



October 13, 2025

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

RE: **Hognose Viper Federal Com #602H - Closure Request Report**
Incident Number: nAPP2500721668
GPS: 32.29595°, -103.547701°
Lea County, New Mexico
ESRR Project No. 2783/VP-21484

To Whom It May Concern:

Earth Systems Response & Restoration (ESRR), on behalf of Devon Energy (Devon), presents the following Closure Request Report (CRR) detailing excavation activities and subsequent soil sampling events associated with an inadvertent release of drilling mud/ fluids at the Hognose Viper Federal Com #602H (Site). Based on completed remedial actions and laboratory analytical results from recent soil sampling events, Devon is requesting No Further Action (NFA) at the Site.

Site Location & Incident Description

The Site is located in Unit D, Section 23, Township 23 South, Range 33 East, in Lea County, New Mexico (32.29595°, -103.547701°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM) (**Figure 1**).

On January 6, 2025, mud tanks spilled over during drilling operations, causing the release of approximately 22 barrels (bbl) of drilling mud/ fluids onto a Devon operated pad and adjacent native soils. A vacuum truck was immediately dispatched to the Site and recovered 18 bbls of fluids. ESRR conducted initial site assessment activities and mapped the observed release footprint on January 8, 2025, hereafter referred to as the Area of Concern (AOC) (**Figure 2**). Devon gave notice to the New Mexico Oil Conservation Division (NMOCD) on January 7, 2024, by Notification of Release (NOR) and was subsequently assigned Incident Number nAPP2500721668. A Corrective Action Form C-141 (Form C-141) was submitted on January 14, 2025.

On April 2, 2025, Devon requested an extension of the April 7, 2025 deadline, to allow additional time to complete delineation and remediation activities and for ESRR to complete a subsequent corrective action report. Devon was granted a 90-day extension by the NMOCD for July 7, 2025.

On July 7, 2025, Devon requested an extension of the July 7, 2025 deadline, to allow additional time for remediation activities and for ESRR to complete a CRR. Devon was granted a 90-day extension by the NMOCD for October 6, 2025.

On October 2, 2025, Devon requested an extension of the October 6, 2025 deadline, to allow additional time for restoration activities and for ESRR to finalize this CRR. Devon was granted an extension by the NMOCD for October 13, 2025.

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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:

- o Between 1,000 feet and ½ mile of any continuously flowing watercourse or any other significant watercourse;
- o Between ½ and 1 mile of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- o Greater than 5 miles of any occupied permanent residence, school, hospital, institution or church;
- o Between ½ and 1 mile of any spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- o Between ½ and 1 mile of any other freshwater well or spring;
- o Greater than 5 miles of any incorporated municipal boundary or a defined municipal fresh water well field covered under a municipal ordinance;
- o Between 1,000 feet and ½ mile of any wetland;
- o Greater than 5 miles of any subsurface mine;
- o Greater than 5 miles of any unstable area (i.e. Critical, High, or Medium karst potential); and
- o Greater than 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 Records** for the closest depth to water wells are attached.

Based on the results from the desktop review, no depth to water wells were found within ½ mile with logged data no greater than 25 years old. 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 April 22 and 24, 2025, ESRR conducted initial delineation activities to assess the presence or absence of soil impacts associated with the AOC. Twenty-one delineation boreholes (HA-1 through HA-10, HA-11A through HA-13B, and HA-14 through HA-17) 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 one soil sample was collected from each delineation borehole, representing the highest observed field screening concentrations and/ or the greatest depth. Delineation soil samples were placed directly into lab provided 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 delineation soil samples (HA-13B, HA-14 through HA-16) surrounding the AOC were compliant with Site Closure Criteria and/or the reclamation standard defining the horizontal periphery of the AOC.

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Laboratory analytical results for delineation soil samples collected within and around the AOC (HA-1 through HA-10, HA-11A through HA-13B and HA-17) indicated TPH-GRO+TPH-DRO/TPH and/or Chloride were above the Site Closure Criteria and/or the reclamation standard. Elevated TPH-GRO+TPH-DRO/TPH was characterized by concentrations ranging from 133 to 24,000 mg/kg, specifically for TPH-DRO and/or TPH-GRO. Elevated Chloride was characterized by concentrations ranging from 625 mg/kg to 3,220 mg/kg.

On May 15, 2025, ESRR performed continued delineation of all soil sample locations via mechanical equipment, with an addition of four locations (HA-18 through HA-21) in order to achieve full vertical delineation and to better define the horizontal periphery of the AOC. 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

During August and September of 2025, Devon oversaw initial excavation activities of identified soil impacts performed by a third-party contractor via mechanical equipment based on laboratory analytical results associated with delineation soil sampling activities and visual observation. The excavation was vertically advanced to depths approximately ranging from 1 to 4-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 through CS-46) and sidewalls (SW-1 through SW-5). 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 for confirmation soil samples (CS-1 through CS-4, CS-12, CS-18, CS-20, CS-30, CS-33 and CS-44) indicated that TPH-GRO+TPH-DRO/TPH concentrations were above the applicable Site Closure Criteria and/or the reclamation standard. Elevated TPH-GRO+TPH-DRO/TPH was characterized by concentrations ranging from 205 to 1,700 mg/kg, specifically for TPH-DRO at depths ranging from 1 to 4-feet bgs.

Additional excavation in the proximity to confirmation soil samples (CS-1 through CS-4, CS-12, CS-18, CS-20, CS-30, CS-33 and CS-44) were vertically advanced to depths ranging from 2 to 6-feet bgs. Following the removal of soil, ESRR collected, handled, transported, and analyzed the final confirmation soil samples as previously described.

Laboratory analytical results indicated that the concentration 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 1,160 cubic yards (CY) of impacted soil was removed from the Site and transported to the Northern Delaware Basin Landfill near Jal, New Mexico under Devon 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.

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Closure Request

Based on laboratory analytical results, impacts associated with the inadvertent release have been delineated, excavated, and removed from the Site in accordance with Site Closure Criteria. Devon 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 Devon respectfully requests Closure of this CRR associated with Incident Number nAPP2500721668.

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

A handwritten signature in black ink, appearing to read "Gilbert Moreno".

Gilbert Moreno
Carlsbad Operations Manager/ Project Geologist

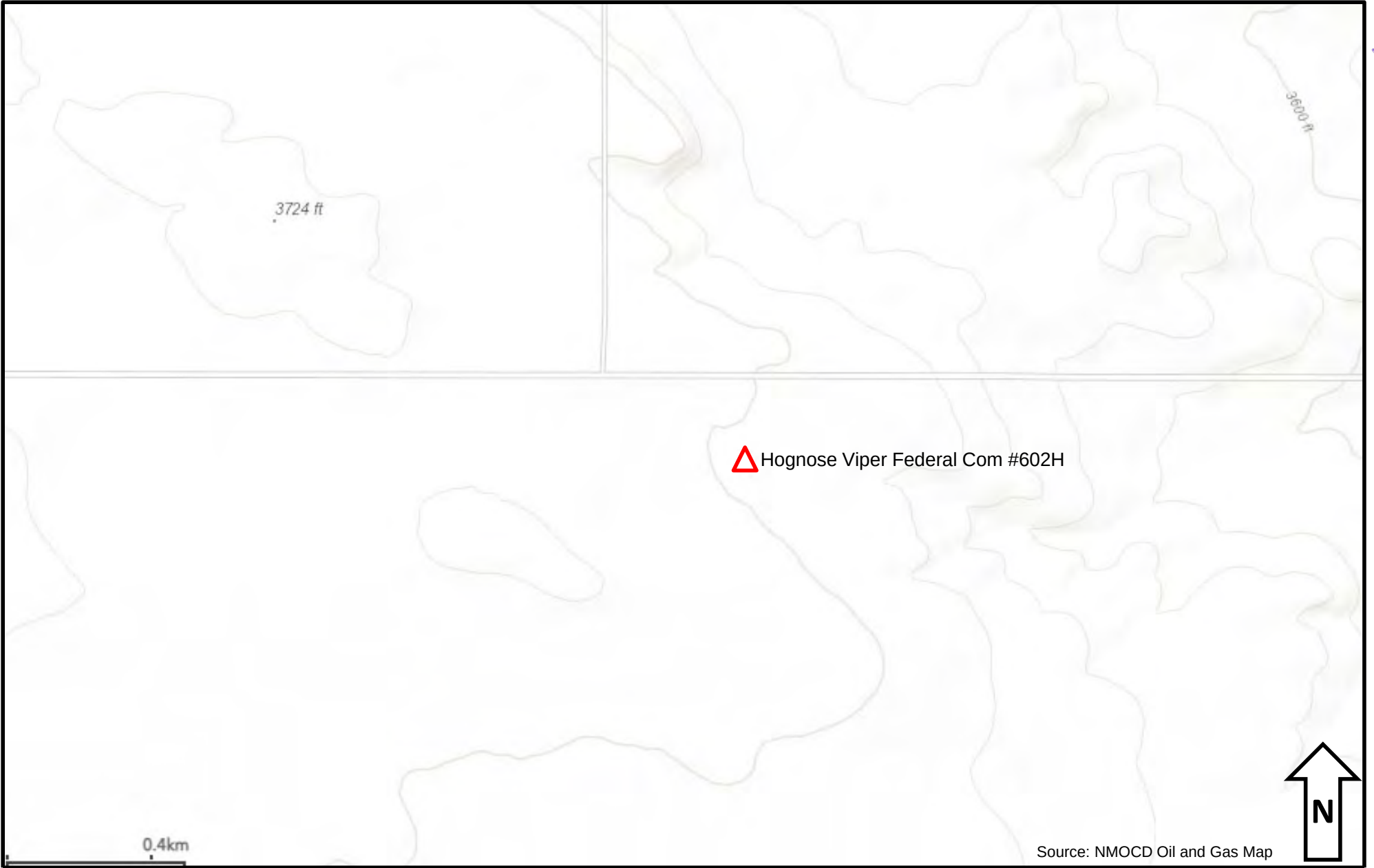
A handwritten signature in black ink, appearing to read "Kris Williams".

Kris Williams, CHMM, REM
Principal

cc: Jim Raley, Devon Energy
Bureau of Land Management

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



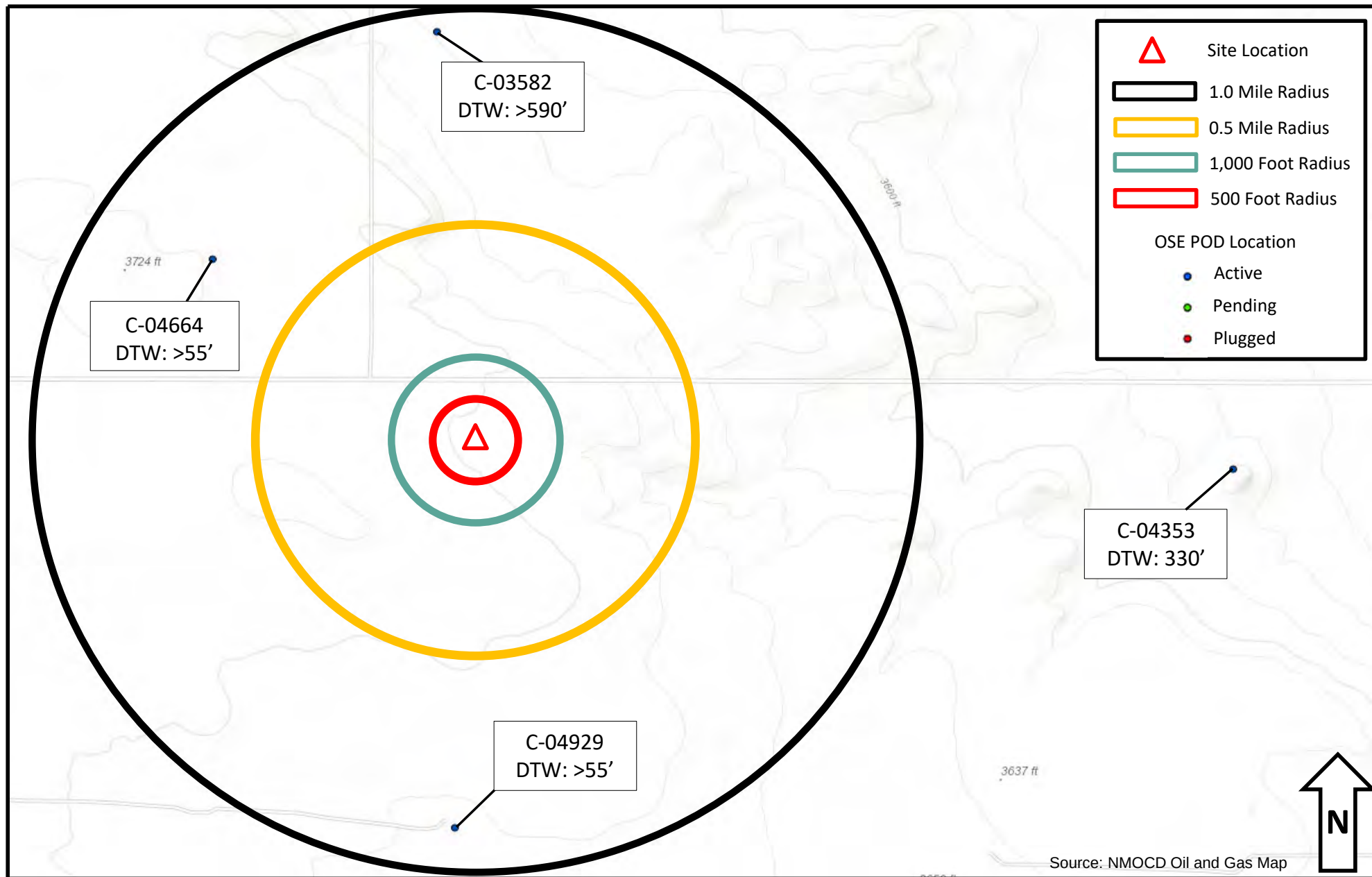


Figure 1A – Ground Water

Devon Energy Permian – Hognose Viper Federal Com #602H
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 Lea County, New Mexico

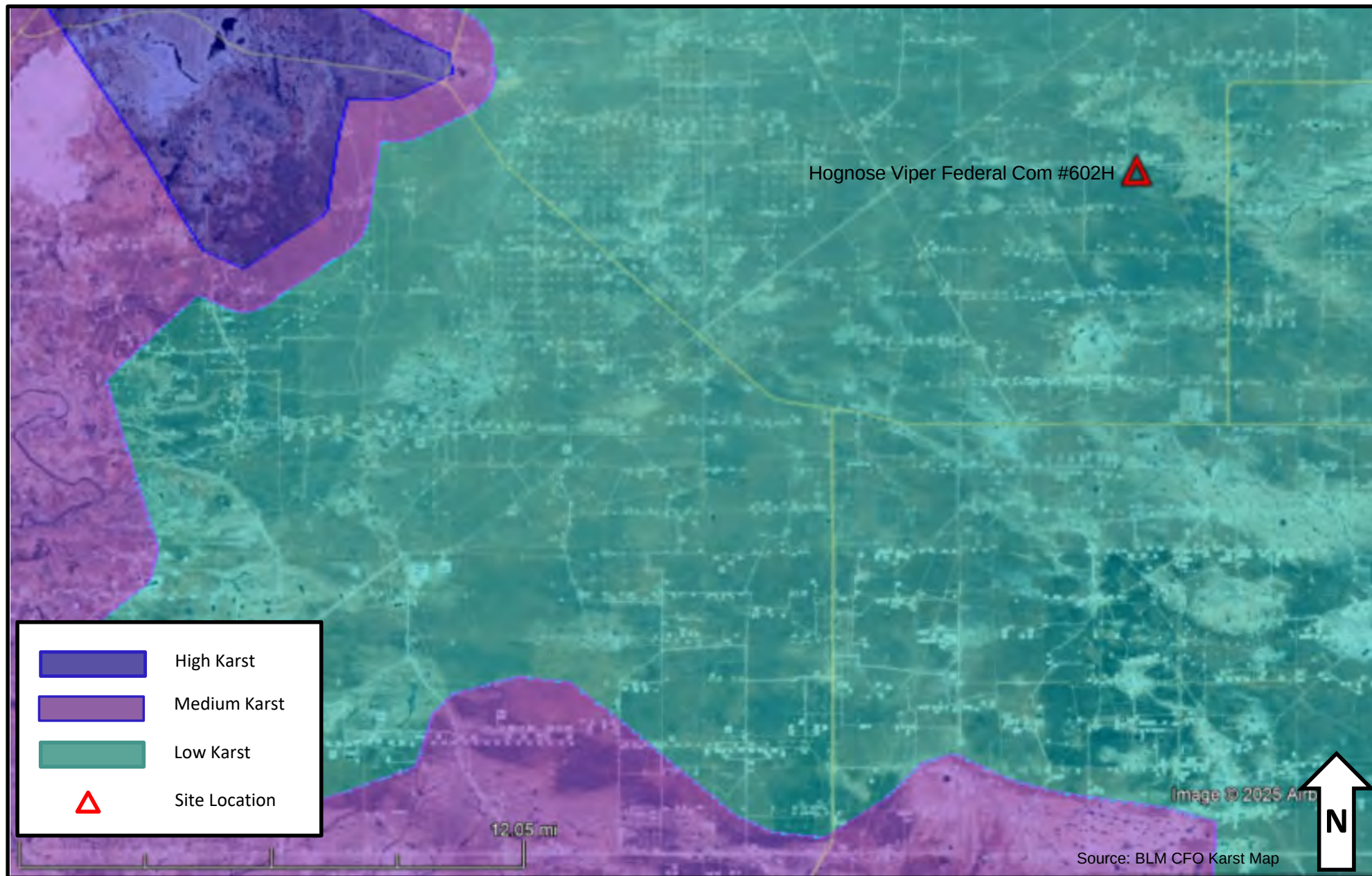


Figure 1B – Karst Potential

Devon Energy Permian – Hognose Viper Federal Com #602H
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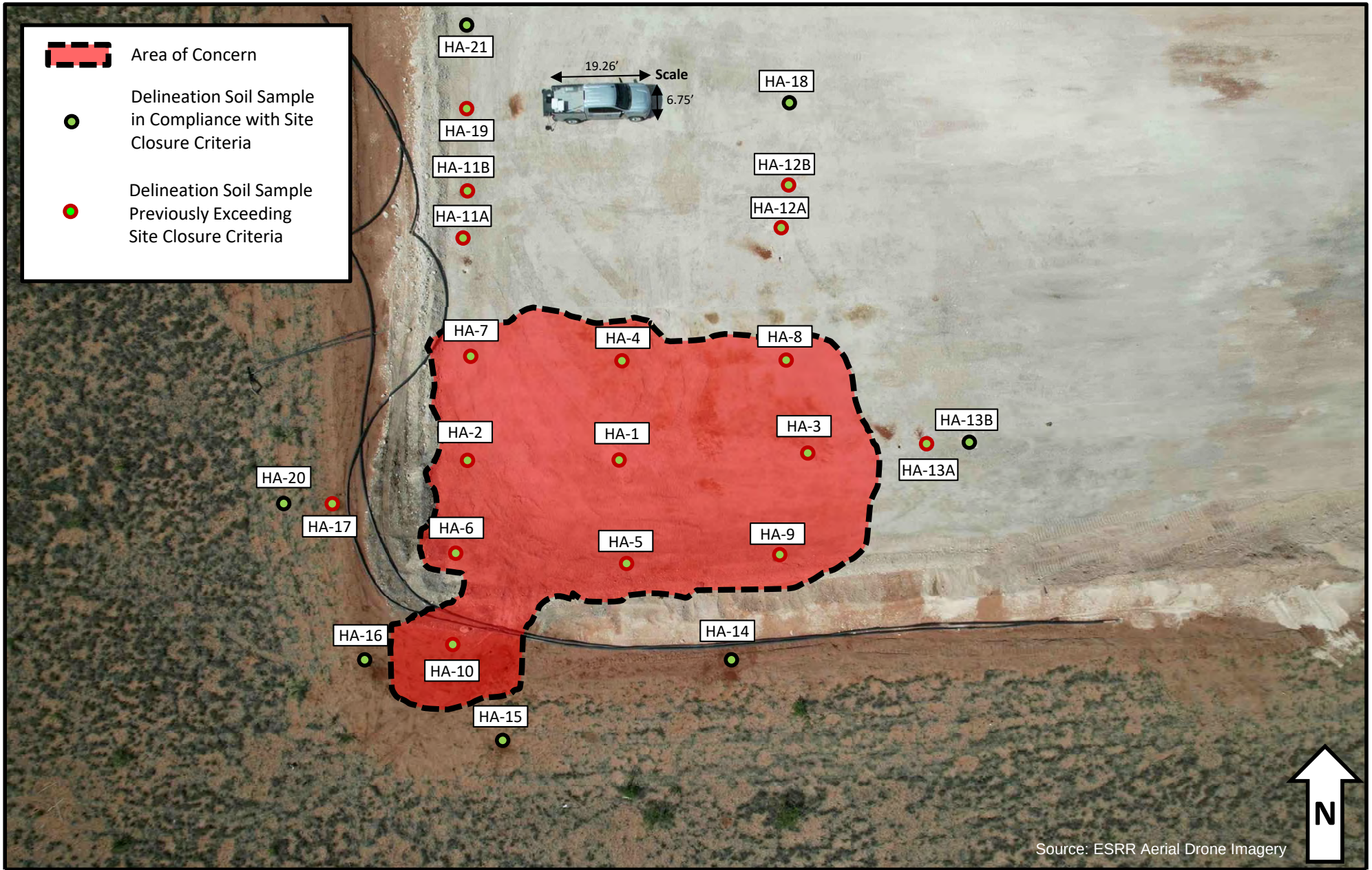


