.5	Comp	1		X	X	X		Incident Number
HA-1	S	11.20.24	12:05	1	Comp	1					X	nAPP2432429248
HA-1	S	11.20.24	12:10	2	Comp	1		X	X	X		
HA-1	S	11.20.24	12:15	3	Comp	1					X	
HA-1	S	11.20.24	12:20	4	Comp	1		X	X	X		
HA-1	S	11.20.24	12:25	6	Comp	1		X	X	X		
HA-2	S	11.20.24	12:30	0.5	Comp	1		X	X	X		
HA-2	S	11.20.24	12:35	1	Comp	1					X	
HA-2	S	11.20.24	12:40	2	Comp	1		X	X	X		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0			11/21 802	2			
3				4			
5				6			

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT	**Turn Around**	
Project Number:	2685	☑ Routine ☐ Rush	
Project Location:	Chaves County, NM	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT	Temp Blank:	~~Yes~~ No	Wet Ice: ~~Yes~~ No
Samples Received Intact:	~~Yes~~ No	Thermometer ID:	Tnum7
Cooler Custody Seals:	Yes No ~~N/A~~	Correction Factor:	-0.2
Sample Custody Seals:	Yes No ~~N/A~~	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

Preservative Codes

~~None: NO~~ ~~DI Water: H_2O~~
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
~~$Na_2S_2O_3$: $NaSO_3$~~
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/ Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	Sample Comments
HA-2	S	11.20.24	12:45	3	Comp	1				X	Incident Number
~~HA-2~~	~~S~~	~~11.20.24~~	~~12:50~~	~~4~~	Comp	1	X	X	X		nAPP2432429248
HA-2	S	11.20.24	12:55	6	Comp	1	X	X	X		
HA-3	S	11.20.24	13:00	0.5	Comp	1	X	X	X		
HA-3	S	11.20.24	13:05	1	Comp	1				X	
HA-3	S	11.20.24	13:10	2	Comp	1	X	X	X		
HA-3	S	11.20.24	13:15	3	Comp	1				X	
HA-3	S	11.20.24	13:20	4	Comp	1	X	X	X		
HA-4	S	11.20.24	13:25	0.5	Comp	1	X	X	X		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		11/21 802	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

www.xenco.com Page 3 of 4

Work Order No: _____

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT	**Turn Around**	
Project Number:	2685	☑ Routine ☐ Rush	
Project Location:	Chaves County, NM	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TNMC07
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2S0_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/ Comp	# of Cont	Pres. Code	TPH -NM	Chloride-NM	BTEX-NM	Hold	Sample Comments
HA-4	S	11.20.24	13:30	1	Comp	1					X	Incident Number
HA-4	S	11.20.24	13:35	2	Comp	1		X	X	X		nAPP2432429248
HA-4	S	11.20.24	13:40	3	Comp	1					X	
HA-4	S	11.20.24	13:45	4	Comp	1		X	X	X		
HA-4	S	11.20.24	13:50	6	Comp	1		X	X	X		
HA-5	S	11.20.24	13:55	0.5	Comp	1		X	X	X		
HA-5	S	11.20.24	14:00	1	Comp	1					X	
HA-5	S	11.20.24	14:05	2	Comp	1		X	X	X		
HA-5	S	11.20.24	14:10	3	Comp	1					X	

Parameters

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed — Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		11/21 802	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 4 of 4

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R&R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT	**Turn Around**	
Project Number:	2685	☑ Routine ☐ Rush	
Project Location:	Chaves County, NM	Due Date:	5 Day TAT
Sampler's Name:	Gilbert Moreno	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TNM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

ANALYSIS REQUEST

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH -NM	Chloride-NM	BTEX-NM	Hold	Sample Comments
HA-5	S	11.20.24	14:15	4	Comp	1		X	X	X		Incident Number
HA-5	S	11.20.24	14:20	6	Comp	1		X	X	X		nAPP2432429248

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed

Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		11/21 8:02	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7406-1
SDG Number: Chaves County, NM

Login Number: 7406
List Number: 1
Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7406-1
SDG Number: Chaves County, NM