Figure 2 – Delineation Soil Sample Locations

Devon Energy Permian – Hognose Viper Federal Com #602H
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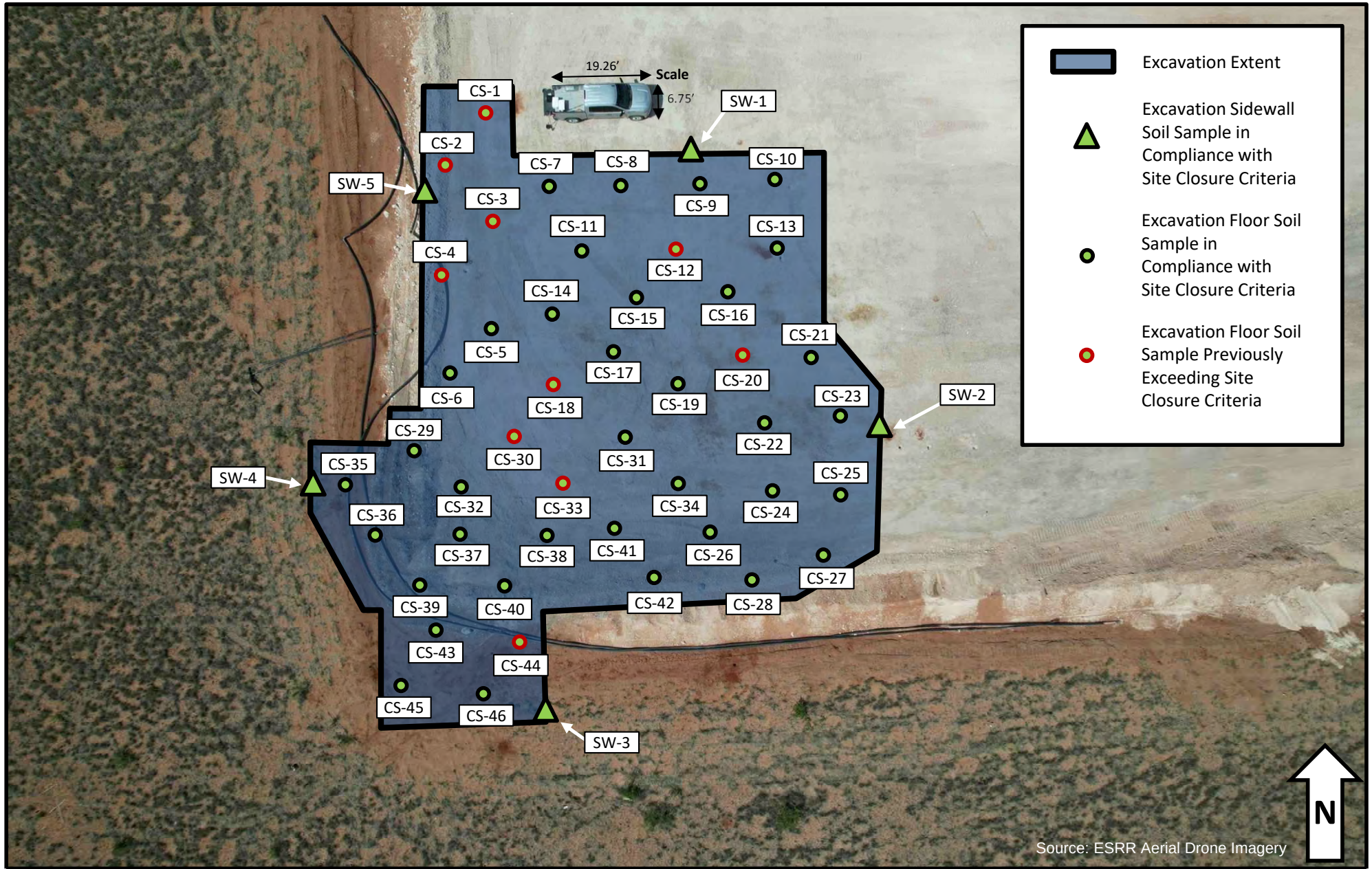


Figure 3 – Excavation Soil Sample Locations

Devon Energy Permian – Hognose Viper Federal Com #602H
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Lea County, New Mexico



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

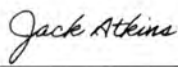
www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4664			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 18	SECONDS 7.02	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	22	27.99	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NW SE Sec.15 T23S R33S NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 9/7/2022		DRILLING ENDED 9/7/2022		DEPTH OF COMPLETED WELL (FT) 55	BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) n/a	
	COMPLETED WELL IS: ☐ ARTESIAN ☒ DRY HOLE ☐ SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a	DATE STATIC MEASURED 9/13/2022	
	DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☒ OTHER - SPECIFY: Hollow Stem Auger						CHECK HERE IF PITLESS ADAPTER IS INSTALLED ☐	
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 55		±6.5	Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04664	POD NO. 1	TRN NO. 732814
LOCATION 23S. 33E. 1S 414	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	24	24	Sand, Medium/ fine grained, poorly graded, with caliche, Red	Y ✓ N		
	24	29	5	Caliche, consolidated, with sand, White	Y ✓ N		
	29	34	5	Sand, Medium/ fine grained, poorly graded, with caliche, Red	Y ✓ N		
	34	55	21	Sand, Medium/ fine grained, poorly graded, Brown	Y ✓ N		
					Y N		
					Y N		
					Y N		
					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: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 05E 011 SEP 26 2022 PM 3:25					
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt							
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 30 DAYS AFTER COMPLETION OF WELL DRILLING:  SIGNATURE OF DRILLER / PRINT SIGNEE NAME Jackie D. Atkins DATE						

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO. C-64664	POD NO. 1	TRN NO. 732 814	
LOCATION 235 33E 15 414	WELL TAG ID NO.		PAGE 2 OF 2

Mike A. Hamman, P.E.
State Engineer



Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 732814
File Nbr: C 04664
Well File Nbr: C 04664 POD1

Oct. 03, 2022

DALE WOODALL
DEVON ENERGY
6488 7 RIVERS HWY
ARTESIA, NM 88210

Greetings:

The above numbered permit was issued in your name on 08/25/2022.

The Well Record was received in this office on 09/26/2022, stating that it had been completed on 09/07/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 08/25/2023.

If you have any questions, please feel free to contact us.

Sincerely,


Vanessa Clements
(575) 622-6521

drywell

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PHOTO 1: Southeastern view during initial site assessment activities by Devon. 1/6/2025



PHOTO 2: Northwestern view during initial site assessment activities by ESRR. 1/8/2025

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PHOTO 3: Northern view during initial delineation activities. 4/22/2025



PHOTO 4: Northern view during initial delineation activities. 4/22/2025

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PHOTO 5: Northern view during initial delineation activities. 4/24/2025



PHOTO 6: Northern view during initial delineation activities. 4/24/2025

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PHOTO 7: Eastern view during additional delineation activities. 5/15/2025

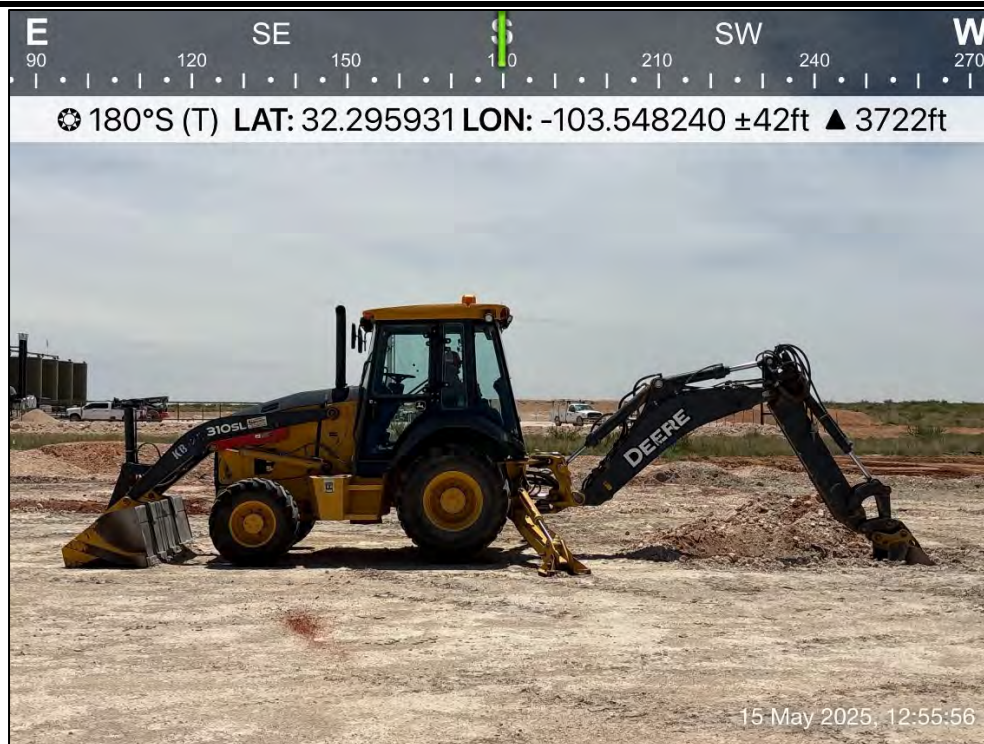


PHOTO 8: Southern view during additional delineation activities. 5/15/2025

Hognose Viper Federal Com #602H - Closure Request Report
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PHOTO 9: Northeastern view of excavation extent. 8/28/2025

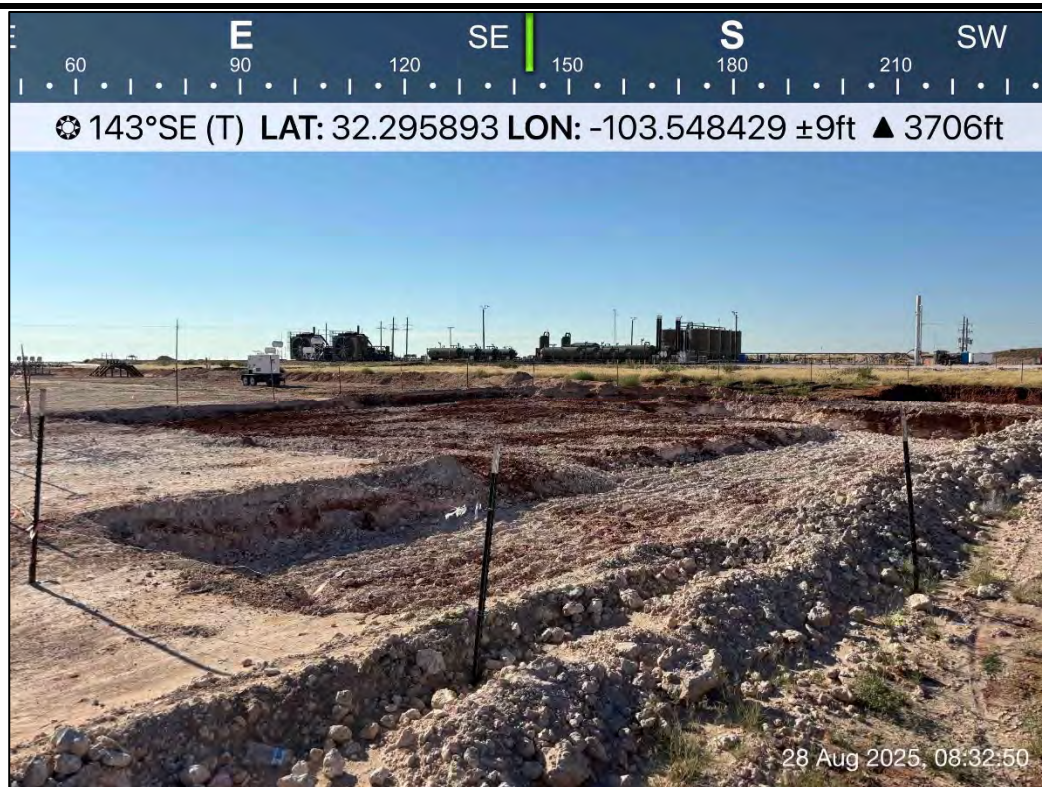


PHOTO 10: Southeastern view of excavation extent. 8/28/2025

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PHOTO 11: Northwestern view of excavation extent following additional excavation activities. 9/16/2025



PHOTO 12: Northeastern view of excavation extent following additional excavation activities. 9/16/2025

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PHOTO 13: Northern view following restoration activities. 10/7/2025



PHOTO 14: Western view following restoration activities. 10/7/2025

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PHOTO 15: Eastern view following restoration activities. 10/7/2025



PHOTO 16: Southeastern view of location sign. 10/7/2025



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Hognose Viper Federal Com #602H
Lea 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 - nAPP2500721668									
HA - 1	04/22/25	0.5	<0.0199	7.49	614	23,400	<250	24,000	3,220
HA - 1	04/22/25	1	<0.0199	0.481	<50.1	3,090	<50.1	3,090	168
HA - 1	04/22/25	2	<0.00200	<0.00399	<49.8	199	<49.8	199	106
HA - 1	05/15/25	4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	47.6
HA - 2	04/22/25	0.5	<0.00200	<0.00401	<50.2	1,060	<50.2	1,060	2,000
HA - 2	04/22/25	1	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	119
HA - 2	04/22/25	2	<0.00199	<0.00398	<49.9	593	<49.9	593	625
HA - 2	05/15/25	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	85.5
HA - 3	04/22/25	0.5	<0.0200	0.228	<50.1	3,640	<50.1	3,640	1,390
HA - 3	04/22/25	1	<0.00200	<0.00399	<49.8	157	<49.8	157	148
HA - 3	04/22/25	2	<0.00202	<0.00404	<50.1	<50.1	<50.1	<50.1	90.3
HA - 3	05/15/25	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	94.5
HA - 4	04/22/25	0.5	<0.00200	<0.00399	<50.2	1,080	<50.2	1,080	430
HA - 4	04/22/25	1	<0.00198	<0.00396	<50.0	53.2	<50.0	53.2	81.0
HA - 4	05/15/25	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	104
HA - 4	05/15/25	4	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	44.5
HA - 5	04/22/25	0.5	<0.00199	<0.00398	<50.4	1,260	<50.4	1,260	507
HA - 5	04/22/25	1	<0.00200	<0.00399	<50.1	<50.1	<50.1	<50.1	115
HA - 5	05/15/25	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	1,180
HA - 5	05/15/25	4	<0.00198	<0.00397	<49.8	239	<49.8	239	203
HA - 5	05/15/25	6	<0.00200	0.00907	<49.9	<49.9	<49.9	<49.9	83
HA - 6	04/22/25	0.5	<0.00200	<0.00401	<50.1	545	<50.1	545	1,600
HA - 6	04/22/25	1	<0.00199	<0.00398	<50.2	<50.2	<50.2	<50.2	72.6
HA - 6	04/22/25	2	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	291
HA - 7	04/22/25	0.5	<0.00200	<0.00399	<50.0	133	<50.0	133	436
HA - 7	04/22/25	1	<0.00202	<0.00404	<49.9	377	<49.9	377	487
HA - 7	05/15/25	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	37.7
HA - 7	05/15/25	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	66.7



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Hognose Viper Federal Com #602H
Lea 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 - nAPP2500721668									
HA - 8	04/22/25	0.5	<0.00200	<0.00399	<50.3	1,350	<50.3	1,350	1,050
HA - 8	04/22/25	1	<0.00199	<0.00398	<50.4	282	<50.4	282	306
HA - 8	05/15/25	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	87.9
HA - 8	05/15/25	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	81.1
HA - 9	04/22/25	0.5	<0.00199	<0.00398	<49.9	951	<49.9	951	1,520
HA - 9	04/22/25	1	<0.00200	<0.00399	<49.7	295	<49.7	295	401
HA - 9	05/15/25	2	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	95.5
HA - 9	05/15/25	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	83.5
HA-10	04/24/25	0.5	<0.00200	<0.00401	<50.0	2,060	<50.0	2,060	1,710
HA-10	04/24/25	1	<0.00199	<0.00398	<50.0	738	<50.0	738	314
HA-10	05/15/25	2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	265
HA-10	05/15/25	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	79.4
HA-11A	04/24/25	0.5	<0.00200	<0.00399	<49.9	135	<49.9	135	1,740
HA-11A	05/15/25	2	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	180
HA-11B	04/24/25	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	2,360
HA-11B	05/15/25	2	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	320
HA-12A	04/24/25	0.5	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	791
HA-12A	05/15/25	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	96
HA-12B	04/24/25	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	2,360
HA-12B	05/15/25	2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	104
HA - 13A	04/22/25	0.5	<0.00198	<0.00396	<49.8	88.2	<49.8	88.2	1,060
HA - 13A	04/22/25	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	173
HA - 13A	05/15/25	2	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	85.2
HA - 13B	04/22/25	0.5	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	438
HA - 14	04/24/25	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	124
HA - 14	04/24/25	1	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	149
HA - 14	04/24/25	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	105
HA - 14	05/15/25	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	42.4



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Hognose Viper Federal Com #602H
Lea 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 - nAPP2500721668									
HA - 15	04/24/25	0.5	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	101
HA - 15	04/24/25	1	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	122
HA - 15	04/24/25	2	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	79.9
HA - 15	05/15/25	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	103
HA - 16	04/24/25	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	125
HA - 16	04/24/25	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	124
HA - 16	05/15/25	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	93.5
HA - 17	04/24/25	0.5	<0.00198	<0.00396	<49.8	167	<49.8	167	171
HA - 17	04/24/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	112
HA - 17	04/24/25	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	82.6
HA - 18	05/15/25	0.5	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	417
HA - 18	05/15/25	2	<0.00202	<0.00403	<49.7	<49.7	<49.7	<49.7	123
HA - 19	05/15/25	0.5	<0.00200	<0.00399	<49.8	173	<49.8	173	1,140
HA - 19	05/15/25	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	121
HA - 20	05/15/25	0.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	106
HA - 21	05/15/25	0.5	<0.00201	<0.00402	<49.8	60.5	<49.8	60.5	387
Confirmation Soil Samples - nAPP2500721668									
CS-1	08/29/25	2	<0.00199	<0.00398	<49.9	168	<49.9	168	361
CS-1	09/16/25	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	110
CS-2	08/29/25	2	<0.00200	<0.00399	<49.9	205	<49.9	205	360
CS-2	09/16/25	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	100
CS-3	08/28/25	2	<0.00198	<0.00396	<50.0	109	<50.0	109	307
CS-3	09/16/25	3	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	122
CS-4	08/29/25	2	<0.00201	<0.00402	<49.8	109	<49.8	109	144
CS-4	09/16/25	3	<0.00198	<0.00396	<49.6	<49.6	<49.6	<49.6	97.6
CS-5	08/28/25	2	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	89.6
CS-6	08/29/25	2	<0.00199	<0.00398	<50.0	77.4	<50.0	77.4	55.1
CS-7	08/29/25	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	90.1
CS-8	08/29/25	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	260
CS-9	08/29/25	1	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	204



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Hognose Viper Federal Com #602H
Lea 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
Confirmation Soil Samples - nAPP2500721668									
CS-10	08/29/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	240
CS-11	08/29/25	1	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	111
CS-12	08/28/25	1	<0.00198	<0.00396	<50.0	239	<50.0	239	278
CS-12	09/16/25	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	94.9
CS-13	08/28/25	1	<0.00201	<0.00402	<49.8	64.2	<49.8	64.2	317
CS-14	08/28/25	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	327
CS-15	08/29/25	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	230
CS-16	08/29/25	1	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	289
CS-17	08/29/25	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	263
CS-18	08/29/25	1	<0.00202	<0.00404	<50.0	1,700	<50.0	1,700	291
CS-18	09/16/25	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	101
CS-19	08/29/25	1	<0.00199	<0.00398	<49.8	86.9	<49.8	86.9	293
CS-20	08/28/25	2	<0.00198	<0.00396	<49.7	546	<49.7	546	266
CS-20	09/16/25	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	109
CS-21	08/28/25	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	62.8
CS-22	08/29/25	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	63.3
CS-23	08/29/25	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	64.1
CS-24	08/29/25	2	<0.00200	<0.00400	<49.8	<49.8	<49.8	<49.8	26.5
CS-25	08/28/25	2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	40.7
CS-26	08/29/25	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	114
CS-27	08/29/25	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	96.7
CS-28	08/28/25	2	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	98.8
CS-29	08/28/25	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	25.4
CS-30	08/28/25	4	<0.00198	<0.00396	<49.8	494	<49.8	494	221
CS-30	09/16/25	6	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	56.8
CS-31	08/28/25	4	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	23.3
CS-32	08/28/25	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<10.1
CS-33	08/28/25	4	<0.00199	<0.00398	<50.0	273	<50.0	273	142
CS-33	09/16/25	6	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	224



Table 1
SOIL SAMPLE ANALYTICAL RESULTS
Hognose Viper Federal Com #602H
Lea 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
Confirmation Soil Samples - nAPP2500721668									
CS-34	08/28/25	4	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	267
CS-35	08/29/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<9.98
CS-36	08/28/25	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<10.1
CS-37	08/29/25	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	21.9
CS-38	08/29/25	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	20.0
CS-39	08/29/25	1	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	30.4
CS-40	08/29/25	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	20.3
CS-41	08/28/25	6	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	10.2
CS-42	08/28/25	6	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	17.6
CS-43	08/28/25	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	42.7
CS-44	08/28/25	2	<0.00201	<0.00402	<49.7	205	<49.7	205	136
CS-44	09/16/25	3	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	186
CS-45	08/28/25	2	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<9.92
CS-46	08/28/25	2	<0.00199	<0.00398	<49.8	<49.8	61.7	61.7	<9.94
SW-1	08/29/25	0-2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	270
SW-2	08/28/25	0-2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	191
SW-3	08/28/25	0-2	<0.00198	<0.00396	<49.8	<49.8	<49.8	<49.8	<9.98
SW-4	08/28/25	0-2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	13.1
SW-5	08/28/25	0-4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	238

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



Outlook

RE: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

From Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>**Date** Wed 4/2/2025 10:29 AM**To** Gilbert Moreno <gmoreno@earthsys.net>**Cc** Raley, Jim <Jim.Raley@dvn.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Good morning Gilbert,

The extension request for NAPP2500721668 HOGNOSE VIPER FEDERAL COM #602H is approved. The new due date to submit your remediation plan or closure report to the OCD is July 7, 2025. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

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

From: Gilbert Moreno <gmoreno@earthsys.net>**Sent:** Wednesday, April 2, 2025 11:22 AM**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>**Cc:** Raley, Jim <Jim.Raley@dvn.com>**Subject:** [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

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Hello,

Earth Sytems R & R (ESRR) on behalf of Devon Energy (Devon) is requesting an extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at HOGNOSE VIPER FEDERAL COM #602H (Site).

A drilling mud/ fluid release was discovered on January 6th, 2025, and was subsequently assigned Incident Number nAPP2500721668. Initial delineation activities have been delayed due to the active status of drilling operations and safety precautions put in place by Devon and ESRR. As of April 1st, 2025, drilling operations have come to completion and ESRR is anticipating beginning delineation activities mid April 2025.

Devon requests an extension of the April 7th, 2025, deadline for the release associated with Incident Number nAPP2500721668, to allow additional time for scheduling and completion of delineation and remediation activities, and for ESRR to complete a subsequent corrective action closure report.

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





RE: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

From Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Date Mon 7/14/2025 2:02 PM

To Gilbert Moreno <gmoreno@earthsys.net>

Cc Raley, Jim <jim.rale@dmn.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Hi Gilbert,

Thanks for providing the update to OCD. As the date of discovery of the release was 1/6/25 and no remediation plan has been submitted for this site, a remediation plan or a remediation closure report will be due to OCD by 10/6/2025. There will be no more extensions granted for NAPP2500721668 HOGNOSE VIPER FEDERAL COM #602H to submit a report.

Sincerely,

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, July 14, 2025 1:21 PM

To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Cc: Raley, Jim <jim.rale@dmn.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Subject: Re: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

Correction. ESRR was notified July 8th, not the 15th.

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: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, July 14, 2025 1:18 PM
To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Cc: Raley, Jim <jim.raley@dmv.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: Re: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

Good afternoon,

Just wanted to provide an update on this incident.

As of July 15, 2025, Earth Systems Response & Restoration (ESRR) was notified that Devon frac began staging equipment, preventing the Devon 3rd-party contractor from initiating excavation activities due to Devon Safety Encroachment Guidelines. ESRR will continue to monitor frac activities and will keep NMOCD updated as we get closer to a start date for remediation if unable to meet the recently approved extension date of October 6, 2025.

Regards,

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, July 7, 2025 8:36 AM
To: Gilbert Moreno <gmoreno@earthsys.net>
Cc: Raley, Jim <jim.raley@dmv.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: RE: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

Good morning Gilbert,

The extension request for NAPP2500721668 HOGNOSE VIPER FEDERAL COM #602H is approved. The new due date to submit your remediation plan or closure report to the

OCD is October 6, 2025. By this date, a remediation closure report or deferral report is due to the OCD. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

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

From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, July 7, 2025 7:52 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Raley, Jim <jim.raley@dvn.com>
Subject: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

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Hello,

Earth Sytems R & R (ESRR) on behalf of Devon Energy (Devon) is requesting an additional extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at HOGNOSE VIPER FEDERAL COM #602H (Site).

Initial delineation activities were completed on April 22 and 24, 2025, with additional delineation by means of mechanical equipment on May 15, 2025. Excavation activities are set to begin mid-July 2025.

Devon requests an extension of the July 7th, 2025, deadline for the release associated with Incident Number nAPP2500721668, to allow additional time to complete remediation activities, and for ESRR to complete a subsequent corrective action closure report.

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



Outlook

RE: [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

From Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>**Date** Thu 10/2/2025 9:04 AM**To** Gilbert Moreno <gmoreno@earthsys.net>**Cc** Raley, Jim <jim.rale@dmn.com>; CFO_Spill, BLM_NM <blm_nm_cfo_spill@blm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Good morning Gilbert,

This is the final extension that will be granted for nAPP2500721668 HOGNOSE VIPER FEDERAL COM #602H. A remediation plan or remediation closure report must be submitted to the OCD Permitting website no later than October 13, 2025. Please include a copy of this and all notifications in the report to ensure the notifications are documented in the project file.

Kind regards,

Shelly

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

From: Gilbert Moreno <gmoreno@earthsys.net>**Sent:** Thursday, October 2, 2025 8:00 AM**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>**Cc:** Raley, Jim <jim.rale@dmn.com>; CFO_Spill, BLM_NM <blm_nm_cfo_spill@blm.gov>**Subject:** [EXTERNAL] HOGNOSE VIPER FEDERAL COM #602H - Extension Request - nAPP2500721668

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

Hello,

Earth Sytems R & R (ESRR) on behalf of Devon Energy (Devon) is requesting reconsideration on a final extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at HOGNOSE VIPER FEDERAL COM #602H (Site).

Final excavation activities were completed along with final confirmation sampling on September 16, 2025. Unfortunately, after receiving the final lab analytical reports on September 22, 2025, the soonest availability for the Devon contracted 3rd-party contractor to begin restoration activities was today, October 2, 2025. Restoration activities are anticipated to be completed by the end of day October 6,

2025, which will then allow ESRR to finalize the Closure Request Report for Devon to submit by October 13, 2025.

Devon requests the minimum extension of the October 6, 2025, deadline for the release associated with Incident Number nAPP2500721668, to allow additional time for ESRR to finalize the subsequent corrective action closure report for Devon to submit.

Regards,

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





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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 4/29/2025 1:14:01 PM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8026-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



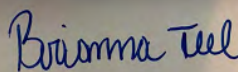
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
4/29/2025 1:14:01 PM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8026-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8026-1

Job ID: 890-8026-1**Eurofins Carlsbad****Job Narrative
890-8026-1**

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 4/23/2025 9:37 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 0.0°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 1 (890-8026-1), HA - 1 (890-8026-2), HA - 1 (890-8026-3), HA - 2 (890-8026-4), HA - 2 (890-8026-5), HA - 2 (890-8026-6), HA - 3 (890-8026-7), HA - 3 (890-8026-8), HA - 3 (890-8026-9), HA - 4 (890-8026-10), HA - 4 (890-8026-11), HA - 5 (890-8026-12), HA - 5 (890-8026-13), HA - 6 (890-8026-14), HA - 6 (890-8026-15), HA - 6 (890-8026-16), HA - 7 (890-8026-17), HA - 7 (890-8026-18), HA - 8 (890-8026-19), HA - 8 (890-8026-20), HA - 9 (890-8026-21) and HA - 9 (890-8026-22).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-8026-1), HA - 1 (890-8026-2) and HA - 3 (890-8026-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: HA - 1 (890-8026-1), HA - 1 (890-8026-2) and HA - 3 (890-8026-7). Elevated reporting limits (RLs) are provided.

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

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-108510 and analytical batch 880-108708 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: HA - 1 (890-8026-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 1 (890-8026-2), HA - 1 (890-8026-3), HA - 2 (890-8026-4), HA - 2 (890-8026-5), HA - 2 (890-8026-6), HA - 3 (890-8026-7), HA - 3 (890-8026-8), HA - 3 (890-8026-9), HA - 4 (890-8026-10), HA - 4 (890-8026-11), HA - 5 (890-8026-12), (880-57248-A-61-A), (880-57248-A-61-B MS) and (880-57248-A-61-C MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 5 (890-8026-13), HA - 6 (890-8026-16), HA - 7 (890-8026-18), (LCS 880-108437/2-A) and (LCSD 880-108437/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 6 (890-8026-14) and HA - 7 (890-8026-17). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-108574/2-A), (LCSD 880-108574/3-A) and (880-57281-A-5-B). 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

Eurofins Carlsbad

Case Narrative

Client: Earth Systems Response and Restoration
Project: Hognose Viper Federal Com #602H

Job ID: 890-8026-1

Job ID: 890-8026-1 (Continued) Eurofins Carlsbad

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-108578 and analytical batch 880-108599 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-1

Date Collected: 04/22/25 13:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:26	10
Toluene	0.166		0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:26	10
Ethylbenzene	0.892		0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:26	10
m-Xylene & p-Xylene	4.39		0.0398		mg/Kg		04/24/25 09:36	04/24/25 19:26	10
o-Xylene	2.04		0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:26	10
Xylenes, Total	6.43		0.0398		mg/Kg		04/24/25 09:36	04/24/25 19:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	277	S1+	70 - 130	04/24/25 09:36	04/24/25 19:26	10
1,4-Difluorobenzene (Surr)	96		70 - 130	04/24/25 09:36	04/24/25 19:26	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	7.49		0.0398		mg/Kg			04/24/25 19:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	24000		250		mg/Kg			04/26/25 00:56	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	614		250		mg/Kg		04/24/25 08:13	04/26/25 00:56	5
Diesel Range Organics (Over C10-C28)	23400		250		mg/Kg		04/24/25 08:13	04/26/25 00:56	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		04/24/25 08:13	04/26/25 00:56	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	291	S1+	70 - 130	04/24/25 08:13	04/26/25 00:56	5
o-Terphenyl	525	S1+	70 - 130	04/24/25 08:13	04/26/25 00:56	5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3220	F1	49.8		mg/Kg			04/24/25 22:48	5

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-2

Date Collected: 04/22/25 13:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:47	10
Toluene	<0.0199	U	0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:47	10
Ethylbenzene	0.0319		0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:47	10
m-Xylene & p-Xylene	0.296		0.0398		mg/Kg		04/24/25 09:36	04/24/25 19:47	10
o-Xylene	0.153		0.0199		mg/Kg		04/24/25 09:36	04/24/25 19:47	10
Xylenes, Total	0.449		0.0398		mg/Kg		04/24/25 09:36	04/24/25 19:47	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130	04/24/25 09:36	04/24/25 19:47	10

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-2

Date Collected: 04/22/25 13:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	04/24/25 09:36	04/24/25 19:47	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.481		0.0398		mg/Kg			04/24/25 19:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3090		50.1		mg/Kg			04/26/25 01:11	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	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 01:11	1
Diesel Range Organics (Over C10-C28)	3090		50.1		mg/Kg		04/24/25 08:13	04/26/25 01:11	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 01:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	187	S1+	70 - 130				04/24/25 08:13	04/26/25 01:11	1
o-Terphenyl	235	S1+	70 - 130				04/24/25 08:13	04/26/25 01:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	168		9.92		mg/Kg			04/24/25 23:05	1

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-3

Date Collected: 04/22/25 13:20

Matrix: Solid

Date Received: 04/23/25 09:37

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		04/24/25 09:36	04/24/25 17:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 17:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	04/24/25 09:36	04/24/25 17:03	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/24/25 09:36	04/24/25 17:03	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			04/24/25 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	199		49.8		mg/Kg			04/26/25 01:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-3

Date Collected: 04/22/25 13:20

Matrix: Solid

Date Received: 04/23/25 09:37

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	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 01:45	1
Diesel Range Organics (Over C10-C28)	199		49.8		mg/Kg		04/24/25 08:13	04/26/25 01:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 01:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	183	S1+	70 - 130				04/24/25 08:13	04/26/25 01:45	1
o-Terphenyl	186	S1+	70 - 130				04/24/25 08:13	04/26/25 01:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		10.0		mg/Kg			04/24/25 23:11	1

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-4

Date Collected: 04/22/25 13:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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		04/24/25 09:36	04/24/25 17:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:24	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/24/25 09:36	04/24/25 17:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 17:24	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/24/25 09:36	04/24/25 17:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				04/24/25 09:36	04/24/25 17:24	1
1,4-Difluorobenzene (Surr)	95		70 - 130				04/24/25 09:36	04/24/25 17:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/24/25 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1060		50.2		mg/Kg			04/26/25 02:02	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	<50.2	U	50.2		mg/Kg		04/24/25 08:13	04/26/25 02:02	1
Diesel Range Organics (Over C10-C28)	1060		50.2		mg/Kg		04/24/25 08:13	04/26/25 02:02	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		04/24/25 08:13	04/26/25 02:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	179	S1+	70 - 130				04/24/25 08:13	04/26/25 02:02	1
o-Terphenyl	210	S1+	70 - 130				04/24/25 08:13	04/26/25 02:02	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-4

Date Collected: 04/22/25 13:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2000		49.7		mg/Kg			04/24/25 23:16	5

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-5

Date Collected: 04/22/25 13:40

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:36	04/24/25 17:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 17:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 17:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:36	04/24/25 17:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 17:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:36	04/24/25 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				04/24/25 09:36	04/24/25 17:44	1
1,4-Difluorobenzene (Surr)	89		70 - 130				04/24/25 09:36	04/24/25 17:44	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			04/24/25 17:44	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			04/26/25 02:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 02:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 02:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	180	S1+	70 - 130				04/24/25 08:13	04/26/25 02:18	1
o-Terphenyl	179	S1+	70 - 130				04/24/25 08:13	04/26/25 02:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		9.92		mg/Kg			04/24/25 23:22	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-6

Date Collected: 04/22/25 13:50

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 2

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		04/24/25 09:36	04/24/25 18:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 18:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 18:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:36	04/24/25 18:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:36	04/24/25 18:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:36	04/24/25 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	04/24/25 09:36	04/24/25 18:05	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/24/25 09:36	04/24/25 18:05	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			04/24/25 18:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	593		49.9		mg/Kg			04/26/25 02:36	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		04/24/25 08:13	04/26/25 02:36	1
Diesel Range Organics (Over C10-C28)	593		49.9		mg/Kg		04/24/25 08:13	04/26/25 02:36	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/24/25 08:13	04/26/25 02:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	179	S1+	70 - 130	04/24/25 08:13	04/26/25 02:36	1
o-Terphenyl	185	S1+	70 - 130	04/24/25 08:13	04/26/25 02:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	625		10.0		mg/Kg			04/24/25 23:39	1

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-7

Date Collected: 04/22/25 14:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0200	U	0.0200		mg/Kg		04/24/25 09:36	04/24/25 20:07	10
Toluene	<0.0200	U	0.0200		mg/Kg		04/24/25 09:36	04/24/25 20:07	10
Ethylbenzene	<0.0200	U	0.0200		mg/Kg		04/24/25 09:36	04/24/25 20:07	10
m-Xylene & p-Xylene	0.145		0.0399		mg/Kg		04/24/25 09:36	04/24/25 20:07	10
o-Xylene	0.0834		0.0200		mg/Kg		04/24/25 09:36	04/24/25 20:07	10
Xylenes, Total	0.228		0.0399		mg/Kg		04/24/25 09:36	04/24/25 20:07	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	164	S1+	70 - 130	04/24/25 09:36	04/24/25 20:07	10

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-7

Date Collected: 04/22/25 14:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	04/24/25 09:36	04/24/25 20:07	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.228		0.0399		mg/Kg			04/24/25 20:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3640		50.1		mg/Kg			04/26/25 02:52	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	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 02:52	1
Diesel Range Organics (Over C10-C28)	3640		50.1		mg/Kg		04/24/25 08:13	04/26/25 02:52	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 02:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	183	S1+	70 - 130				04/24/25 08:13	04/26/25 02:52	1
o-Terphenyl	245	S1+	70 - 130				04/24/25 08:13	04/26/25 02:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1390		10.1		mg/Kg			04/24/25 23:45	1

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-8

Date Collected: 04/22/25 14:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:36	04/24/25 18:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 18:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 18:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 18:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 18:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/24/25 09:36	04/24/25 18:25	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/24/25 09:36	04/24/25 18:25	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			04/24/25 18:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	157		49.8		mg/Kg			04/26/25 03:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-8

Date Collected: 04/22/25 14:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 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		04/24/25 08:13	04/26/25 03:10	1
Diesel Range Organics (Over C10-C28)	157		49.8		mg/Kg		04/24/25 08:13	04/26/25 03:10	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/24/25 08:13	04/26/25 03:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	189	S1+	70 - 130				04/24/25 08:13	04/26/25 03:10	1
o-Terphenyl	191	S1+	70 - 130				04/24/25 08:13	04/26/25 03:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	148		9.94		mg/Kg			04/24/25 23:50	1

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-9

Date Collected: 04/22/25 14:20

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/24/25 09:36	04/24/25 18:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130				04/24/25 09:36	04/24/25 18:46	1
1,4-Difluorobenzene (Surr)	94		70 - 130				04/24/25 09:36	04/24/25 18:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/24/25 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			04/26/25 03:25	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	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 03:25	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 03:25	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/24/25 08:13	04/26/25 03:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	187	S1+	70 - 130				04/24/25 08:13	04/26/25 03:25	1
o-Terphenyl	189	S1+	70 - 130				04/24/25 08:13	04/26/25 03:25	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-9

Date Collected: 04/22/25 14:20

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.3		9.92		mg/Kg			04/24/25 23:56	1

Client Sample ID: HA - 4

Lab Sample ID: 890-8026-10

Date Collected: 04/22/25 14:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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		04/24/25 09:36	04/24/25 19:06	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 19:06	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 19:06	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 19:06	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 19:06	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:36	04/24/25 19:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130				04/24/25 09:36	04/24/25 19:06	1
1,4-Difluorobenzene (Surr)	90		70 - 130				04/24/25 09:36	04/24/25 19:06	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			04/24/25 19:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1080		50.2		mg/Kg			04/26/25 03:43	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	<50.2	U	50.2		mg/Kg		04/24/25 08:13	04/26/25 03:43	1
Diesel Range Organics (Over C10-C28)	1080		50.2		mg/Kg		04/24/25 08:13	04/26/25 03:43	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		04/24/25 08:13	04/26/25 03:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	188	S1+	70 - 130				04/24/25 08:13	04/26/25 03:43	1
o-Terphenyl	213	S1+	70 - 130				04/24/25 08:13	04/26/25 03:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	430		10.0		mg/Kg			04/25/25 00:02	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-8026-11

Date Collected: 04/22/25 14:40

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:23	04/24/25 14:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/24/25 09:23	04/24/25 14:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/24/25 09:23	04/24/25 14:39	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/24/25 09:23	04/24/25 14:39	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/24/25 09:23	04/24/25 14:39	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/24/25 09:23	04/24/25 14:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/24/25 09:23	04/24/25 14:39	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/24/25 09:23	04/24/25 14:39	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			04/24/25 14:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.2		50.0		mg/Kg			04/26/25 03:59	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	<50.0	U	50.0		mg/Kg		04/24/25 08:13	04/26/25 03:59	1
Diesel Range Organics (Over C10-C28)	53.2		50.0		mg/Kg		04/24/25 08:13	04/26/25 03:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/24/25 08:13	04/26/25 03:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	181	S1+	70 - 130	04/24/25 08:13	04/26/25 03:59	1
o-Terphenyl	183	S1+	70 - 130	04/24/25 08:13	04/26/25 03:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.0	F1	10.1		mg/Kg			04/25/25 00:07	1

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-12

Date Collected: 04/22/25 14:50

Matrix: Solid

Date Received: 04/23/25 09:37

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		04/24/25 09:23	04/24/25 15:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 15:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 15:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 15:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 15:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 15:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	04/24/25 09:23	04/24/25 15:00	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-12