Login Number: 7406
List Number: 2
Creator: Rios, Minerva

List Source: Eurofins Midland
List Creation: 11/21/24 09:49 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	False	
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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Gilbert Moreno
Earth Systems Response and Restoration
4115 South County Road 1297
Odessa, Texas 79765

Generated 12/30/2024 5:43:52 PM

JOB DESCRIPTION

Chavis 8" Lateral (MAL-1-10-3-4-EXT
Chaves County, NM

JOB NUMBER

890-7519-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

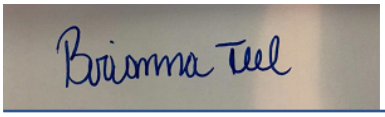
Eurofins Carlsbad

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
12/30/2024 5:43:52 PM

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

Table of Contents

Definitions/Glossary

Client: Earth Systems Response and Restoration
Job ID: 890-7519-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT
SDG: Chaves County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
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.
F1	MS and/or MSD recovery 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.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Earth Systems Response and Restoration Job ID: 890-7519-1
Project: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1 Eurofins Carlsbad

Job Narrative
890-7519-1

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

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

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

Receipt
The samples were received on 12/27/2024 2:06 PM. 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 0.6°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: CS-1 (890-7519-1), SW-1 (890-7519-2) and SW-2 (890-7519-3).

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-98990 and analytical batch 880-99023 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample duplicate (LCSD) recovery is within acceptance limits.

Method 8015MOD_NM: The laboratory control sample (LCS) for preparation batch 880-98990 and analytical batch 880-99023 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCS and were within the control limits for the associated laboratory control sample duplicate (LCSD); therefore, the data have been reported.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-98990 and analytical batch 880-99023 was outside the control limits.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: SW-1 (890-7519-2) and (LCS 880-98990/2-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-7519-A-1-B MS) and (890-7519-A-1-C MSD). Evidence of matrix interferences is not obvious.

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.

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Client Sample ID: CS-1

Lab Sample ID: 890-7519-1
Matrix: Solid
Date Collected: 12/27/24 09:15
Date Received: 12/27/24 14:06
Sample Depth: 3

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		12/30/24 09:59	12/30/24 12:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/30/24 09:59	12/30/24 12:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/30/24 09:59	12/30/24 12:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:26*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			12/30/24 12:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			12/30/24 13:04	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	<49.9	U *+ *1 F1	49.9		mg/Kg		12/29/24 20:37	12/30/24 13:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+ *1 F1	49.9		mg/Kg		12/29/24 20:37	12/30/24 13:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/29/24 20:37	12/30/24 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*12/29/24 20:37*	*12/30/24 13:04*	*1*
o-Terphenyl	*73*		*70 - 130*	*12/29/24 20:37*	*12/30/24 13:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80.7**		10.1		mg/Kg			12/30/24 11:13	1

Client Sample ID: SW-1

Lab Sample ID: 890-7519-2
Matrix: Solid
Date Collected: 12/27/24 09:30
Date Received: 12/27/24 14:06
Sample Depth: 0-3

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		12/30/24 09:59	12/30/24 12:47	1
Toluene	**0.00345**		0.00201		mg/Kg		12/30/24 09:59	12/30/24 12:47	1
Ethylbenzene	**0.00224**		0.00201		mg/Kg		12/30/24 09:59	12/30/24 12:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/30/24 09:59	12/30/24 12:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/30/24 09:59	12/30/24 12:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/30/24 09:59	12/30/24 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:47*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-7519-2
Matrix: Solid
Date Collected: 12/27/24 09:30
Date Received: 12/27/24 14:06
Sample Depth: 0-3

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.00569**		0.00402		mg/Kg			12/30/24 12:47	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			12/30/24 13:48	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		12/29/24 20:37	12/30/24 13:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+ *1	50.0		mg/Kg		12/29/24 20:37	12/30/24 13:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/24 20:37	12/30/24 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*67*	*S1-*	*70 - 130*	*12/29/24 20:37*	*12/30/24 13:48*	*1*
o-Terphenyl	*64*	*S1-*	*70 - 130*	*12/29/24 20:37*	*12/30/24 13:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**97.7**		10.0		mg/Kg			12/30/24 11:31	1