Date Collected: 04/22/25 14:50

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	04/24/25 09:23	04/24/25 15:00	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			04/24/25 15:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1260		50.4		mg/Kg			04/26/25 04:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		04/24/25 08:13	04/26/25 04:16	1
Diesel Range Organics (Over C10-C28)	1260		50.4		mg/Kg		04/24/25 08:13	04/26/25 04:16	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		04/24/25 08:13	04/26/25 04:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	184	S1+	70 - 130				04/24/25 08:13	04/26/25 04:16	1
o-Terphenyl	207	S1+	70 - 130				04/24/25 08:13	04/26/25 04:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	507		9.98		mg/Kg			04/25/25 00:24	1

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-13

Date Collected: 04/22/25 15:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:23	04/24/25 16:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 16:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 16:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/24/25 09:23	04/24/25 16:24	1
1,4-Difluorobenzene (Surr)	84		70 - 130	04/24/25 09:23	04/24/25 16:24	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			04/24/25 16:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			04/29/25 00:13	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-13

Date Collected: 04/22/25 15:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 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	<50.1	U	50.1		mg/Kg		04/23/25 12:10	04/29/25 00:13	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		04/23/25 12:10	04/29/25 00:13	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/23/25 12:10	04/29/25 00:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130				04/23/25 12:10	04/29/25 00:13	1
o-Terphenyl	135	S1+	70 - 130				04/23/25 12:10	04/29/25 00:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	115		9.94		mg/Kg			04/25/25 00:30	1

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-14

Date Collected: 04/22/25 15:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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		04/24/25 09:23	04/24/25 16:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:44	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/24/25 09:23	04/24/25 16:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 16:44	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/24/25 09:23	04/24/25 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				04/24/25 09:23	04/24/25 16:44	1
1,4-Difluorobenzene (Surr)	94		70 - 130				04/24/25 09:23	04/24/25 16:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/24/25 16:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	545		50.1		mg/Kg			04/29/25 00:29	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	<50.1	U	50.1		mg/Kg		04/23/25 12:10	04/29/25 00:29	1
Diesel Range Organics (Over C10-C28)	545		50.1		mg/Kg		04/23/25 12:10	04/29/25 00:29	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		04/23/25 12:10	04/29/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130				04/23/25 12:10	04/29/25 00:29	1
o-Terphenyl	144	S1+	70 - 130				04/23/25 12:10	04/29/25 00:29	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-14

Date Collected: 04/22/25 15:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1600		49.6		mg/Kg			04/25/25 00:47	5

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-15

Date Collected: 04/22/25 15:20

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:23	04/24/25 17:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 17:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 17:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130				04/24/25 09:23	04/24/25 17:05	1
1,4-Difluorobenzene (Surr)	92		70 - 130				04/24/25 09:23	04/24/25 17:05	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			04/24/25 17:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			04/29/25 00:44	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	<50.2	U	50.2		mg/Kg		04/23/25 12:10	04/29/25 00:44	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		04/23/25 12:10	04/29/25 00:44	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		04/23/25 12:10	04/29/25 00:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				04/23/25 12:10	04/29/25 00:44	1
o-Terphenyl	126		70 - 130				04/23/25 12:10	04/29/25 00:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	72.6		10.0		mg/Kg			04/25/25 00:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-16

Date Collected: 04/22/25 15:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 2

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		04/24/25 09:23	04/24/25 17:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 17:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 17:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	04/24/25 09:23	04/24/25 17:25	1
1,4-Difluorobenzene (Surr)	78		70 - 130	04/24/25 09:23	04/24/25 17:25	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			04/24/25 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			04/29/25 01:00	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	<50.3	U	50.3		mg/Kg		04/23/25 12:10	04/29/25 01:00	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		04/23/25 12:10	04/29/25 01:00	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		04/23/25 12:10	04/29/25 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130	04/23/25 12:10	04/29/25 01:00	1
o-Terphenyl	132	S1+	70 - 130	04/23/25 12:10	04/29/25 01:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	291		10.0		mg/Kg			04/25/25 00:58	1

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-17

Date Collected: 04/22/25 15:40

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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		04/24/25 09:23	04/24/25 17:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 17:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 17:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 17:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 17:46	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 17:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/24/25 09:23	04/24/25 17:46	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-17

Date Collected: 04/22/25 15:40

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	04/24/25 09:23	04/24/25 17:46	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			04/24/25 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	133		50.0		mg/Kg			04/29/25 01:14	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		04/23/25 12:10	04/29/25 01:14	1
Diesel Range Organics (Over C10-C28)	133		50.0		mg/Kg		04/23/25 12:10	04/29/25 01:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/25 12:10	04/29/25 01:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130				04/23/25 12:10	04/29/25 01:14	1
o-Terphenyl	132	S1+	70 - 130				04/23/25 12:10	04/29/25 01:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	436		10.1		mg/Kg			04/25/25 01:04	1

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-18

Date Collected: 04/22/25 15:50

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:23	04/24/25 18:06	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:23	04/24/25 18:06	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:23	04/24/25 18:06	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/24/25 09:23	04/24/25 18:06	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/24/25 09:23	04/24/25 18:06	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/24/25 09:23	04/24/25 18:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130	04/24/25 09:23	04/24/25 18:06	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/24/25 09:23	04/24/25 18:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/24/25 18:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	377		49.9		mg/Kg			04/29/25 01:29	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-18

Date Collected: 04/22/25 15:50

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 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		04/23/25 12:10	04/29/25 01:29	1
Diesel Range Organics (Over C10-C28)	377		49.9		mg/Kg		04/23/25 12:10	04/29/25 01:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/23/25 12:10	04/29/25 01:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130				04/23/25 12:10	04/29/25 01:29	1
o-Terphenyl	140	S1+	70 - 130				04/23/25 12:10	04/29/25 01:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	487		9.94		mg/Kg			04/25/25 01:09	1

Client Sample ID: HA - 8

Lab Sample ID: 890-8026-19

Date Collected: 04/22/25 16:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

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		04/24/25 09:23	04/24/25 18:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 18:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 18:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 18:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 18:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 18:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130				04/24/25 09:23	04/24/25 18:27	1
1,4-Difluorobenzene (Surr)	97		70 - 130				04/24/25 09:23	04/24/25 18:27	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			04/24/25 18:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1350		50.3		mg/Kg			04/28/25 23:42	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	<50.3	U	50.3		mg/Kg		04/24/25 12:59	04/28/25 23:42	1
Diesel Range Organics (Over C10-C28)	1350		50.3		mg/Kg		04/24/25 12:59	04/28/25 23:42	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		04/24/25 12:59	04/28/25 23:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				04/24/25 12:59	04/28/25 23:42	1
o-Terphenyl	127		70 - 130				04/24/25 12:59	04/28/25 23:42	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 8

Lab Sample ID: 890-8026-19

Date Collected: 04/22/25 16:00

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		9.92		mg/Kg			04/25/25 01:15	1

Client Sample ID: HA - 8

Lab Sample ID: 890-8026-20

Date Collected: 04/22/25 16:10

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:23	04/24/25 18:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 18:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 18:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 18:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 18:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 18:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130				04/24/25 09:23	04/24/25 18:47	1
1,4-Difluorobenzene (Surr)	92		70 - 130				04/24/25 09:23	04/24/25 18:47	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			04/24/25 18:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	282		50.4		mg/Kg			04/28/25 23:58	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	<50.4	U	50.4		mg/Kg		04/24/25 12:59	04/28/25 23:58	1
Diesel Range Organics (Over C10-C28)	282		50.4		mg/Kg		04/24/25 12:59	04/28/25 23:58	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		04/24/25 12:59	04/28/25 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				04/24/25 12:59	04/28/25 23:58	1
o-Terphenyl	97		70 - 130				04/24/25 12:59	04/28/25 23:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	306		10.0		mg/Kg			04/25/25 01:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 9

Lab Sample ID: 890-8026-21

Date Collected: 04/22/25 16:20

Matrix: Solid

Date Received: 04/23/25 09:37

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		04/24/25 09:23	04/24/25 19:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 19:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 19:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 19:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/25 09:23	04/24/25 19:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/25 09:23	04/24/25 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	04/24/25 09:23	04/24/25 19:08	1
1,4-Difluorobenzene (Surr)	86		70 - 130	04/24/25 09:23	04/24/25 19:08	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			04/24/25 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	951		49.9		mg/Kg			04/29/25 00:13	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		04/24/25 12:59	04/29/25 00:13	1
Diesel Range Organics (Over C10-C28)	951		49.9		mg/Kg		04/24/25 12:59	04/29/25 00:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/24/25 12:59	04/29/25 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130	04/24/25 12:59	04/29/25 00:13	1
o-Terphenyl	116		70 - 130	04/24/25 12:59	04/29/25 00:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1520		50.4		mg/Kg			04/25/25 09:09	5

Client Sample ID: HA - 9

Lab Sample ID: 890-8026-22

Date Collected: 04/22/25 16:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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		04/24/25 09:23	04/24/25 19:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 19:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 19:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 19:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 19:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/24/25 09:23	04/24/25 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	04/24/25 09:23	04/24/25 19:28	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 9

Lab Sample ID: 890-8026-22

Date Collected: 04/22/25 16:30

Matrix: Solid

Date Received: 04/23/25 09:37

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	84		70 - 130	04/24/25 09:23	04/24/25 19:28	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			04/24/25 19:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	295		49.7		mg/Kg			04/29/25 00:29	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		04/24/25 12:59	04/29/25 00:29	1
Diesel Range Organics (Over C10-C28)	295		49.7		mg/Kg		04/24/25 12:59	04/29/25 00:29	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		04/24/25 12:59	04/29/25 00:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				04/24/25 12:59	04/29/25 00:29	1
o-Terphenyl	103		70 - 130				04/24/25 12:59	04/29/25 00:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	401		10.1		mg/Kg			04/25/25 04:26	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-8026-1	HA - 1	277 S1+	96
890-8026-2	HA - 1	133 S1+	95
890-8026-3	HA - 1	125	94
890-8026-4	HA - 2	115	95
890-8026-5	HA - 2	109	89
890-8026-6	HA - 2	122	95
890-8026-7	HA - 3	164 S1+	98
890-8026-8	HA - 3	117	94
890-8026-9	HA - 3	122	94
890-8026-10	HA - 4	112	90
890-8026-11	HA - 4	83	96
890-8026-12	HA - 5	97	100
890-8026-13	HA - 5	83	84
890-8026-14	HA - 6	85	94
890-8026-15	HA - 6	79	92
890-8026-16	HA - 6	85	78
890-8026-17	HA - 7	84	95
890-8026-18	HA - 7	85	98
890-8026-19	HA - 8	93	97
890-8026-20	HA - 8	85	92
890-8026-21	HA - 9	94	86
890-8026-22	HA - 9	90	84
LCS 880-108522/1-A	Lab Control Sample	101	89
LCS 880-108524/1-A	Lab Control Sample	100	72
LCSD 880-108522/2-A	Lab Control Sample Dup	100	90
LCSD 880-108524/2-A	Lab Control Sample Dup	103	71
MB 880-108522/5-A	Method Blank	84	94
MB 880-108524/5-A	Method Blank	106	83
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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-8026-1	HA - 1	291 S1+	525 S1+
890-8026-2	HA - 1	187 S1+	235 S1+
890-8026-3	HA - 1	183 S1+	186 S1+
890-8026-4	HA - 2	179 S1+	210 S1+
890-8026-5	HA - 2	180 S1+	179 S1+
890-8026-6	HA - 2	179 S1+	185 S1+
890-8026-7	HA - 3	183 S1+	245 S1+
890-8026-8	HA - 3	189 S1+	191 S1+
890-8026-9	HA - 3	187 S1+	189 S1+
890-8026-10	HA - 4	188 S1+	213 S1+
890-8026-11	HA - 4	181 S1+	183 S1+

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea 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)
890-8026-12	HA - 5	184 S1+	207 S1+
890-8026-13	HA - 5	135 S1+	135 S1+
890-8026-14	HA - 6	129	144 S1+
890-8026-15	HA - 6	128	126
890-8026-16	HA - 6	131 S1+	132 S1+
890-8026-17	HA - 7	130	132 S1+
890-8026-18	HA - 7	135 S1+	140 S1+
890-8026-19	HA - 8	103	127
890-8026-20	HA - 8	101	97
890-8026-21	HA - 9	106	116
890-8026-22	HA - 9	106	103
LCS 880-108437/2-A	Lab Control Sample	150 S1+	143 S1+
LCS 880-108510/2-A	Lab Control Sample	113	123
LCS 880-108574/2-A	Lab Control Sample	164 S1+	148 S1+
LCSD 880-108437/3-A	Lab Control Sample Dup	151 S1+	144 S1+
LCSD 880-108510/3-A	Lab Control Sample Dup	126	113
LCSD 880-108574/3-A	Lab Control Sample Dup	166 S1+	149 S1+
MB 880-108437/1-A	Method Blank	104	99
MB 880-108510/1-A	Method Blank	165 S1+	164 S1+
MB 880-108574/1-A	Method Blank	107	103

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-108522/5-A

Matrix: Solid

Analysis Batch: 108515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108522

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 11:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 11:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/25 09:23	04/24/25 11:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:23	04/24/25 11:33	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/25 09:23	04/24/25 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/24/25 09:23	04/24/25 11:33	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/24/25 09:23	04/24/25 11:33	1

Lab Sample ID: LCS 880-108522/1-A

Matrix: Solid

Analysis Batch: 108515

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108522

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08178		mg/Kg		82	70 - 130
Toluene	0.100	0.07989		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.09941		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1814		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09244		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	89		70 - 130

Lab Sample ID: LCSD 880-108522/2-A

Matrix: Solid

Analysis Batch: 108515

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108522

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09564		mg/Kg		96	70 - 130	16	35
Toluene	0.100	0.09510		mg/Kg		95	70 - 130	17	35
Ethylbenzene	0.100	0.1158		mg/Kg		116	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.2117		mg/Kg		106	70 - 130	15	35
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130	15	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-108524/5-A

Matrix: Solid

Analysis Batch: 108521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 12:04	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108524/5-A

Matrix: Solid

Analysis Batch: 108521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/25 09:36	04/24/25 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/25 09:36	04/24/25 12:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/25 09:36	04/24/25 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/24/25 09:36	04/24/25 12:04	1
1,4-Difluorobenzene (Surr)	83		70 - 130	04/24/25 09:36	04/24/25 12:04	1

Lab Sample ID: LCS 880-108524/1-A

Matrix: Solid

Analysis Batch: 108521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108524

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09780		mg/Kg		98	70 - 130
Toluene	0.100	0.09001		mg/Kg		90	70 - 130
Ethylbenzene	0.100	0.09502		mg/Kg		95	70 - 130
m-Xylene & p-Xylene	0.200	0.1840		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09902		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	72		70 - 130

Lab Sample ID: LCSD 880-108524/2-A

Matrix: Solid

Analysis Batch: 108521

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108524

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1001		mg/Kg		100	70 - 130	2	35
Toluene	0.100	0.09083		mg/Kg		91	70 - 130	1	35
Ethylbenzene	0.100	0.09579		mg/Kg		96	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1870		mg/Kg		93	70 - 130	2	35
o-Xylene	0.100	0.1004		mg/Kg		100	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	71		70 - 130

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

Lab Sample ID: MB 880-108437/1-A

Matrix: Solid

Analysis Batch: 108845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108437

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		04/23/25 12:10	04/28/25 19:13	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108437/1-A

Matrix: Solid

Analysis Batch: 108845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/23/25 12:10	04/28/25 19:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/23/25 12:10	04/28/25 19:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				04/23/25 12:10	04/28/25 19:13	1
o-Terphenyl	99		70 - 130				04/23/25 12:10	04/28/25 19:13	1

Lab Sample ID: LCS 880-108437/2-A

Matrix: Solid

Analysis Batch: 108845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108437

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1114		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	958.7		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	150	S1+	70 - 130				
o-Terphenyl	143	S1+	70 - 130				

Lab Sample ID: LCSD 880-108437/3-A

Matrix: Solid

Analysis Batch: 108845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108437

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1096		mg/Kg		110	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	959.5		mg/Kg		96	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	151	S1+	70 - 130						
o-Terphenyl	144	S1+	70 - 130						

Lab Sample ID: MB 880-108510/1-A

Matrix: Solid

Analysis Batch: 108708

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108510

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		04/24/25 08:13	04/25/25 21:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/24/25 08:13	04/25/25 21:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/24/25 08:13	04/25/25 21:05	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	165	S1+	70 - 130				04/24/25 08:13	04/25/25 21:05	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108510/1-A

Matrix: Solid

Analysis Batch: 108708

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108510

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	164	S1+	70 - 130	04/24/25 08:13	04/25/25 21:05	1

Lab Sample ID: LCS 880-108510/2-A

Matrix: Solid

Analysis Batch: 108708

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1093		mg/Kg		109	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1212		mg/Kg		121	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	113		70 - 130				
<i>o</i> -Terphenyl	123		70 - 130				

Lab Sample ID: LCSD 880-108510/3-A

Matrix: Solid

Analysis Batch: 108708

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108510

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1012		mg/Kg		101	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	1058		mg/Kg		106	70 - 130	14	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	126		70 - 130						
<i>o</i> -Terphenyl	113		70 - 130						

Lab Sample ID: MB 880-108574/1-A

Matrix: Solid

Analysis Batch: 108847

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108574

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		04/24/25 12:59	04/28/25 19:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/24/25 12:59	04/28/25 19:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/24/25 12:59	04/28/25 19:13	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	107		70 - 130						
<i>o</i> -Terphenyl	103		70 - 130						

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-108574/2-A

Matrix: Solid

Analysis Batch: 108847

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1101		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1049		mg/Kg		105	70 - 130
		LCS	LCS				
		%Recovery	Qualifier				
Surrogate			Limits				
1-Chlorooctane	164	S1+	70 - 130				
o-Terphenyl	148	S1+	70 - 130				

Lab Sample ID: LCSD 880-108574/3-A

Matrix: Solid

Analysis Batch: 108847

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108574

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1107		mg/Kg		111	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1070		mg/Kg		107	70 - 130	2	20
		LCSD	LCSD						
		%Recovery	Qualifier						
Surrogate			Limits						
1-Chlorooctane	166	S1+	70 - 130						
o-Terphenyl	149	S1+	70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-108578/1-A

Matrix: Solid

Analysis Batch: 108599

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			04/24/25 22:31	1

Lab Sample ID: LCS 880-108578/2-A

Matrix: Solid

Analysis Batch: 108599

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.8		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-108578/3-A

Matrix: Solid

Analysis Batch: 108599

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	248.2		mg/Kg		99	90 - 110	1	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-8026-1 MS

Matrix: Solid

Analysis Batch: 108599

Client Sample ID: HA - 1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	3220	F1	1250	5196	F1	mg/Kg		159	90 - 110		

Lab Sample ID: 890-8026-1 MSD

Matrix: Solid

Analysis Batch: 108599

Client Sample ID: HA - 1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	3220	F1	1250	5210	F1	mg/Kg		160	90 - 110	0	20

Lab Sample ID: 890-8026-11 MS

Matrix: Solid

Analysis Batch: 108599

Client Sample ID: HA - 4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	81.0	F1	253	378.6	F1	mg/Kg		118	90 - 110		

Lab Sample ID: 890-8026-11 MSD

Matrix: Solid

Analysis Batch: 108599

Client Sample ID: HA - 4

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	81.0	F1	253	378.6	F1	mg/Kg		118	90 - 110	0	20

Lab Sample ID: MB 880-108590/1-A

Matrix: Solid

Analysis Batch: 108601

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			04/25/25 01:05	1

Lab Sample ID: LCS 880-108590/2-A

Matrix: Solid

Analysis Batch: 108601

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	256.4		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-108590/3-A

Matrix: Solid

Analysis Batch: 108601

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	252.4		mg/Kg		101	90 - 110	2	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 108515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-11	HA - 4	Total/NA	Solid	8021B	108522
890-8026-12	HA - 5	Total/NA	Solid	8021B	108522
890-8026-13	HA - 5	Total/NA	Solid	8021B	108522
890-8026-14	HA - 6	Total/NA	Solid	8021B	108522
890-8026-15	HA - 6	Total/NA	Solid	8021B	108522
890-8026-16	HA - 6	Total/NA	Solid	8021B	108522
890-8026-17	HA - 7	Total/NA	Solid	8021B	108522
890-8026-18	HA - 7	Total/NA	Solid	8021B	108522
890-8026-19	HA - 8	Total/NA	Solid	8021B	108522
890-8026-20	HA - 8	Total/NA	Solid	8021B	108522
890-8026-21	HA - 9	Total/NA	Solid	8021B	108522
890-8026-22	HA - 9	Total/NA	Solid	8021B	108522
MB 880-108522/5-A	Method Blank	Total/NA	Solid	8021B	108522
LCS 880-108522/1-A	Lab Control Sample	Total/NA	Solid	8021B	108522
LCSD 880-108522/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	108522

Analysis Batch: 108521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	8021B	108524
890-8026-2	HA - 1	Total/NA	Solid	8021B	108524
890-8026-3	HA - 1	Total/NA	Solid	8021B	108524
890-8026-4	HA - 2	Total/NA	Solid	8021B	108524
890-8026-5	HA - 2	Total/NA	Solid	8021B	108524
890-8026-6	HA - 2	Total/NA	Solid	8021B	108524
890-8026-7	HA - 3	Total/NA	Solid	8021B	108524
890-8026-8	HA - 3	Total/NA	Solid	8021B	108524
890-8026-9	HA - 3	Total/NA	Solid	8021B	108524
890-8026-10	HA - 4	Total/NA	Solid	8021B	108524
MB 880-108524/5-A	Method Blank	Total/NA	Solid	8021B	108524
LCS 880-108524/1-A	Lab Control Sample	Total/NA	Solid	8021B	108524
LCSD 880-108524/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	108524

Prep Batch: 108522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-11	HA - 4	Total/NA	Solid	5035	
890-8026-12	HA - 5	Total/NA	Solid	5035	
890-8026-13	HA - 5	Total/NA	Solid	5035	
890-8026-14	HA - 6	Total/NA	Solid	5035	
890-8026-15	HA - 6	Total/NA	Solid	5035	
890-8026-16	HA - 6	Total/NA	Solid	5035	
890-8026-17	HA - 7	Total/NA	Solid	5035	
890-8026-18	HA - 7	Total/NA	Solid	5035	
890-8026-19	HA - 8	Total/NA	Solid	5035	
890-8026-20	HA - 8	Total/NA	Solid	5035	
890-8026-21	HA - 9	Total/NA	Solid	5035	
890-8026-22	HA - 9	Total/NA	Solid	5035	
MB 880-108522/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-108522/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-108522/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

GC VOA

Prep Batch: 108524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	5035	
890-8026-2	HA - 1	Total/NA	Solid	5035	
890-8026-3	HA - 1	Total/NA	Solid	5035	
890-8026-4	HA - 2	Total/NA	Solid	5035	
890-8026-5	HA - 2	Total/NA	Solid	5035	
890-8026-6	HA - 2	Total/NA	Solid	5035	
890-8026-7	HA - 3	Total/NA	Solid	5035	
890-8026-8	HA - 3	Total/NA	Solid	5035	
890-8026-9	HA - 3	Total/NA	Solid	5035	
890-8026-10	HA - 4	Total/NA	Solid	5035	
MB 880-108524/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-108524/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-108524/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 108730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	Total BTEX	
890-8026-2	HA - 1	Total/NA	Solid	Total BTEX	
890-8026-3	HA - 1	Total/NA	Solid	Total BTEX	
890-8026-4	HA - 2	Total/NA	Solid	Total BTEX	
890-8026-5	HA - 2	Total/NA	Solid	Total BTEX	
890-8026-6	HA - 2	Total/NA	Solid	Total BTEX	
890-8026-7	HA - 3	Total/NA	Solid	Total BTEX	
890-8026-8	HA - 3	Total/NA	Solid	Total BTEX	
890-8026-9	HA - 3	Total/NA	Solid	Total BTEX	
890-8026-10	HA - 4	Total/NA	Solid	Total BTEX	
890-8026-11	HA - 4	Total/NA	Solid	Total BTEX	
890-8026-12	HA - 5	Total/NA	Solid	Total BTEX	
890-8026-13	HA - 5	Total/NA	Solid	Total BTEX	
890-8026-14	HA - 6	Total/NA	Solid	Total BTEX	
890-8026-15	HA - 6	Total/NA	Solid	Total BTEX	
890-8026-16	HA - 6	Total/NA	Solid	Total BTEX	
890-8026-17	HA - 7	Total/NA	Solid	Total BTEX	
890-8026-18	HA - 7	Total/NA	Solid	Total BTEX	
890-8026-19	HA - 8	Total/NA	Solid	Total BTEX	
890-8026-20	HA - 8	Total/NA	Solid	Total BTEX	
890-8026-21	HA - 9	Total/NA	Solid	Total BTEX	
890-8026-22	HA - 9	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 108437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-13	HA - 5	Total/NA	Solid	8015NM Prep	
890-8026-14	HA - 6	Total/NA	Solid	8015NM Prep	
890-8026-15	HA - 6	Total/NA	Solid	8015NM Prep	
890-8026-16	HA - 6	Total/NA	Solid	8015NM Prep	
890-8026-17	HA - 7	Total/NA	Solid	8015NM Prep	
890-8026-18	HA - 7	Total/NA	Solid	8015NM Prep	
MB 880-108437/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108437/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 108437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-108437/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 108510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	8015NM Prep	
890-8026-2	HA - 1	Total/NA	Solid	8015NM Prep	
890-8026-3	HA - 1	Total/NA	Solid	8015NM Prep	
890-8026-4	HA - 2	Total/NA	Solid	8015NM Prep	
890-8026-5	HA - 2	Total/NA	Solid	8015NM Prep	
890-8026-6	HA - 2	Total/NA	Solid	8015NM Prep	
890-8026-7	HA - 3	Total/NA	Solid	8015NM Prep	
890-8026-8	HA - 3	Total/NA	Solid	8015NM Prep	
890-8026-9	HA - 3	Total/NA	Solid	8015NM Prep	
890-8026-10	HA - 4	Total/NA	Solid	8015NM Prep	
890-8026-11	HA - 4	Total/NA	Solid	8015NM Prep	
890-8026-12	HA - 5	Total/NA	Solid	8015NM Prep	
MB 880-108510/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108510/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 108574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-19	HA - 8	Total/NA	Solid	8015NM Prep	
890-8026-20	HA - 8	Total/NA	Solid	8015NM Prep	
890-8026-21	HA - 9	Total/NA	Solid	8015NM Prep	
890-8026-22	HA - 9	Total/NA	Solid	8015NM Prep	
MB 880-108574/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108574/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108574/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 108708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	8015B NM	108510
890-8026-2	HA - 1	Total/NA	Solid	8015B NM	108510
890-8026-3	HA - 1	Total/NA	Solid	8015B NM	108510
890-8026-4	HA - 2	Total/NA	Solid	8015B NM	108510
890-8026-5	HA - 2	Total/NA	Solid	8015B NM	108510
890-8026-6	HA - 2	Total/NA	Solid	8015B NM	108510
890-8026-7	HA - 3	Total/NA	Solid	8015B NM	108510
890-8026-8	HA - 3	Total/NA	Solid	8015B NM	108510
890-8026-9	HA - 3	Total/NA	Solid	8015B NM	108510
890-8026-10	HA - 4	Total/NA	Solid	8015B NM	108510
890-8026-11	HA - 4	Total/NA	Solid	8015B NM	108510
890-8026-12	HA - 5	Total/NA	Solid	8015B NM	108510
MB 880-108510/1-A	Method Blank	Total/NA	Solid	8015B NM	108510
LCS 880-108510/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108510
LCSD 880-108510/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108510

Analysis Batch: 108800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 108800 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-2	HA - 1	Total/NA	Solid	8015 NM	
890-8026-3	HA - 1	Total/NA	Solid	8015 NM	
890-8026-4	HA - 2	Total/NA	Solid	8015 NM	
890-8026-5	HA - 2	Total/NA	Solid	8015 NM	
890-8026-6	HA - 2	Total/NA	Solid	8015 NM	
890-8026-7	HA - 3	Total/NA	Solid	8015 NM	
890-8026-8	HA - 3	Total/NA	Solid	8015 NM	
890-8026-9	HA - 3	Total/NA	Solid	8015 NM	
890-8026-10	HA - 4	Total/NA	Solid	8015 NM	
890-8026-11	HA - 4	Total/NA	Solid	8015 NM	
890-8026-12	HA - 5	Total/NA	Solid	8015 NM	
890-8026-13	HA - 5	Total/NA	Solid	8015 NM	
890-8026-14	HA - 6	Total/NA	Solid	8015 NM	
890-8026-15	HA - 6	Total/NA	Solid	8015 NM	
890-8026-16	HA - 6	Total/NA	Solid	8015 NM	
890-8026-17	HA - 7	Total/NA	Solid	8015 NM	
890-8026-18	HA - 7	Total/NA	Solid	8015 NM	
890-8026-19	HA - 8	Total/NA	Solid	8015 NM	
890-8026-20	HA - 8	Total/NA	Solid	8015 NM	
890-8026-21	HA - 9	Total/NA	Solid	8015 NM	
890-8026-22	HA - 9	Total/NA	Solid	8015 NM	

Analysis Batch: 108845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-13	HA - 5	Total/NA	Solid	8015B NM	108437
890-8026-14	HA - 6	Total/NA	Solid	8015B NM	108437
890-8026-15	HA - 6	Total/NA	Solid	8015B NM	108437
890-8026-16	HA - 6	Total/NA	Solid	8015B NM	108437
890-8026-17	HA - 7	Total/NA	Solid	8015B NM	108437
890-8026-18	HA - 7	Total/NA	Solid	8015B NM	108437
MB 880-108437/1-A	Method Blank	Total/NA	Solid	8015B NM	108437
LCS 880-108437/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108437
LCSD 880-108437/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108437

Analysis Batch: 108847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-19	HA - 8	Total/NA	Solid	8015B NM	108574
890-8026-20	HA - 8	Total/NA	Solid	8015B NM	108574
890-8026-21	HA - 9	Total/NA	Solid	8015B NM	108574
890-8026-22	HA - 9	Total/NA	Solid	8015B NM	108574
MB 880-108574/1-A	Method Blank	Total/NA	Solid	8015B NM	108574
LCS 880-108574/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108574
LCSD 880-108574/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108574

HPLC/IC

Leach Batch: 108578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Soluble	Solid	DI Leach	
890-8026-2	HA - 1	Soluble	Solid	DI Leach	
890-8026-3	HA - 1	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 108578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-4	HA - 2	Soluble	Solid	DI Leach	
890-8026-5	HA - 2	Soluble	Solid	DI Leach	
890-8026-6	HA - 2	Soluble	Solid	DI Leach	
890-8026-7	HA - 3	Soluble	Solid	DI Leach	
890-8026-8	HA - 3	Soluble	Solid	DI Leach	
890-8026-9	HA - 3	Soluble	Solid	DI Leach	
890-8026-10	HA - 4	Soluble	Solid	DI Leach	
890-8026-11	HA - 4	Soluble	Solid	DI Leach	
890-8026-12	HA - 5	Soluble	Solid	DI Leach	
890-8026-13	HA - 5	Soluble	Solid	DI Leach	
890-8026-14	HA - 6	Soluble	Solid	DI Leach	
890-8026-15	HA - 6	Soluble	Solid	DI Leach	
890-8026-16	HA - 6	Soluble	Solid	DI Leach	
890-8026-17	HA - 7	Soluble	Solid	DI Leach	
890-8026-18	HA - 7	Soluble	Solid	DI Leach	
890-8026-19	HA - 8	Soluble	Solid	DI Leach	
890-8026-20	HA - 8	Soluble	Solid	DI Leach	
MB 880-108578/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108578/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108578/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8026-1 MS	HA - 1	Soluble	Solid	DI Leach	
890-8026-1 MSD	HA - 1	Soluble	Solid	DI Leach	
890-8026-11 MS	HA - 4	Soluble	Solid	DI Leach	
890-8026-11 MSD	HA - 4	Soluble	Solid	DI Leach	

Leach Batch: 108590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-21	HA - 9	Soluble	Solid	DI Leach	
890-8026-22	HA - 9	Soluble	Solid	DI Leach	
MB 880-108590/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108590/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108590/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 108599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-1	HA - 1	Soluble	Solid	300.0	108578
890-8026-2	HA - 1	Soluble	Solid	300.0	108578
890-8026-3	HA - 1	Soluble	Solid	300.0	108578
890-8026-4	HA - 2	Soluble	Solid	300.0	108578
890-8026-5	HA - 2	Soluble	Solid	300.0	108578
890-8026-6	HA - 2	Soluble	Solid	300.0	108578
890-8026-7	HA - 3	Soluble	Solid	300.0	108578
890-8026-8	HA - 3	Soluble	Solid	300.0	108578
890-8026-9	HA - 3	Soluble	Solid	300.0	108578
890-8026-10	HA - 4	Soluble	Solid	300.0	108578
890-8026-11	HA - 4	Soluble	Solid	300.0	108578
890-8026-12	HA - 5	Soluble	Solid	300.0	108578
890-8026-13	HA - 5	Soluble	Solid	300.0	108578
890-8026-14	HA - 6	Soluble	Solid	300.0	108578
890-8026-15	HA - 6	Soluble	Solid	300.0	108578
890-8026-16	HA - 6	Soluble	Solid	300.0	108578

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 108599 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-17	HA - 7	Soluble	Solid	300.0	108578
890-8026-18	HA - 7	Soluble	Solid	300.0	108578
890-8026-19	HA - 8	Soluble	Solid	300.0	108578
890-8026-20	HA - 8	Soluble	Solid	300.0	108578
MB 880-108578/1-A	Method Blank	Soluble	Solid	300.0	108578
LCS 880-108578/2-A	Lab Control Sample	Soluble	Solid	300.0	108578
LCSD 880-108578/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108578
890-8026-1 MS	HA - 1	Soluble	Solid	300.0	108578
890-8026-1 MSD	HA - 1	Soluble	Solid	300.0	108578
890-8026-11 MS	HA - 4	Soluble	Solid	300.0	108578
890-8026-11 MSD	HA - 4	Soluble	Solid	300.0	108578

Analysis Batch: 108601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8026-21	HA - 9	Soluble	Solid	300.0	108590
890-8026-22	HA - 9	Soluble	Solid	300.0	108590
MB 880-108590/1-A	Method Blank	Soluble	Solid	300.0	108590
LCS 880-108590/2-A	Lab Control Sample	Soluble	Solid	300.0	108590
LCSD 880-108590/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108590

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-1

Date Collected: 04/22/25 13:00

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	108521	04/24/25 19:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 19:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 00:56	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	108708	04/26/25 00:56	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		5			108599	04/24/25 22:48	CH	EET MID

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-2

Date Collected: 04/22/25 13:10

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	108521	04/24/25 19:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 19:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 01:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 01:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:05	CH	EET MID

Client Sample ID: HA - 1

Lab Sample ID: 890-8026-3

Date Collected: 04/22/25 13:20

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 17:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 01:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 01:45	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:11	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-4

Date Collected: 04/22/25 13:30

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 17:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:24	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-4

Date Collected: 04/22/25 13:30

Matrix: Solid

Date Received: 04/23/25 09:37

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			108800	04/26/25 02:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 02:02	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		5			108599	04/24/25 23:16	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-5

Date Collected: 04/22/25 13:40

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 17:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 02:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 02:18	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:22	CH	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-8026-6

Date Collected: 04/22/25 13:50

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 02:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 02:36	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:39	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-7

Date Collected: 04/22/25 14:00

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	108521	04/24/25 20:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 20:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 02:52	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 02:52	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-7

Date Collected: 04/22/25 14:00

Matrix: Solid

Date Received: 04/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:45	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-8

Date Collected: 04/22/25 14:10

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 18:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 03:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 03:10	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:50	CH	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-8026-9

Date Collected: 04/22/25 14:20

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 18:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 03:25	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 03:25	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/24/25 23:56	CH	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-8026-10

Date Collected: 04/22/25 14:30

Matrix: Solid

Date Received: 04/23/25 09:37

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	108524	04/24/25 09:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108521	04/24/25 19:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 19:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 03:43	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 03:43	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:02	CH	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-8026-11

Date Collected: 04/22/25 14:40

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 14:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 14:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 03:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 03:59	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:07	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-12

Date Collected: 04/22/25 14:50

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 15:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 15:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/26/25 04:16	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	108510	04/24/25 08:13	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108708	04/26/25 04:16	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:24	CH	EET MID

Client Sample ID: HA - 5

Lab Sample ID: 890-8026-13

Date Collected: 04/22/25 15:00

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 16:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 16:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 00:13	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 00:13	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:30	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-14

Date Collected: 04/22/25 15:10

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 16:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 16:44	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-14

Date Collected: 04/22/25 15:10

Matrix: Solid

Date Received: 04/23/25 09:37

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			108800	04/29/25 00:29	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 00:29	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		5			108599	04/25/25 00:47	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-15

Date Collected: 04/22/25 15:20

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 17:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 00:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 00:44	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:52	CH	EET MID

Client Sample ID: HA - 6

Lab Sample ID: 890-8026-16

Date Collected: 04/22/25 15:30

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 17:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 01:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 01:00	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 00:58	CH	EET MID

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-17

Date Collected: 04/22/25 15:40

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 17:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 17:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 01:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 01:14	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-17

Date Collected: 04/22/25 15:40

Matrix: Solid

Date Received: 04/23/25 09:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 01:04	CH	EET MID

Client Sample ID: HA - 7

Lab Sample ID: 890-8026-18

Date Collected: 04/22/25 15:50

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 18:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 01:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	108437	04/23/25 12:10	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108845	04/29/25 01:29	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 01:09	CH	EET MID

Client Sample ID: HA - 8

Lab Sample ID: 890-8026-19

Date Collected: 04/22/25 16:00

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 18:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/28/25 23:42	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	108574	04/24/25 12:59	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108847	04/28/25 23:42	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 01:15	CH	EET MID

Client Sample ID: HA - 8

Lab Sample ID: 890-8026-20

Date Collected: 04/22/25 16:10

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 18:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 18:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/28/25 23:58	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	108574	04/24/25 12:59	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108847	04/28/25 23:58	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	108578	04/24/25 14:05	SA	EET MID
Soluble	Analysis	300.0		1			108599	04/25/25 01:21	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Client Sample ID: HA - 9

Lab Sample ID: 890-8026-21

Date Collected: 04/22/25 16:20

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 19:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 19:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 00:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	108574	04/24/25 12:59	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108847	04/29/25 00:13	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108590	04/24/25 15:09	SI	EET MID
Soluble	Analysis	300.0		5			108601	04/25/25 09:09	CH	EET MID

Client Sample ID: HA - 9

Lab Sample ID: 890-8026-22

Date Collected: 04/22/25 16:30

Matrix: Solid

Date Received: 04/23/25 09:37

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	108522	04/24/25 09:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108515	04/24/25 19:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108730	04/24/25 19:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			108800	04/29/25 00:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	108574	04/24/25 12:59	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108847	04/29/25 00:29	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	108590	04/24/25 15:09	SI	EET MID
Soluble	Analysis	300.0		1			108601	04/25/25 04:26	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea 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

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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8026-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8026-1	HA - 1	Solid	04/22/25 13:00	04/23/25 09:37	0.5
890-8026-2	HA - 1	Solid	04/22/25 13:10	04/23/25 09:37	1
890-8026-3	HA - 1	Solid	04/22/25 13:20	04/23/25 09:37	2
890-8026-4	HA - 2	Solid	04/22/25 13:30	04/23/25 09:37	0.5
890-8026-5	HA - 2	Solid	04/22/25 13:40	04/23/25 09:37	1
890-8026-6	HA - 2	Solid	04/22/25 13:50	04/23/25 09:37	2
890-8026-7	HA - 3	Solid	04/22/25 14:00	04/23/25 09:37	0.5
890-8026-8	HA - 3	Solid	04/22/25 14:10	04/23/25 09:37	1
890-8026-9	HA - 3	Solid	04/22/25 14:20	04/23/25 09:37	2
890-8026-10	HA - 4	Solid	04/22/25 14:30	04/23/25 09:37	0.5
890-8026-11	HA - 4	Solid	04/22/25 14:40	04/23/25 09:37	1
890-8026-12	HA - 5	Solid	04/22/25 14:50	04/23/25 09:37	0.5
890-8026-13	HA - 5	Solid	04/22/25 15:00	04/23/25 09:37	1
890-8026-14	HA - 6	Solid	04/22/25 15:10	04/23/25 09:37	0.5
890-8026-15	HA - 6	Solid	04/22/25 15:20	04/23/25 09:37	1
890-8026-16	HA - 6	Solid	04/22/25 15:30	04/23/25 09:37	2
890-8026-17	HA - 7	Solid	04/22/25 15:40	04/23/25 09:37	0.5
890-8026-18	HA - 7	Solid	04/22/25 15:50	04/23/25 09:37	1
890-8026-19	HA - 8	Solid	04/22/25 16:00	04/23/25 09:37	0.5
890-8026-20	HA - 8	Solid	04/22/25 16:10	04/23/25 09:37	1
890-8026-21	HA - 9	Solid	04/22/25 16:20	04/23/25 09:37	0.5
890-8026-22	HA - 9	Solid	04/22/25 16:30	04/23/25 09:37	1