Client Sample ID: SW-2

Lab Sample ID: 890-7519-3
Matrix: Solid
Date Collected: 12/27/24 09:45
Date Received: 12/27/24 14:06
Sample Depth: 0-3

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		12/30/24 09:59	12/30/24 13:07	1
Toluene	**0.0101**		0.00200		mg/Kg		12/30/24 09:59	12/30/24 13:07	1
Ethylbenzene	**0.0133**		0.00200		mg/Kg		12/30/24 09:59	12/30/24 13:07	1
m-Xylene & p-Xylene	**0.0167**		0.00399		mg/Kg		12/30/24 09:59	12/30/24 13:07	1
o-Xylene	**0.00679**		0.00200		mg/Kg		12/30/24 09:59	12/30/24 13:07	1
Xylenes, Total	**0.0235**		0.00399		mg/Kg		12/30/24 09:59	12/30/24 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*12/30/24 09:59*	*12/30/24 13:07*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*12/30/24 09:59*	*12/30/24 13:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0469**		0.00399		mg/Kg			12/30/24 13:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**76.0**		49.8		mg/Kg			12/30/24 14:03	1

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Client Sample ID: SW-2

Date Collected: 12/27/24 09:45
Date Received: 12/27/24 14:06
Sample Depth: 0-3

Lab Sample ID: 890-7519-3

Matrix: Solid

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	<49.8	U *+ *1	49.8		mg/Kg		12/29/24 20:37	12/30/24 14:03	1
Diesel Range Organics (Over C10-C28)	**76.0**	***+ *1**	49.8		mg/Kg		12/29/24 20:37	12/30/24 14:03	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		12/29/24 20:37	12/30/24 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*12/29/24 20:37*	*12/30/24 14:03*	*1*
o-Terphenyl	*70*		*70 - 130*	*12/29/24 20:37*	*12/30/24 14:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**169**		9.94		mg/Kg			12/30/24 11:37	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7519-1	CS-1	101	96
890-7519-1 MS	CS-1	108	98
890-7519-1 MSD	CS-1	115	98
890-7519-2	SW-1	114	98
890-7519-3	SW-2	116	92
LCS 880-99026/1-A	Lab Control Sample	98	98
LCSD 880-99026/2-A	Lab Control Sample Dup	103	98
MB 880-99026/5-A	Method Blank	95	91

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-7519-1	CS-1	77	73
890-7519-1 MS	CS-1	76	67 S1-
890-7519-1 MSD	CS-1	71	66 S1-
890-7519-2	SW-1	67 S1-	64 S1-
890-7519-3	SW-2	70	70
LCS 880-98990/2-A	Lab Control Sample	174 S1+	152 S1+
LCSD 880-98990/3-A	Lab Control Sample Dup	118	102
MB 880-98990/1-A	Method Blank	69 S1-	76

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-99026/5-A
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 99026

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/30/24 09:59	12/30/24 12:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/30/24 09:59	12/30/24 12:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/30/24 09:59	12/30/24 12:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:05*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*12/30/24 09:59*	*12/30/24 12:05*	*1*

Lab Sample ID: LCS 880-99026/1-A
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 99026

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1114		mg/Kg		111	70 - 130
Toluene	0.100	0.1098		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1077		mg/Kg		108	70 - 130
m-Xylene & p-Xylene	0.200	0.2064		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1131		mg/Kg		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-99026/2-A
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 99026

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1125		mg/Kg		112	70 - 130	1	35
Toluene	0.100	0.1140		mg/Kg		114	70 - 130	4	35
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2167		mg/Kg		108	70 - 130	5	35
o-Xylene	0.100	0.1185		mg/Kg		119	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-7519-1 MS
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 99026

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1117		mg/Kg		112	70 - 130
Toluene	<0.00200	U	0.100	0.1099		mg/Kg		110	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

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

Lab Sample ID: 890-7519-1 MS
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 99026

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.1069		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2064		mg/Kg		103	70 - 130
o-Xylene	<0.00200	U	0.100	0.1127		mg/Kg		113	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-7519-1 MSD
Matrix: Solid
Analysis Batch: 99018