Chain of Custody



Environment Testing
Xenco

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 3

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

ANALYSIS REQUEST										Preservative Codes	
Project Name:	Project Number:	Project Location:	Sampler's Name:	POWOW #:	Turn Around	Pres. Code	Barcode			Sample Comments	
Hognose Viper Federal Com #602H	2783	Lea County, NM	Santiago Giron		☒ Routine ☐ Rush		890-8026 Chain of Custody			None: NO	
Due Date: Routine TAT					TAT starts the day received by the lab, if received by 4:30pm					DI Water: H ₂ O	
SAMPLE RECEIPT					Parameters					Cool: Cool	
Samples Received Intact:	Temp Blank:	Yes No	Wet Ice:	Yes No	Thermometer ID: Talmor					HCL: HC	
Cooler Custody Seals:	Yes No	N/A	Correction Factor:	-0.2						H ₂ SO ₄ : H ₂	
Sample Custody Seals:	Yes No	N/A	Temperature Reading:	-0.1						H ₃ PO ₄ : HP	
Total Containers:	Corrected Temperature:									NaHSO ₄ : NABIS	
										Na ₂ S ₂ O ₃ : NaSO ₃	
										Zn Acetate+NaOH: Zn	
										NaOH+Ascorbic Acid: SAPC	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of	TPH - NM	Chloride - NM	BTEX - NM	24 Hr Rush	
HA-1	S	4.22.25	13:00	0.5	Grab/1	1	X	X	X		
HA-1	S	4.22.25	13:10	1	Grab/1	1	X	X	X		
HA-1	S	4.22.25	13:20	2	Grab/1	1	X	X	X		
HA-2	S	4.22.25	13:30	0.5	Grab/1	1	X	X	X		
HA-2	S	4.22.25	13:40	1	Grab/1	1	X	X	X		
HA-2	S	4.22.25	13:50	2	Grab/1	1	X	X	X		
HA-3	S	4.22.25	14:00	0.5	Grab/1	1	X	X	X		
HA-3	S	4.22.25	14:10	1	Grab/1	1	X	X	X		
HA-3	S	4.22.25	14:20	2	Grab/1	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 SiO₂ Na Sr Ti 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 \$6 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
<i>[Signature]</i>	<i>[Signature]</i>	4/23 9:37			
		4			
		6			

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

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



Environment Testing

Xenco

Work Order No:

www.xenco.com Page 2 of 3

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

Program: ☐ US/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

SAMPLE RECEIPT				Turn Around				Parameters				ANALYSIS REQUEST												Preservative Codes											
Project Name:	Project Number:	Project Location:	Sampler's Name:	Temp Blank:	Yes	No	Wet Ice:	Yes	No	Thermometer ID:	Correction Factor:	Temperature Reading:	Corrected Temperature:	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH - NM	Chloride - NM	BTEX - NM													None: NO	DI Water: H ₂ O
Hognose Viper Federal Com #602H	2783	Lea County, NM	Santiago Giron	Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	14:30	0.5	Grab/	1	X	X	X													Cool: Cool	MeOH: Me
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	14:40	1	Grab/	1	X	X	X													HCL: HC	HNO ₃ : HN
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	14:50	0.5	Grab/	1	X	X	X													H ₂ SO ₄ : H ₂	NaOH: Na
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:00	1	Grab/	1	X	X	X													H ₃ PO ₄ : HP	
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:10	0.5	Grab/	1	X	X	X													NaHSO ₄ : NABIS	
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:20	1	Grab/	1	X	X	X													Na ₂ S ₂ O ₃ : NaSO ₃	
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:30	2	Grab/	1	X	X	X													Zn Acetate+NaOH: Zn	
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:40	0.5	Grab/	1	X	X	X													NaOH+Ascorbic Acid: SAPC	
				Yes	No	Yes	No	Yes	No	NA	-0.2	-0.1		4.22.25	15:50	1	Grab/	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 Ti Sn U V Zn
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
<i>[Signature]</i>	<i>[Signature]</i>	4/23 933			
		4			
		6			

Revised Date: 08/25/2020 Rev. 2020.2

Chain of Custody

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

Work Order No:

Page 3 of 3
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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 product and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xenco.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
0		9/23 937				
3						

Revised Date: 08/25/2020 By: 20202

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8026-1

SDG Number: Lea County, NM

Login Number: 8026

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.	N/A	
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: 890-8026-1

SDG Number: Lea County, NM

Login Number: 8026

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 04/23/25 09:23 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	



Environment Testing

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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 4/30/2025 12:44:19 PM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8032-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

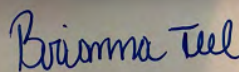
Eurofins Carlsbad

Job Notes

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

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

Authorization



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4/30/2025 12:44:19 PM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8032-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8032-1

Job ID: 890-8032-1

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Job Narrative 890-8032-1

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 4/25/2025 8:33 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 -1.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-10 (890-8032-1) and HA-10 (890-8032-2).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-108830 and analytical batch 880-108910 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-108910 recovered above the upper control limit for Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-108910/20).

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 sample was outside control limits: HA-10 (890-8032-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: HA-10 (890-8032-2). 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

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-108876 and analytical batch 880-108881 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Client Sample ID: HA-10

Lab Sample ID: 890-8032-1

Date Collected: 04/24/25 13:00

Matrix: Solid

Date Received: 04/25/25 08:33

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 11:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:43	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 11:43	1
o-Xylene	<0.00200	U F2 F1	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:43	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 11:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	04/28/25 10:44	04/29/25 11:43	1
1,4-Difluorobenzene (Surr)	106		70 - 130	04/28/25 10:44	04/29/25 11:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	2060		50.0		mg/Kg			04/29/25 18:37	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		04/28/25 08:33	04/29/25 18:37	1
Diesel Range Organics (Over C10-C28)	2060		50.0		mg/Kg		04/28/25 08:33	04/29/25 18:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130	04/28/25 08:33	04/29/25 18:37	1
o-Terphenyl	142	S1+	70 - 130	04/28/25 08:33	04/29/25 18:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1710		50.4		mg/Kg			04/29/25 01:33	5

Client Sample ID: HA-10

Lab Sample ID: 890-8032-2

Date Collected: 04/24/25 13:10

Matrix: Solid

Date Received: 04/25/25 08:33

Sample Depth: 1

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		04/28/25 10:44	04/29/25 12:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 12:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 12:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	04/28/25 10:44	04/29/25 12:04	1
1,4-Difluorobenzene (Surr)	89		70 - 130	04/28/25 10:44	04/29/25 12:04	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Client Sample ID: HA-10

Lab Sample ID: 890-8032-2

Date Collected: 04/24/25 13:10

Matrix: Solid

Date Received: 04/25/25 08:33

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	738		50.0		mg/Kg			04/29/25 18:52	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		04/28/25 08:33	04/29/25 18:52	1
Diesel Range Organics (Over C10-C28)	738		50.0		mg/Kg		04/28/25 08:33	04/29/25 18:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	139	S1+	70 - 130				04/28/25 08:33	04/29/25 18:52	1
o-Terphenyl	147	S1+	70 - 130				04/28/25 08:33	04/29/25 18:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	314	F1	9.98		mg/Kg			04/29/25 01:40	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea 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)
890-8032-1	HA-10	103	106
890-8032-1 MS	HA-10	117	107
890-8032-1 MSD	HA-10	107	105
890-8032-2	HA-10	94	89
LCS 880-108830/1-A	Lab Control Sample	104	94
LCSD 880-108830/2-A	Lab Control Sample Dup	103	100
MB 880-108830/5-A	Method Blank	84	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-8032-1	HA-10	132 S1+	142 S1+
890-8032-2	HA-10	139 S1+	147 S1+
LCS 880-108789/2-A	Lab Control Sample	114	109
LCSD 880-108789/3-A	Lab Control Sample Dup	119	112
MB 880-108789/1-A	Method Blank	109	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-108830/5-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108830

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/28/25 10:44	04/29/25 11:22	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/28/25 10:44	04/29/25 11:22	1

Lab Sample ID: LCS 880-108830/1-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1015		mg/Kg		102	70 - 130
Toluene	0.100	0.09215		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.1104		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1067		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-108830/2-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09984		mg/Kg		100	70 - 130	2	35
Toluene	0.100	0.08929		mg/Kg		89	70 - 130	3	35
Ethylbenzene	0.100	0.1102		mg/Kg		110	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2104		mg/Kg		105	70 - 130	1	35
o-Xylene	0.100	0.1058		mg/Kg		106	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-8032-1 MS

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: HA-10

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1053		mg/Kg		105	70 - 130
Toluene	<0.00200	U	0.100	0.07925		mg/Kg		79	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8032-1 MS

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: HA-10

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.08384		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1641		mg/Kg		82	70 - 130
o-Xylene	<0.00200	U F2 F1	0.100	0.08286		mg/Kg		83	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-8032-1 MSD

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: HA-10

Prep Type: Total/NA

Prep Batch: 108830

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	0.1071		mg/Kg		107	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.08059		mg/Kg		81	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.08180		mg/Kg		82	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1573		mg/Kg		79	70 - 130	4	35
o-Xylene	<0.00200	U F2 F1	0.100	0.1721	F1 F2	mg/Kg		172	70 - 130	70	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-108789/1-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108789

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		04/28/25 08:33	04/29/25 16:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	04/28/25 08:33	04/29/25 16:10	1
o-Terphenyl	106		70 - 130	04/28/25 08:33	04/29/25 16:10	1

Lab Sample ID: LCS 880-108789/2-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1134		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-108789/2-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108789

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-108789/3-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108789

	Spike	LCSD	LCSD					%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	1000	1169		mg/Kg		117	70 - 130	3	20		
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130	0	20		

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	112		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-108876/1-A

Matrix: Solid

Analysis Batch: 108881

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<10.0	U	10.0		mg/Kg			04/28/25 23:38	1	

Lab Sample ID: LCS 880-108876/2-A

Matrix: Solid

Analysis Batch: 108881

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	250	230.5		mg/Kg		92	90 - 110			

Lab Sample ID: LCSD 880-108876/3-A

Matrix: Solid

Analysis Batch: 108881

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD					%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Chloride	250	232.6		mg/Kg		93	90 - 110	1	20		

Lab Sample ID: 890-8032-2 MS

Matrix: Solid

Analysis Batch: 108881

Client Sample ID: HA-10

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	314	F1	250	535.6	F1	mg/Kg		89	90 - 110		

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-8032-2 MSD					Client Sample ID: HA-10							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 108881												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	314	F1	250	537.0	F1	mg/Kg		89	90 - 110	0	20	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

GC VOA

Prep Batch: 108830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	5035	
890-8032-2	HA-10	Total/NA	Solid	5035	
MB 880-108830/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8032-1 MS	HA-10	Total/NA	Solid	5035	
890-8032-1 MSD	HA-10	Total/NA	Solid	5035	

Analysis Batch: 108910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	8021B	108830
890-8032-2	HA-10	Total/NA	Solid	8021B	108830
MB 880-108830/5-A	Method Blank	Total/NA	Solid	8021B	108830
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	8021B	108830
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	108830
890-8032-1 MS	HA-10	Total/NA	Solid	8021B	108830
890-8032-1 MSD	HA-10	Total/NA	Solid	8021B	108830

GC Semi VOA

Prep Batch: 108789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	8015NM Prep	
890-8032-2	HA-10	Total/NA	Solid	8015NM Prep	
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 108919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	8015B NM	108789
890-8032-2	HA-10	Total/NA	Solid	8015B NM	108789
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015B NM	108789
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108789
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108789

Analysis Batch: 109098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	8015 NM	
890-8032-2	HA-10	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 108876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Soluble	Solid	DI Leach	
890-8032-2	HA-10	Soluble	Solid	DI Leach	
MB 880-108876/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108876/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108876/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8032-2 MS	HA-10	Soluble	Solid	DI Leach	
890-8032-2 MSD	HA-10	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

HPLC/IC

Analysis Batch: 108881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Soluble	Solid	300.0	108876
890-8032-2	HA-10	Soluble	Solid	300.0	108876
MB 880-108876/1-A	Method Blank	Soluble	Solid	300.0	108876
LCS 880-108876/2-A	Lab Control Sample	Soluble	Solid	300.0	108876
LCSD 880-108876/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108876
890-8032-2 MS	HA-10	Soluble	Solid	300.0	108876
890-8032-2 MSD	HA-10	Soluble	Solid	300.0	108876

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Client Sample ID: HA-10

Lab Sample ID: 890-8032-1

Date Collected: 04/24/25 13:00

Matrix: Solid

Date Received: 04/25/25 08:33

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 11:43	MNR	EET MID
Total/NA	Analysis	8015 NM		1			109098	04/29/25 18:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 18:37	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		5			108881	04/29/25 01:33	CH	EET MID

Client Sample ID: HA-10

Lab Sample ID: 890-8032-2

Date Collected: 04/24/25 13:10

Matrix: Solid

Date Received: 04/25/25 08:33

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 12:04	MNR	EET MID
Total/NA	Analysis	8015 NM		1			109098	04/29/25 18:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 18:52	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 01:40	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea 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

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	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.

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: Hognose Viper Federal Com #602H

Job ID: 890-8032-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8032-1	HA-10	Solid	04/24/25 13:00	04/25/25 08:33	0.5
890-8032-2	HA-10	Solid	04/24/25 13:10	04/25/25 08:33	1

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



Chain of Custody

Houston, TX (281) 240-4299, Dallas, TX (214) 502-0300
 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

890-8032 Chain of Custody



www.xenco.com Page 1 of 1

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

[illegible]

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zr
Hg: 1631 / 245.1 / 7470 / 77

Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document at relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$66.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xeno, 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
		4/25 830			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8032-1

SDG Number: Lea County, NM

Login Number: 8032

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: 890-8032-1

SDG Number: Lea County, NM

Login Number: 8032

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 04/28/25 11:12 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 10/9/2025 11:31:38 AM Revision 1

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8032-2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

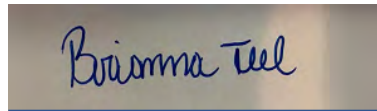
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
10/9/2025 11:31:38 AM
Revision 1

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8032-2
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

Qualifiers

GC VOA

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: Hognose Viper Federal Com #602H

Job ID: 890-8032-2

Job ID: 890-8032-2**Eurofins Carlsbad****Job Narrative
890-8032-2****REVISION**

The report being provided is a revision of the original report sent on 5/6/2025. The report (revision 1) is being revised due to Revised to rerun report to include BTEX results, sample summary, COC and receipt checklist.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 4/25/2025 8:33 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 -1.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-10 (890-8032-1) and HA-10 (890-8032-2).

GC VOA

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

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

Client Sample ID: HA-10
Date Collected: 04/24/25 13:00
Date Received: 04/25/25 08:33
Sample Depth: 0.5

Lab Sample ID: 890-8032-1
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/29/25 11:43	1

Client Sample ID: HA-10
Date Collected: 04/24/25 13:10
Date Received: 04/25/25 08:33
Sample Depth: 1

Lab Sample ID: 890-8032-2
Matrix: Solid

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			04/29/25 12:04	1

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

GC VOA

Analysis Batch: 109490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8032-1	HA-10	Total/NA	Solid	Total BTEX	
890-8032-2	HA-10	Total/NA	Solid	Total BTEX	

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

Client Sample ID: HA-10
Date Collected: 04/24/25 13:00
Date Received: 04/25/25 08:33

Lab Sample ID: 890-8032-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Total BTEX		1			109490	04/29/25 11:43	AJ	EET MID

Client Sample ID: HA-10
Date Collected: 04/24/25 13:10
Date Received: 04/25/25 08:33

Lab Sample ID: 890-8032-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Total BTEX		1			109490	04/29/25 12:04	AJ	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea 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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

Method	Method Description	Protocol	Laboratory
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID

- Protocol References:**
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure
- Laboratory References:**
- EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Sample Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8032-2
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8032-1	HA-10	Solid	04/24/25 13:00	04/25/25 08:33	0.5
890-8032-2	HA-10	Solid	04/24/25 13:10	04/25/25 08:33	1

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Environment Testing

Xenoco

Chain of Custody

Houston, TX (281) 240-4289, 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

890-8032 Chain of Custody



www.xenoco.com

Page 1 of 1

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

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:	Hognose Viper Federal Com #602H	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes		
Project Number:	2783	☒ Routine ☐ Rush																	None: NO	DI Water: H ₂ O		
Project Location:	Lea County, NM	Due Date:	Routine TAT																Cool: Cool	MeOH: Me		
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																	HCL: HC	HNO ₃ : HN		
POW/O #:																			H ₂ SO ₄ : H ₂	NaOH: Na		
SAMPLE RECEIPT	Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	Parameters																H ₃ PO ₄ : HP	
Samples Received Intact:	Yes No	Thermometer ID:	Tuncer																NaHSO ₄ : NABIS			
Cooler Custody Seals:	Yes No	Correction Factor:	-0.2																Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:	Yes No	Temperature Reading:	-1.6																Zn Acetate+NaOH: Zn			
Total Containers:		Corrected Temperature:	-1.41																NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush									Sample Comments		
HA-10	S	4.24.25	13:00	0.5	Grab/	1	X	X	X											Incident Number		
HA-10	S	4.24.25	13:10	1	Grab/	1	X	X	X											nAPP2500721668		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mn Mo Ni K Se Ag SiO₂ Na Sr Ti 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 Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco 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 Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, 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
		4/125 8302			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8032-2

SDG Number: Lea County, NM

Login Number: 8032**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	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8032-2

SDG Number: Lea County, NM

Login Number: 8032**List Number: 2****Creator: Laing, Edmundo****List Source: Eurofins Midland****List Creation: 04/28/25 11:12 AM**

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Carlsbad



Environment Testing

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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 5/12/2025 3:52:21 PM Revision 1

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8034-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

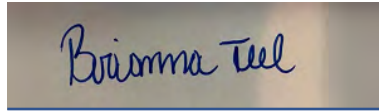
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
5/12/2025 3:52:21 PM
Revision 1

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8034-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8034-1

Job ID: 890-8034-1**Eurofins Carlsbad**

Job Narrative
890-8034-1

REVISION

The report being provided is a revision of the original report sent on 5/1/2025. The report (revision 1) is being revised due to Revised to correct sample depth for sample 001 (HA-11A) to 0.5'.

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 4/25/2025 8:30 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 -1.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 11A (890-8034-1), HA - 11B (890-8034-2), HA - 12A (890-8034-3), HA - 12B (890-8034-4), HA - 13A (890-8034-5), HA - 13A (890-8034-6) and HA - 13B (890-8034-7).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-108910 recovered above the upper control limit for Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-108910/20).

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 - 11B (890-8034-2), HA - 12A (890-8034-3), HA - 12B (890-8034-4), (890-8027-A-1-I MS) and (890-8027-A-1-J MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 11A (890-8034-1) and HA - 13A (890-8034-5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-108955/2-A), (LCSD 880-108955/3-A), (890-8034-A-6-D MS) and (890-8034-A-6-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-109022/56). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-108955 and analytical batch 880-109022 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.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-109022 recovered below the lower control limit for Gasoline Range Organics (GRO)-C6-C10. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is:(CCV 880-109022/30).