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 99026

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1129		mg/Kg		113	70 - 130	1	35
Toluene	<0.00200	U	0.100	0.1151		mg/Kg		115	70 - 130	5	35
Ethylbenzene	<0.00200	U	0.100	0.1137		mg/Kg		114	70 - 130	6	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2204		mg/Kg		110	70 - 130	7	35
o-Xylene	<0.00200	U	0.100	0.1209		mg/Kg		121	70 - 130	7	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-98990/1-A
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 98990

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		12/29/24 20:37	12/30/24 10:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/29/24 20:37	12/30/24 10:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/29/24 20:37	12/30/24 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*69*	*S1-*	*70 - 130*	*12/29/24 20:37*	*12/30/24 10:23*	*1*
o-Terphenyl	*76*		*70 - 130*	*12/29/24 20:37*	*12/30/24 10:23*	*1*

Lab Sample ID: LCS 880-98990/2-A
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98990

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1417	*+	mg/Kg		142	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1458	*+	mg/Kg		146	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

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

Lab Sample ID: LCS 880-98990/2-A
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 98990

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	174	S1+	70 - 130
o-Terphenyl	152	S1+	70 - 130

Lab Sample ID: LCSD 880-98990/3-A
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 98990

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1033	*1	mg/Kg		103	70 - 130	31	20
Diesel Range Organics (Over C10-C28)			1000	997.2	*1	mg/Kg		100	70 - 130	38	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-7519-1 MS
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 98990

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+ *1 F1	999	531.4	F1	mg/Kg		53	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *+ *1 F1	999	539.6	F1	mg/Kg		54	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	67	S1-	70 - 130

Lab Sample ID: 890-7519-1 MSD
Matrix: Solid
Analysis Batch: 99023

Client Sample ID: CS-1
Prep Type: Total/NA
Prep Batch: 98990

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+ *1 F1	999	518.7	F1	mg/Kg		52	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+ *1 F1	999	546.1	F1	mg/Kg		55	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	66	S1-	70 - 130

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-98999/1-A
Matrix: Solid
Analysis Batch: 99013

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			12/30/24 09:33	1

Lab Sample ID: LCS 880-98999/2-A
Matrix: Solid
Analysis Batch: 99013

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	233.7		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-98999/3-A
Matrix: Solid
Analysis Batch: 99013

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	234.3		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 890-7519-1 MS
Matrix: Solid
Analysis Batch: 99013

Client Sample ID: CS-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	80.7		252	344.8		mg/Kg		105	90 - 110		

Lab Sample ID: 890-7519-1 MSD
Matrix: Solid
Analysis Batch: 99013

Client Sample ID: CS-1
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	80.7		252	344.1		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

GC VOA

Analysis Batch: 99018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	8021B	99026
890-7519-2	SW-1	Total/NA	Solid	8021B	99026
890-7519-3	SW-2	Total/NA	Solid	8021B	99026
MB 880-99026/5-A	Method Blank	Total/NA	Solid	8021B	99026
LCS 880-99026/1-A	Lab Control Sample	Total/NA	Solid	8021B	99026
LCSD 880-99026/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	99026
890-7519-1 MS	CS-1	Total/NA	Solid	8021B	99026
890-7519-1 MSD	CS-1	Total/NA	Solid	8021B	99026

Prep Batch: 99026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	5035	
890-7519-2	SW-1	Total/NA	Solid	5035	
890-7519-3	SW-2	Total/NA	Solid	5035	
MB 880-99026/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-99026/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-99026/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7519-1 MS	CS-1	Total/NA	Solid	5035	
890-7519-1 MSD	CS-1	Total/NA	Solid	5035	

Analysis Batch: 99112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	Total BTEX	
890-7519-2	SW-1	Total/NA	Solid	Total BTEX	
890-7519-3	SW-2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 98990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	8015NM Prep	
890-7519-2	SW-1	Total/NA	Solid	8015NM Prep	
890-7519-3	SW-2	Total/NA	Solid	8015NM Prep	
MB 880-98990/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98990/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7519-1 MS	CS-1	Total/NA	Solid	8015NM Prep	
890-7519-1 MSD	CS-1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 99023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	8015B NM	98990
890-7519-2	SW-1	Total/NA	Solid	8015B NM	98990
890-7519-3	SW-2	Total/NA	Solid	8015B NM	98990
MB 880-98990/1-A	Method Blank	Total/NA	Solid	8015B NM	98990
LCS 880-98990/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98990
LCSD 880-98990/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98990
890-7519-1 MS	CS-1	Total/NA	Solid	8015B NM	98990
890-7519-1 MSD	CS-1	Total/NA	Solid	8015B NM	98990