Eurofins Carlsbad

Case Narrative

Client: Earth Systems Response and Restoration
Project: Hognose Viper Federal Com #602H

Job ID: 890-8034-1

Job ID: 890-8034-1 (Continued) Eurofins Carlsbad

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 11A

Lab Sample ID: 890-8034-1

Date Collected: 04/24/25 13:20

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 17:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 17:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 17:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 17:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 17:29	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 17:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	04/28/25 10:44	04/29/25 17:29	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/28/25 10:44	04/29/25 17:29	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			04/29/25 17:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	135		49.9		mg/Kg			04/30/25 08:50	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		04/28/25 08:33	04/30/25 08:50	1
Diesel Range Organics (Over C10-C28)	135		49.9		mg/Kg		04/28/25 08:33	04/30/25 08:50	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/28/25 08:33	04/30/25 08:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130	04/28/25 08:33	04/30/25 08:50	1
o-Terphenyl	134	S1+	70 - 130	04/28/25 08:33	04/30/25 08:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1740		50.4		mg/Kg			04/29/25 11:08	5

Client Sample ID: HA - 11B

Lab Sample ID: 890-8034-2

Date Collected: 04/24/25 14:00

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 17:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/28/25 10:44	04/29/25 17:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/28/25 10:44	04/29/25 17:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/28/25 10:44	04/29/25 17:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/28/25 10:44	04/29/25 17:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/28/25 10:44	04/29/25 17:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	04/28/25 10:44	04/29/25 17:49	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 11B

Lab Sample ID: 890-8034-2

Date Collected: 04/24/25 14:00

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	79		70 - 130	04/28/25 10:44	04/29/25 17:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			04/29/25 17:49	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			04/30/25 09:06	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		04/28/25 08:33	04/30/25 09:06	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/30/25 09:06	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/30/25 09:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				04/28/25 08:33	04/30/25 09:06	1
o-Terphenyl	130		70 - 130				04/28/25 08:33	04/30/25 09:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2360	F1	49.8		mg/Kg			04/28/25 21:52	5

Client Sample ID: HA - 12A

Lab Sample ID: 890-8034-3

Date Collected: 04/24/25 13:30

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 18:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 18:10	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 18:10	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/28/25 10:44	04/29/25 18:10	1
1,4-Difluorobenzene (Surr)	92		70 - 130	04/28/25 10:44	04/29/25 18:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/29/25 18:10	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			04/30/25 09:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 12A

Date Collected: 04/24/25 13:30

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Lab Sample ID: 890-8034-3

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	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/30/25 09:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/30/25 09:21	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/30/25 09:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130				04/28/25 08:33	04/30/25 09:21	1
o-Terphenyl	128		70 - 130				04/28/25 08:33	04/30/25 09:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	791		10.1		mg/Kg			04/28/25 22:10	1

Client Sample ID: HA - 12B

Date Collected: 04/24/25 14:10

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Lab Sample ID: 890-8034-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		04/28/25 10:44	04/29/25 18:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				04/28/25 10:44	04/29/25 18:30	1
1,4-Difluorobenzene (Surr)	80		70 - 130				04/28/25 10:44	04/29/25 18:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			04/29/25 18:30	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			04/30/25 09:37	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		04/28/25 08:33	04/30/25 09:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/30/25 09:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/30/25 09:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130				04/28/25 08:33	04/30/25 09:37	1
o-Terphenyl	128		70 - 130				04/28/25 08:33	04/30/25 09:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 12B

Date Collected: 04/24/25 14:10

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Lab Sample ID: 890-8034-4

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2360		50.3		mg/Kg			04/28/25 22:15	5

Client Sample ID: HA - 13A

Date Collected: 04/24/25 13:40

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Lab Sample ID: 890-8034-5

Matrix: Solid

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		04/28/25 10:44	04/29/25 18:51	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 18:51	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 18:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 18:51	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 18:51	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130				04/28/25 10:44	04/29/25 18:51	1
1,4-Difluorobenzene (Surr)	79		70 - 130				04/28/25 10:44	04/29/25 18:51	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			04/29/25 18:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	88.2		49.8		mg/Kg			04/30/25 09:51	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		04/28/25 08:33	04/30/25 09:51	1
Diesel Range Organics (Over C10-C28)	88.2		49.8		mg/Kg		04/28/25 08:33	04/30/25 09:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/30/25 09:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				04/28/25 08:33	04/30/25 09:51	1
o-Terphenyl	134	S1+	70 - 130				04/28/25 08:33	04/30/25 09:51	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1060		9.94		mg/Kg			04/28/25 22:32	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 13A

Lab Sample ID: 890-8034-6

Date Collected: 04/24/25 13:50

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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		04/28/25 10:44	04/29/25 19:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 19:11	1
o-Xylene	0.00356		0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:11	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	04/28/25 10:44	04/29/25 19:11	1
1,4-Difluorobenzene (Surr)	79		70 - 130	04/28/25 10:44	04/29/25 19:11	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			04/29/25 19:11	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			04/30/25 20:49	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		04/29/25 10:45	04/30/25 20:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U F1	49.9		mg/Kg		04/29/25 10:45	04/30/25 20:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/29/25 10:45	04/30/25 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	04/29/25 10:45	04/30/25 20:49	1
o-Terphenyl	76		70 - 130	04/29/25 10:45	04/30/25 20:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	173		9.90		mg/Kg			04/28/25 22:38	1

Client Sample ID: HA - 13B

Lab Sample ID: 890-8034-7

Date Collected: 04/24/25 14:20

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 19:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:32	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 19:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 19:32	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 19:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/28/25 10:44	04/29/25 19:32	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 13B

Lab Sample ID: 890-8034-7

Date Collected: 04/24/25 14:20

Matrix: Solid

Date Received: 04/25/25 08:30

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	04/28/25 10:44	04/29/25 19:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/29/25 19:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			04/30/25 21:51	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		04/29/25 10:45	04/30/25 21:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/29/25 10:45	04/30/25 21:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/29/25 10:45	04/30/25 21:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130				04/29/25 10:45	04/30/25 21:51	1
o-Terphenyl	70		70 - 130				04/29/25 10:45	04/30/25 21:51	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	438		10.1		mg/Kg			04/28/25 22:43	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea 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)
890-8034-1	HA - 11A	87	94
890-8034-2	HA - 11B	87	79
890-8034-3	HA - 12A	83	92
890-8034-4	HA - 12B	88	80
890-8034-5	HA - 13A	87	79
890-8034-6	HA - 13A	87	79
890-8034-7	HA - 13B	83	96
LCS 880-108830/1-A	Lab Control Sample	104	94
LCSD 880-108830/2-A	Lab Control Sample Dup	103	100
MB 880-108830/5-A	Method Blank	84	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-8034-1	HA - 11A	137 S1+	134 S1+
890-8034-2	HA - 11B	134 S1+	130
890-8034-3	HA - 12A	134 S1+	128
890-8034-4	HA - 12B	133 S1+	128
890-8034-5	HA - 13A	132 S1+	134 S1+
890-8034-6	HA - 13A	78	76
890-8034-6 MS	HA - 13A	65 S1-	58 S1-
890-8034-6 MSD	HA - 13A	62 S1-	55 S1-
890-8034-7	HA - 13B	73	70
LCS 880-108789/2-A	Lab Control Sample	114	109
LCS 880-108955/2-A	Lab Control Sample	19 S1-	13 S1-
LCSD 880-108789/3-A	Lab Control Sample Dup	119	112
LCSD 880-108955/3-A	Lab Control Sample Dup	19 S1-	13 S1-
MB 880-108789/1-A	Method Blank	109	106
MB 880-108955/1-A	Method Blank	126	124

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-108830/5-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108830

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/28/25 10:44	04/29/25 11:22	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/28/25 10:44	04/29/25 11:22	1

Lab Sample ID: LCS 880-108830/1-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1015		mg/Kg		102	70 - 130
Toluene	0.100	0.09215		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.1104		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1067		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-108830/2-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09984		mg/Kg		100	70 - 130	2	35
Toluene	0.100	0.08929		mg/Kg		89	70 - 130	3	35
Ethylbenzene	0.100	0.1102		mg/Kg		110	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2104		mg/Kg		105	70 - 130	1	35
o-Xylene	0.100	0.1058		mg/Kg		106	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108789/1-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108789

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		04/28/25 08:33	04/29/25 16:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				04/28/25 08:33	04/29/25 16:10	1
o-Terphenyl	106		70 - 130				04/28/25 08:33	04/29/25 16:10	1

Lab Sample ID: LCS 880-108789/2-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1134		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130
Surrogate	%Recovery	LCS Qualifier	Limits				
1-Chlorooctane	114		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-108789/3-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108789

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1169		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130	0	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	112		70 - 130						

Lab Sample ID: MB 880-108955/1-A

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108955

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		04/29/25 10:45	04/30/25 19:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/29/25 10:45	04/30/25 19:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/29/25 10:45	04/30/25 19:47	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108955/1-A

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108955

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	126		70 - 130	04/29/25 10:45	04/30/25 19:47	1
o-Terphenyl	124		70 - 130	04/29/25 10:45	04/30/25 19:47	1

Lab Sample ID: LCS 880-108955/2-A

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1268		mg/Kg		127	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1095		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	19	S1-	70 - 130
o-Terphenyl	13	S1-	70 - 130

Lab Sample ID: LCSD 880-108955/3-A

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108955

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1261		mg/Kg		126	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1049		mg/Kg		105	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	19	S1-	70 - 130
o-Terphenyl	13	S1-	70 - 130

Lab Sample ID: 890-8034-6 MS

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: HA - 13A

Prep Type: Total/NA

Prep Batch: 108955

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	1000	887.1		mg/Kg		89	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	504.4	F1	mg/Kg		50	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	65	S1-	70 - 130
o-Terphenyl	58	S1-	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8034-6 MSD

Matrix: Solid

Analysis Batch: 109022

Client Sample ID: HA - 13A

Prep Type: Total/NA

Prep Batch: 108955

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	1000	857.2		mg/Kg		86	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	1000	487.3	F1	mg/Kg		49	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	62	S1-	70 - 130								
o-Terphenyl	55	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-108877/1-A

Matrix: Solid

Analysis Batch: 108883

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			04/28/25 20:16	1

Lab Sample ID: LCS 880-108877/2-A

Matrix: Solid

Analysis Batch: 108883

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.5		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-108877/3-A

Matrix: Solid

Analysis Batch: 108883

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	242.4		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 890-8034-2 MS

Matrix: Solid

Analysis Batch: 108883

Client Sample ID: HA - 11B

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2360	F1	1250	3896	F1	mg/Kg		124	90 - 110

Lab Sample ID: 890-8034-2 MSD

Matrix: Solid

Analysis Batch: 108883

Client Sample ID: HA - 11B

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2360	F1	1250	3886	F1	mg/Kg		123	90 - 110	0	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

GC VOA

Prep Batch: 108830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	5035	
890-8034-2	HA - 11B	Total/NA	Solid	5035	
890-8034-3	HA - 12A	Total/NA	Solid	5035	
890-8034-4	HA - 12B	Total/NA	Solid	5035	
890-8034-5	HA - 13A	Total/NA	Solid	5035	
890-8034-6	HA - 13A	Total/NA	Solid	5035	
890-8034-7	HA - 13B	Total/NA	Solid	5035	
MB 880-108830/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 108910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	8021B	108830
890-8034-2	HA - 11B	Total/NA	Solid	8021B	108830
890-8034-3	HA - 12A	Total/NA	Solid	8021B	108830
890-8034-4	HA - 12B	Total/NA	Solid	8021B	108830
890-8034-5	HA - 13A	Total/NA	Solid	8021B	108830
890-8034-6	HA - 13A	Total/NA	Solid	8021B	108830
890-8034-7	HA - 13B	Total/NA	Solid	8021B	108830
MB 880-108830/5-A	Method Blank	Total/NA	Solid	8021B	108830
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	8021B	108830
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	108830

Analysis Batch: 109081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	Total BTEX	
890-8034-2	HA - 11B	Total/NA	Solid	Total BTEX	
890-8034-3	HA - 12A	Total/NA	Solid	Total BTEX	
890-8034-4	HA - 12B	Total/NA	Solid	Total BTEX	
890-8034-5	HA - 13A	Total/NA	Solid	Total BTEX	
890-8034-6	HA - 13A	Total/NA	Solid	Total BTEX	
890-8034-7	HA - 13B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 108789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	8015NM Prep	
890-8034-2	HA - 11B	Total/NA	Solid	8015NM Prep	
890-8034-3	HA - 12A	Total/NA	Solid	8015NM Prep	
890-8034-4	HA - 12B	Total/NA	Solid	8015NM Prep	
890-8034-5	HA - 13A	Total/NA	Solid	8015NM Prep	
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 108919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	8015B NM	108789
890-8034-2	HA - 11B	Total/NA	Solid	8015B NM	108789

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 108919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-3	HA - 12A	Total/NA	Solid	8015B NM	108789
890-8034-4	HA - 12B	Total/NA	Solid	8015B NM	108789
890-8034-5	HA - 13A	Total/NA	Solid	8015B NM	108789
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015B NM	108789
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108789
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108789

Prep Batch: 108955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-6	HA - 13A	Total/NA	Solid	8015NM Prep	
890-8034-7	HA - 13B	Total/NA	Solid	8015NM Prep	
MB 880-108955/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108955/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108955/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8034-6 MS	HA - 13A	Total/NA	Solid	8015NM Prep	
890-8034-6 MSD	HA - 13A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 109022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-6	HA - 13A	Total/NA	Solid	8015B NM	108955
890-8034-7	HA - 13B	Total/NA	Solid	8015B NM	108955
MB 880-108955/1-A	Method Blank	Total/NA	Solid	8015B NM	108955
LCS 880-108955/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108955
LCSD 880-108955/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108955
890-8034-6 MS	HA - 13A	Total/NA	Solid	8015B NM	108955
890-8034-6 MSD	HA - 13A	Total/NA	Solid	8015B NM	108955

Analysis Batch: 109100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Total/NA	Solid	8015 NM	
890-8034-2	HA - 11B	Total/NA	Solid	8015 NM	
890-8034-3	HA - 12A	Total/NA	Solid	8015 NM	
890-8034-4	HA - 12B	Total/NA	Solid	8015 NM	
890-8034-5	HA - 13A	Total/NA	Solid	8015 NM	
890-8034-6	HA - 13A	Total/NA	Solid	8015 NM	
890-8034-7	HA - 13B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 108877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Soluble	Solid	DI Leach	
890-8034-2	HA - 11B	Soluble	Solid	DI Leach	
890-8034-3	HA - 12A	Soluble	Solid	DI Leach	
890-8034-4	HA - 12B	Soluble	Solid	DI Leach	
890-8034-5	HA - 13A	Soluble	Solid	DI Leach	
890-8034-6	HA - 13A	Soluble	Solid	DI Leach	
890-8034-7	HA - 13B	Soluble	Solid	DI Leach	
MB 880-108877/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108877/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108877/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 108877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-2 MS	HA - 11B	Soluble	Solid	DI Leach	
890-8034-2 MSD	HA - 11B	Soluble	Solid	DI Leach	

Analysis Batch: 108883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8034-1	HA - 11A	Soluble	Solid	300.0	108877
890-8034-2	HA - 11B	Soluble	Solid	300.0	108877
890-8034-3	HA - 12A	Soluble	Solid	300.0	108877
890-8034-4	HA - 12B	Soluble	Solid	300.0	108877
890-8034-5	HA - 13A	Soluble	Solid	300.0	108877
890-8034-6	HA - 13A	Soluble	Solid	300.0	108877
890-8034-7	HA - 13B	Soluble	Solid	300.0	108877
MB 880-108877/1-A	Method Blank	Soluble	Solid	300.0	108877
LCS 880-108877/2-A	Lab Control Sample	Soluble	Solid	300.0	108877
LCSD 880-108877/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108877
890-8034-2 MS	HA - 11B	Soluble	Solid	300.0	108877
890-8034-2 MSD	HA - 11B	Soluble	Solid	300.0	108877

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 11A**Lab Sample ID: 890-8034-1****Date Collected: 04/24/25 13:20****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 17:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 17:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 08:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 08:50	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		5			108883	04/29/25 11:08	CH	EET MID

Client Sample ID: HA - 11B**Lab Sample ID: 890-8034-2****Date Collected: 04/24/25 14:00****Matrix: Solid****Date Received: 04/25/25 08:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 17:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 09:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 09:06	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		5			108883	04/28/25 21:52	CH	EET MID

Client Sample ID: HA - 12A**Lab Sample ID: 890-8034-3****Date Collected: 04/24/25 13:30****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 18:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 09:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 09:21	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 22:10	CH	EET MID

Client Sample ID: HA - 12B**Lab Sample ID: 890-8034-4****Date Collected: 04/24/25 14:10****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 18:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 18:30	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 12B

Date Collected: 04/24/25 14:10

Date Received: 04/25/25 08:30

Lab Sample ID: 890-8034-4

Matrix: Solid

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			109100	04/30/25 09:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 09:37	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		5			108883	04/28/25 22:15	CH	EET MID

Client Sample ID: HA - 13A

Date Collected: 04/24/25 13:40

Date Received: 04/25/25 08:30

Lab Sample ID: 890-8034-5

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			5.05 g	5 mL	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 18:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 18:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 09:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 09:51	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 22:32	CH	EET MID

Client Sample ID: HA - 13A

Date Collected: 04/24/25 13:50

Date Received: 04/25/25 08:30

Lab Sample ID: 890-8034-6

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 19:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 19:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 20:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	108955	04/29/25 10:45	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109022	04/30/25 20:49	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 22:38	CH	EET MID

Client Sample ID: HA - 13B

Date Collected: 04/24/25 14:20

Date Received: 04/25/25 08:30

Lab Sample ID: 890-8034-7

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			4.99 g	5 mL	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 19:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			109081	04/29/25 19:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			109100	04/30/25 21:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	108955	04/29/25 10:45	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	109022	04/30/25 21:51	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Client Sample ID: HA - 13B
Date Collected: 04/24/25 14:20
Date Received: 04/25/25 08:30

Lab Sample ID: 890-8034-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 22:43	CH	EET MID

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

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Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8034-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8034-1	HA - 11A	Solid	04/24/25 13:20	04/25/25 08:30	0.5
890-8034-2	HA - 11B	Solid	04/24/25 14:00	04/25/25 08:30	0.5
890-8034-3	HA - 12A	Solid	04/24/25 13:30	04/25/25 08:30	0.5
890-8034-4	HA - 12B	Solid	04/24/25 14:10	04/25/25 08:30	0.5
890-8034-5	HA - 13A	Solid	04/24/25 13:40	04/25/25 08:30	0.5
890-8034-6	HA - 13A	Solid	04/24/25 13:50	04/25/25 08:30	1
890-8034-7	HA - 13B	Solid	04/24/25 14:20	04/25/25 08:30	0.5



Chain of Custody

 Environment Testing
Xenco

 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 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hognose Viper Federal Com #602H		Turn Around		Pres. Code	ANALYSIS REQUEST																Preservative Codes			
Project Number:	2783		☒ Routine ☐ Rush																			None: NO DI Water: H ₂ O			
Project Location:	Lea County, NM		Due Date:	Routine TAT																		Cool: Cool MeOH: Me			
Sampler's Name:	Santiago Giron		TAT starts the day received by the lab, if received by 4:30pm																			HCL: HC HNO ₃ : HN			
PO/WO #:					Parameters																	H ₂ SO ₄ : H ₂ NaOH: Na			
SAMPLE RECEIPT			Temp Blank:	☒ Yes ☐ No		Wet Ice:	☒ Yes ☐ No																	H ₃ PO ₄ : HP	
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	TMM007																			NaHSO ₄ : NABIS			
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:	-0.2																			Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:	-1.6																			Zn Acetate+NaOH: Zn			
Total Containers:			Corrected Temperature:	-1.0																		NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH-NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush											Sample Comments			
HA-11A	S	4.24.25	13:20	56 TOS	Grab/	1	X	X	X													Incident Number			
HA-11B	S	4.24.25	14:00	0.5	Grab/	1	X	X	X													nAPP2500721668			
HA-12A	S	4.24.25	13:30	0.5	Grab/	1	X	X	X																
HA-12B	S	4.24.25	14:10	0.5	Grab/	1	X	X	X																
HA-13A	S	4.24.25	13:40	0.5	Grab/	1	X	X	X																
HA-13A	S	4.24.25	13:50	1	Grab/	1	X	X	X																
HA-13B	S	4.24.25	14:20	0.5	Grab/	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 SiO₂ Na Sr Ti 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					
3		4/25 830			
5					

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8034-1

SDG Number: Lea County, NM

Login Number: 8034

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: 890-8034-1

SDG Number: Lea County, NM

Login Number: 8034

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 04/28/25 11:12 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 4/30/2025 12:44:19 PM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8033-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



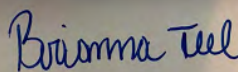
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
4/30/2025 12:44:19 PM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8033-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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
Project: Hognose Viper Federal Com #602H

Job ID: 890-8033-1

Job ID: 890-8033-1

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Job Narrative 890-8033-1

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 4/25/2025 8:30 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 -1.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 14 (890-8033-1), HA - 14 (890-8033-2), HA - 14 (890-8033-3), HA - 15 (890-8033-4), HA - 15 (890-8033-5), HA - 15 (890-8033-6), HA - 16 (890-8033-7), HA - 16 (890-8033-8), HA - 17 (890-8033-9), HA - 17 (890-8033-10) and HA - 17 (890-8033-11).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-108910 recovered above the upper control limit for Ethylbenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is:(CCV 880-108910/20).