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

GC Semi VOA

Analysis Batch: 99085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Total/NA	Solid	8015 NM	
890-7519-2	SW-1	Total/NA	Solid	8015 NM	
890-7519-3	SW-2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 98999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Soluble	Solid	DI Leach	
890-7519-2	SW-1	Soluble	Solid	DI Leach	
890-7519-3	SW-2	Soluble	Solid	DI Leach	
MB 880-98999/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-98999/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-98999/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-7519-1 MS	CS-1	Soluble	Solid	DI Leach	
890-7519-1 MSD	CS-1	Soluble	Solid	DI Leach	

Analysis Batch: 99013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7519-1	CS-1	Soluble	Solid	300.0	98999
890-7519-2	SW-1	Soluble	Solid	300.0	98999
890-7519-3	SW-2	Soluble	Solid	300.0	98999
MB 880-98999/1-A	Method Blank	Soluble	Solid	300.0	98999
LCS 880-98999/2-A	Lab Control Sample	Soluble	Solid	300.0	98999
LCSD 880-98999/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	98999
890-7519-1 MS	CS-1	Soluble	Solid	300.0	98999
890-7519-1 MSD	CS-1	Soluble	Solid	300.0	98999

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Client Sample ID: CS-1

Date Collected: 12/27/24 09:15
Date Received: 12/27/24 14:06

Lab Sample ID: 890-7519-1
Matrix: Solid

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	99026	12/30/24 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	99018	12/30/24 12:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99112	12/30/24 12:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			99085	12/30/24 13:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	98990	12/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	99023	12/30/24 13:04	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	98999	12/30/24 08:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99013	12/30/24 11:13	CH	EET MID

Client Sample ID: SW-1

Date Collected: 12/27/24 09:30
Date Received: 12/27/24 14:06

Lab Sample ID: 890-7519-2
Matrix: Solid

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	99026	12/30/24 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	99018	12/30/24 12:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99112	12/30/24 12:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			99085	12/30/24 13:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	98990	12/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	99023	12/30/24 13:48	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	98999	12/30/24 08:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99013	12/30/24 11:31	CH	EET MID

Client Sample ID: SW-2

Date Collected: 12/27/24 09:45
Date Received: 12/27/24 14:06

Lab Sample ID: 890-7519-3
Matrix: Solid

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	99026	12/30/24 09:59	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	99018	12/30/24 13:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			99112	12/30/24 13:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			99085	12/30/24 14:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	98990	12/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	99023	12/30/24 14:03	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	98999	12/30/24 08:09	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	99013	12/30/24 11:37	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Job ID: 890-7519-1
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT
SDG: Chaves County, 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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, 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: Earth Systems Response and Restoration
Project/Site: Chavis 8" Lateral (MAL-1-10-3-4-EXT

Job ID: 890-7519-1
SDG: Chaves County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-7519-1	CS-1	Solid	12/27/24 09:15	12/27/24 14:06	3
890-7519-2	SW-1	Solid	12/27/24 09:30	12/27/24 14:06	0-3
890-7519-3	SW-2	Solid	12/27/24 09:45	12/27/24 14:06	0-3

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Chain of Custody

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

890-7519 Chain of Custody

12/30/2024

www.xenco.com Page 1 of 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Earth Systems R & R
Company Name:	Earth Systems R&R	Company Name:	
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmoreno@earthsys.net

Work Order Comments

Program: UST/PST ☐ **PRP** ☐ **Brownfields** ☐ **RRC** ☐ **Superfund** ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐

Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT	Turn Around	☐ Routine ☑ Rush
Project Number:	2685	Due Date:	24 HR TAT
Project Location:	Chaves County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Gilbert Moreno		
PO #:			

SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TN#07
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	0.8
Total Containers:		Corrected Temperature:	0.6

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2S0_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/ Comp	# of Cont	Pres. Code	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
CS - 1	S	12.27.24	9:15	3	Comp	1		X	X	X		X	Incident Number
SW - 1	S	12.27.24	9:30	0-3	Comp	1		X	X	X		X	nAPP2432429248
SW - 2	S	12.27.24	9:45	0-3	Comp	1		X	X	X		X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

Hg: 1631 / 245.1 / 7470 / 7471

Circle Method(s) and Metal(s) to be analyzed

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		14:06 12/27	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Teel, Brianna	Carrier Tracking No(s): N/A	COC No: 890-4462.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Brianna.Teel@et.eurofinsus.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-7519-1
Address: 1211 W. Florida Ave, ,	Due Date Requested: 12/30/2024			
City: Midland	TAT Requested (days): N/A			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: CHAVIS 8 LATERAL (MAL-1-10-3-4-EXT	Project #: 88000480			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes: -

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	8015MOD_Calc	8021B/5035FP_Calc BTEX	Total_BTEX_GCV	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
CS-1 (890-7519-1)	12/27/24	09:15 Central	G	Solid			X	X	X	X	X	1	
SW-1 (890-7519-2)	12/27/24	09:30 Central	G	Solid			X	X	X	X	X	1	
SW-2 (890-7519-3)	12/27/24	09:45 Central	G	Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: Teddy Randolph	Date/Time: 12/30/24	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7519-1
SDG Number: Chaves County, NM

Login Number: 7519
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-7519-1
SDG Number: Chaves County, NM

Login Number: 7519
List Number: 2
Creator: Laing, Edmundo

List Source: Eurofins Midland
List Creation: 12/29/24 04:40 PM

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	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2432429248**
Incident Name	**NAPP2432429248 CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT) @ 0**
Incident Type	**Natural Gas Release**
Incident Status	**Remediation Closure Report Received**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	CHAVIS 8" LATERAL (MAL-1-10-3-4-EXT)
Date Release Discovered	11/16/2024
Surface Owner	Private

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Other | Pipeline (Any) | Condensate | Released: 13 BBL | Recovered: 11 BBL | Lost: 2 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)	*Not answered.*

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Santa Fe, NM 87505

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	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	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@kinetik.com Date: 11/19/2024

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Phone: (505) 476-3441

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

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	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 75 and 100 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 100 (ft.)
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	Yes

Remediation Plan		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
Requesting a remediation plan approval with this submission		Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.		
Have the lateral and vertical extents of contamination been fully delineated		Yes
Was this release entirely contained within a lined containment area		No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)		
Chloride	(EPA 300.0 or SM4500 Cl B)	169
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	621
GRO+DRO	(EPA SW-846 Method 8015M)	621
BTEX	(EPA SW-846 Method 8021B or 8260B)	18.2
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.3
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.		
On what estimated date will the remediation commence		12/23/2024
On what date will (or did) the final sampling or liner inspection occur		12/27/2024
On what date will (or was) the remediation complete(d)		01/05/2025
What is the estimated surface area (in square feet) that will be reclaimed		200
What is the estimated volume (in cubic yards) that will be reclaimed		40
What is the estimated surface area (in square feet) that will be remediated		200
What is the estimated volume (in cubic yards) that will be remediated		40
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.		
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.		

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

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	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	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@kinetik.com Date: 02/11/2025
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.	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	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

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QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**415790**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**12/27/2024**
What was the (estimated) number of samples that were to be gathered	**6**
What was the sampling surface area in square feet	**400**

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	200
What was the total volume (cubic yards) remediated	40
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	200
What was the total volume (in cubic yards) reclaimed	40
Summarize any additional remediation activities not included by answers (above)	The Site was remediated according to Site Closure Criteria and has been backfilled with clean, locally sourced material.

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: Sebastian Orozco Title: Sr. Environmental Specialist Email: sorozco@kinetik.com Date: 02/11/2025

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QUESTIONS (continued)

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Operator: FRONTIER FIELD SERVICES, LLC 303 Veterans Airpark Lane Midland, TX 79705	OGRID: 221115
	Action Number: 430592
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	Remediation closure approved.	2/18/2025
amaxwell	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. The 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.	2/18/2025