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 - 14 (890-8033-1), HA - 15 (890-8033-4), HA - 17 (890-8033-9), HA - 17 (890-8033-11), (890-8027-A-1-I MS) and (890-8027-A-1-J MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: HA - 16 (890-8033-7) and HA - 16 (890-8033-8). 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-1

Date Collected: 04/24/25 14:30

Matrix: Solid

Date Received: 04/25/25 08:30

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		04/28/25 10:44	04/29/25 12:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 12:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 12:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 12:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	04/28/25 10:44	04/29/25 12:24	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/28/25 10:44	04/29/25 12:24	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			04/29/25 12:24	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			04/29/25 19:07	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		04/28/25 08:33	04/29/25 19:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/29/25 19:07	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/29/25 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130	04/28/25 08:33	04/29/25 19:07	1
o-Terphenyl	126		70 - 130	04/28/25 08:33	04/29/25 19:07	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		10.1		mg/Kg			04/29/25 02:02	1

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-2

Date Collected: 04/24/25 14:40

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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		04/28/25 10:44	04/29/25 12:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 12:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 12:45	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 12:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 12:45	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 12:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	04/28/25 10:44	04/29/25 12:45	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-2

Date Collected: 04/24/25 14:40

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	04/28/25 10:44	04/29/25 12:45	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			04/29/25 12:45	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			04/29/25 19:22	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		04/28/25 08:33	04/29/25 19:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 19:22	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 19:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				04/28/25 08:33	04/29/25 19:22	1
o-Terphenyl	120		70 - 130				04/28/25 08:33	04/29/25 19:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	149		10.1		mg/Kg			04/29/25 02:09	1

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-3

Date Collected: 04/24/25 14:50

Matrix: Solid

Date Received: 04/25/25 08:30

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		04/28/25 10:44	04/29/25 13:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 13:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/28/25 10:44	04/29/25 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	04/28/25 10:44	04/29/25 13:05	1
1,4-Difluorobenzene (Surr)	87		70 - 130	04/28/25 10:44	04/29/25 13:05	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			04/29/25 13:05	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			04/29/25 19:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-3

Date Collected: 04/24/25 14:50

Matrix: Solid

Date Received: 04/25/25 08:30

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	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 19:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 19:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	125		70 - 130				04/28/25 08:33	04/29/25 19:37	1
o-Terphenyl	120		70 - 130				04/28/25 08:33	04/29/25 19:37	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	105		9.90		mg/Kg			04/29/25 02:30	1

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-4

Date Collected: 04/24/25 15:00

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 13:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 13:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 13:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 13:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130				04/28/25 10:44	04/29/25 13:26	1
1,4-Difluorobenzene (Surr)	85		70 - 130				04/28/25 10:44	04/29/25 13:26	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			04/29/25 13:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			04/29/25 19:52	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		04/28/25 08:33	04/29/25 19:52	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/29/25 19:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/29/25 19:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130				04/28/25 08:33	04/29/25 19:52	1
o-Terphenyl	121		70 - 130				04/28/25 08:33	04/29/25 19:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-4

Date Collected: 04/24/25 15:00

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		10.0		mg/Kg			04/29/25 02:37	1

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-5

Date Collected: 04/24/25 15:10

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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		04/28/25 10:44	04/29/25 13:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 13:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 13:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 13:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 13:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 13:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130				04/28/25 10:44	04/29/25 13:47	1
1,4-Difluorobenzene (Surr)	98		70 - 130				04/28/25 10:44	04/29/25 13:47	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			04/29/25 13:47	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			04/29/25 20:08	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		04/28/25 08:33	04/29/25 20:08	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 20:08	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 20:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	130		70 - 130				04/28/25 08:33	04/29/25 20:08	1
o-Terphenyl	120		70 - 130				04/28/25 08:33	04/29/25 20:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		9.94		mg/Kg			04/29/25 02:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-6

Date Collected: 04/24/25 15:20

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 2

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		04/28/25 10:44	04/29/25 14:07	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 14:07	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 14:07	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 14:07	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 14:07	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	04/28/25 10:44	04/29/25 14:07	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/28/25 10:44	04/29/25 14:07	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			04/29/25 14:07	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			04/29/25 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	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 20:23	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 20:23	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		04/28/25 08:33	04/29/25 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	04/28/25 08:33	04/29/25 20:23	1
o-Terphenyl	109		70 - 130	04/28/25 08:33	04/29/25 20:23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.9		10.1		mg/Kg			04/28/25 21:01	1

Client Sample ID: HA - 16

Lab Sample ID: 890-8033-7

Date Collected: 04/24/25 15:30

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 14:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 14:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 14:28	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 14:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 14:28	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/28/25 10:44	04/29/25 14:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/28/25 10:44	04/29/25 14:28	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 16

Lab Sample ID: 890-8033-7

Date Collected: 04/24/25 15:30

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	04/28/25 10:44	04/29/25 14:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/29/25 14:28	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			04/29/25 20:52	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		04/28/25 08:33	04/29/25 20:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 20:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 20:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	144	S1+	70 - 130				04/28/25 08:33	04/29/25 20:52	1
o-Terphenyl	135	S1+	70 - 130				04/28/25 08:33	04/29/25 20:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	125		10.1		mg/Kg			04/28/25 21:07	1

Client Sample ID: HA - 16

Lab Sample ID: 890-8033-8

Date Collected: 04/24/25 15:40

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 14:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 14:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 14:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		04/28/25 10:44	04/29/25 14:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		04/28/25 10:44	04/29/25 14:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		04/28/25 10:44	04/29/25 14:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130	04/28/25 10:44	04/29/25 14:48	1
1,4-Difluorobenzene (Surr)	95		70 - 130	04/28/25 10:44	04/29/25 14:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			04/29/25 14:48	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			04/29/25 21:08	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 16

Lab Sample ID: 890-8033-8

Date Collected: 04/24/25 15:40

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 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		04/28/25 08:33	04/29/25 21:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 21:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 21:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	156	S1+	70 - 130				04/28/25 08:33	04/29/25 21:08	1
o-Terphenyl	149	S1+	70 - 130				04/28/25 08:33	04/29/25 21:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	124		10.1		mg/Kg			04/28/25 21:24	1

Client Sample ID: HA - 17

Lab Sample ID: 890-8033-9

Date Collected: 04/24/25 15:05

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

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		04/28/25 10:44	04/29/25 16:27	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 16:27	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 16:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 16:27	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/28/25 10:44	04/29/25 16:27	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/28/25 10:44	04/29/25 16:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130				04/28/25 10:44	04/29/25 16:27	1
1,4-Difluorobenzene (Surr)	92		70 - 130				04/28/25 10:44	04/29/25 16:27	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			04/29/25 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	167		49.8		mg/Kg			04/30/25 07:51	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		04/28/25 08:33	04/30/25 07:51	1
Diesel Range Organics (Over C10-C28)	167		49.8		mg/Kg		04/28/25 08:33	04/30/25 07:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/28/25 08:33	04/30/25 07:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130				04/28/25 08:33	04/30/25 07:51	1
o-Terphenyl	117		70 - 130				04/28/25 08:33	04/30/25 07:51	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 17

Lab Sample ID: 890-8033-9

Date Collected: 04/24/25 15:05

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	171		10.1		mg/Kg			04/28/25 21:30	1

Client Sample ID: HA - 17

Lab Sample ID: 890-8033-10

Date Collected: 04/24/25 16:00

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 1

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		04/28/25 10:44	04/29/25 16:48	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 16:48	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 16:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 16:48	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 16:48	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130				04/28/25 10:44	04/29/25 16:48	1
1,4-Difluorobenzene (Surr)	79		70 - 130				04/28/25 10:44	04/29/25 16:48	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			04/29/25 16:48	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			04/30/25 08:22	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		04/28/25 08:33	04/30/25 08:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/28/25 08:33	04/30/25 08:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/28/25 08:33	04/30/25 08:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130				04/28/25 08:33	04/30/25 08:22	1
o-Terphenyl	116		70 - 130				04/28/25 08:33	04/30/25 08:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	112		9.90		mg/Kg			04/28/25 21:35	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 17

Lab Sample ID: 890-8033-11

Date Collected: 04/24/25 16:10

Matrix: Solid

Date Received: 04/25/25 08:30

Sample Depth: 2

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		04/28/25 10:44	04/29/25 17:08	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 17:08	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 17:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 17:08	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/28/25 10:44	04/29/25 17:08	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/28/25 10:44	04/29/25 17:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/28/25 10:44	04/29/25 17:08	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/28/25 10:44	04/29/25 17:08	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			04/29/25 17:08	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			04/30/25 08:36	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		04/28/25 08:33	04/30/25 08:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/30/25 08:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/30/25 08:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	133	S1+	70 - 130	04/28/25 08:33	04/30/25 08:36	1
o-Terphenyl	121		70 - 130	04/28/25 08:33	04/30/25 08:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	82.6		9.96		mg/Kg			04/28/25 21:41	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea 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)
890-8033-1	HA - 14	82	95
890-8033-2	HA - 14	80	90
890-8033-3	HA - 14	77	87
890-8033-4	HA - 15	88	85
890-8033-5	HA - 15	84	98
890-8033-6	HA - 15	83	91
890-8033-7	HA - 16	84	92
890-8033-8	HA - 16	82	95
890-8033-9	HA - 17	83	92
890-8033-10	HA - 17	91	79
890-8033-11	HA - 17	84	91
LCS 880-108830/1-A	Lab Control Sample	104	94
LCSD 880-108830/2-A	Lab Control Sample Dup	103	100
MB 880-108830/5-A	Method Blank	84	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-8033-1	HA - 14	136 S1+	126
890-8033-2	HA - 14	128	120
890-8033-3	HA - 14	125	120
890-8033-4	HA - 15	131 S1+	121
890-8033-5	HA - 15	130	120
890-8033-6	HA - 15	110	109
890-8033-7	HA - 16	144 S1+	135 S1+
890-8033-8	HA - 16	156 S1+	149 S1+
890-8033-9	HA - 17	132 S1+	117
890-8033-10	HA - 17	121	116
890-8033-11	HA - 17	133 S1+	121
LCS 880-108789/2-A	Lab Control Sample	114	109
LCSD 880-108789/3-A	Lab Control Sample Dup	119	112
MB 880-108789/1-A	Method Blank	109	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-108830/5-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108830

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/28/25 10:44	04/29/25 11:22	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/28/25 10:44	04/29/25 11:22	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/28/25 10:44	04/29/25 11:22	1
1,4-Difluorobenzene (Surr)	91		70 - 130	04/28/25 10:44	04/29/25 11:22	1

Lab Sample ID: LCS 880-108830/1-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1015		mg/Kg		102	70 - 130
Toluene	0.100	0.09215		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.1104		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2132		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1067		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-108830/2-A

Matrix: Solid

Analysis Batch: 108910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108830

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09984		mg/Kg		100	70 - 130	2	35
Toluene	0.100	0.08929		mg/Kg		89	70 - 130	3	35
Ethylbenzene	0.100	0.1102		mg/Kg		110	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2104		mg/Kg		105	70 - 130	1	35
o-Xylene	0.100	0.1058		mg/Kg		106	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-108789/1-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 108789

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		04/28/25 08:33	04/29/25 16:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/28/25 08:33	04/29/25 16:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130				04/28/25 08:33	04/29/25 16:10	1
o-Terphenyl	106		70 - 130				04/28/25 08:33	04/29/25 16:10	1

Lab Sample ID: LCS 880-108789/2-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 108789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1134		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1033		mg/Kg		103	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	114		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-108789/3-A

Matrix: Solid

Analysis Batch: 108919

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 108789

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1169		mg/Kg		117	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	119		70 - 130						
o-Terphenyl	112		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-108876/1-A

Matrix: Solid

Analysis Batch: 108881

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			04/28/25 23:38	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-108876/2-A

Matrix: Solid

Analysis Batch: 108881

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	230.5		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-108876/3-A

Matrix: Solid

Analysis Batch: 108881

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	232.6		mg/Kg		93	90 - 110	1	20

Lab Sample ID: MB 880-108877/1-A

Matrix: Solid

Analysis Batch: 108883

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			04/28/25 20:16	1

Lab Sample ID: LCS 880-108877/2-A

Matrix: Solid

Analysis Batch: 108883

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.5		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-108877/3-A

Matrix: Solid

Analysis Batch: 108883

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	242.4		mg/Kg		97	90 - 110	1	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

GC VOA

Prep Batch: 108830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	5035	
890-8033-2	HA - 14	Total/NA	Solid	5035	
890-8033-3	HA - 14	Total/NA	Solid	5035	
890-8033-4	HA - 15	Total/NA	Solid	5035	
890-8033-5	HA - 15	Total/NA	Solid	5035	
890-8033-6	HA - 15	Total/NA	Solid	5035	
890-8033-7	HA - 16	Total/NA	Solid	5035	
890-8033-8	HA - 16	Total/NA	Solid	5035	
890-8033-9	HA - 17	Total/NA	Solid	5035	
890-8033-10	HA - 17	Total/NA	Solid	5035	
890-8033-11	HA - 17	Total/NA	Solid	5035	
MB 880-108830/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 108910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	8021B	108830
890-8033-2	HA - 14	Total/NA	Solid	8021B	108830
890-8033-3	HA - 14	Total/NA	Solid	8021B	108830
890-8033-4	HA - 15	Total/NA	Solid	8021B	108830
890-8033-5	HA - 15	Total/NA	Solid	8021B	108830
890-8033-6	HA - 15	Total/NA	Solid	8021B	108830
890-8033-7	HA - 16	Total/NA	Solid	8021B	108830
890-8033-8	HA - 16	Total/NA	Solid	8021B	108830
890-8033-9	HA - 17	Total/NA	Solid	8021B	108830
890-8033-10	HA - 17	Total/NA	Solid	8021B	108830
890-8033-11	HA - 17	Total/NA	Solid	8021B	108830
MB 880-108830/5-A	Method Blank	Total/NA	Solid	8021B	108830
LCS 880-108830/1-A	Lab Control Sample	Total/NA	Solid	8021B	108830
LCSD 880-108830/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	108830

Analysis Batch: 108991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	Total BTEX	
890-8033-2	HA - 14	Total/NA	Solid	Total BTEX	
890-8033-3	HA - 14	Total/NA	Solid	Total BTEX	
890-8033-4	HA - 15	Total/NA	Solid	Total BTEX	
890-8033-5	HA - 15	Total/NA	Solid	Total BTEX	
890-8033-6	HA - 15	Total/NA	Solid	Total BTEX	
890-8033-7	HA - 16	Total/NA	Solid	Total BTEX	
890-8033-8	HA - 16	Total/NA	Solid	Total BTEX	
890-8033-9	HA - 17	Total/NA	Solid	Total BTEX	
890-8033-10	HA - 17	Total/NA	Solid	Total BTEX	
890-8033-11	HA - 17	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 108789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 108789 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-2	HA - 14	Total/NA	Solid	8015NM Prep	
890-8033-3	HA - 14	Total/NA	Solid	8015NM Prep	
890-8033-4	HA - 15	Total/NA	Solid	8015NM Prep	
890-8033-5	HA - 15	Total/NA	Solid	8015NM Prep	
890-8033-6	HA - 15	Total/NA	Solid	8015NM Prep	
890-8033-7	HA - 16	Total/NA	Solid	8015NM Prep	
890-8033-8	HA - 16	Total/NA	Solid	8015NM Prep	
890-8033-9	HA - 17	Total/NA	Solid	8015NM Prep	
890-8033-10	HA - 17	Total/NA	Solid	8015NM Prep	
890-8033-11	HA - 17	Total/NA	Solid	8015NM Prep	
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 108919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	8015B NM	108789
890-8033-2	HA - 14	Total/NA	Solid	8015B NM	108789
890-8033-3	HA - 14	Total/NA	Solid	8015B NM	108789
890-8033-4	HA - 15	Total/NA	Solid	8015B NM	108789
890-8033-5	HA - 15	Total/NA	Solid	8015B NM	108789
890-8033-6	HA - 15	Total/NA	Solid	8015B NM	108789
890-8033-7	HA - 16	Total/NA	Solid	8015B NM	108789
890-8033-8	HA - 16	Total/NA	Solid	8015B NM	108789
890-8033-9	HA - 17	Total/NA	Solid	8015B NM	108789
890-8033-10	HA - 17	Total/NA	Solid	8015B NM	108789
890-8033-11	HA - 17	Total/NA	Solid	8015B NM	108789
MB 880-108789/1-A	Method Blank	Total/NA	Solid	8015B NM	108789
LCS 880-108789/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	108789
LCSD 880-108789/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	108789

Analysis Batch: 109099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Total/NA	Solid	8015 NM	
890-8033-2	HA - 14	Total/NA	Solid	8015 NM	
890-8033-3	HA - 14	Total/NA	Solid	8015 NM	
890-8033-4	HA - 15	Total/NA	Solid	8015 NM	
890-8033-5	HA - 15	Total/NA	Solid	8015 NM	
890-8033-6	HA - 15	Total/NA	Solid	8015 NM	
890-8033-7	HA - 16	Total/NA	Solid	8015 NM	
890-8033-8	HA - 16	Total/NA	Solid	8015 NM	
890-8033-9	HA - 17	Total/NA	Solid	8015 NM	
890-8033-10	HA - 17	Total/NA	Solid	8015 NM	
890-8033-11	HA - 17	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 108876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Soluble	Solid	DI Leach	
890-8033-2	HA - 14	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 108876 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-3	HA - 14	Soluble	Solid	DI Leach	
890-8033-4	HA - 15	Soluble	Solid	DI Leach	
890-8033-5	HA - 15	Soluble	Solid	DI Leach	
MB 880-108876/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108876/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108876/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 108877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-6	HA - 15	Soluble	Solid	DI Leach	
890-8033-7	HA - 16	Soluble	Solid	DI Leach	
890-8033-8	HA - 16	Soluble	Solid	DI Leach	
890-8033-9	HA - 17	Soluble	Solid	DI Leach	
890-8033-10	HA - 17	Soluble	Solid	DI Leach	
890-8033-11	HA - 17	Soluble	Solid	DI Leach	
MB 880-108877/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-108877/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-108877/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 108881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-1	HA - 14	Soluble	Solid	300.0	108876
890-8033-2	HA - 14	Soluble	Solid	300.0	108876
890-8033-3	HA - 14	Soluble	Solid	300.0	108876
890-8033-4	HA - 15	Soluble	Solid	300.0	108876
890-8033-5	HA - 15	Soluble	Solid	300.0	108876
MB 880-108876/1-A	Method Blank	Soluble	Solid	300.0	108876
LCS 880-108876/2-A	Lab Control Sample	Soluble	Solid	300.0	108876
LCSD 880-108876/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108876

Analysis Batch: 108883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8033-6	HA - 15	Soluble	Solid	300.0	108877
890-8033-7	HA - 16	Soluble	Solid	300.0	108877
890-8033-8	HA - 16	Soluble	Solid	300.0	108877
890-8033-9	HA - 17	Soluble	Solid	300.0	108877
890-8033-10	HA - 17	Soluble	Solid	300.0	108877
890-8033-11	HA - 17	Soluble	Solid	300.0	108877
MB 880-108877/1-A	Method Blank	Soluble	Solid	300.0	108877
LCS 880-108877/2-A	Lab Control Sample	Soluble	Solid	300.0	108877
LCSD 880-108877/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	108877

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-1

Date Collected: 04/24/25 14:30

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 12:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 12:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 19:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 19:07	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 02:02	CH	EET MID

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-2

Date Collected: 04/24/25 14:40

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 12:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 12:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 19:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 19:22	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 02:09	CH	EET MID

Client Sample ID: HA - 14

Lab Sample ID: 890-8033-3

Date Collected: 04/24/25 14:50

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 13:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 19:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 19:37	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 02:30	CH	EET MID

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-4

Date Collected: 04/24/25 15:00

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 13:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 13:26	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-4

Date Collected: 04/24/25 15:00

Matrix: Solid

Date Received: 04/25/25 08:30

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			109099	04/29/25 19:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 19:52	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 02:37	CH	EET MID

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-5

Date Collected: 04/24/25 15:10

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 13:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 13:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 20:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 20:08	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	108876	04/28/25 14:16	SI	EET MID
Soluble	Analysis	300.0		1			108881	04/29/25 02:45	CH	EET MID

Client Sample ID: HA - 15

Lab Sample ID: 890-8033-6

Date Collected: 04/24/25 15:20

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 14:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 14:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 20:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 20:23	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:01	CH	EET MID

Client Sample ID: HA - 16

Lab Sample ID: 890-8033-7

Date Collected: 04/24/25 15:30

Matrix: Solid

Date Received: 04/25/25 08:30

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 14:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 14:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 20:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 20:52	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 16**Lab Sample ID: 890-8033-7****Date Collected: 04/24/25 15:30****Matrix: Solid****Date Received: 04/25/25 08:30**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:07	CH	EET MID

Client Sample ID: HA - 16**Lab Sample ID: 890-8033-8****Date Collected: 04/24/25 15:40****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 14:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 14:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/29/25 21:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/29/25 21:08	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:24	CH	EET MID

Client Sample ID: HA - 17**Lab Sample ID: 890-8033-9****Date Collected: 04/24/25 15:05****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 16:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 16:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/30/25 07:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 07:51	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:30	CH	EET MID

Client Sample ID: HA - 17**Lab Sample ID: 890-8033-10****Date Collected: 04/24/25 16:00****Matrix: Solid****Date Received: 04/25/25 08:30**

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	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 16:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 16:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/30/25 08:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 08:22	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:35	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Client Sample ID: HA - 17
Date Collected: 04/24/25 16:10
Date Received: 04/25/25 08:30

Lab Sample ID: 890-8033-11
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			5.03 g	5 mL	108830	04/28/25 10:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	108910	04/29/25 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			108991	04/29/25 17:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			109099	04/30/25 08:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	108789	04/28/25 08:33	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	108919	04/30/25 08:36	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	108877	04/28/25 14:19	SI	EET MID
Soluble	Analysis	300.0		1			108883	04/28/25 21:41	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8033-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8033-1	HA - 14	Solid	04/24/25 14:30	04/25/25 08:30	0.5
890-8033-2	HA - 14	Solid	04/24/25 14:40	04/25/25 08:30	1
890-8033-3	HA - 14	Solid	04/24/25 14:50	04/25/25 08:30	2
890-8033-4	HA - 15	Solid	04/24/25 15:00	04/25/25 08:30	0.5
890-8033-5	HA - 15	Solid	04/24/25 15:10	04/25/25 08:30	1
890-8033-6	HA - 15	Solid	04/24/25 15:20	04/25/25 08:30	2
890-8033-7	HA - 16	Solid	04/24/25 15:30	04/25/25 08:30	0.5
890-8033-8	HA - 16	Solid	04/24/25 15:40	04/25/25 08:30	1
890-8033-9	HA - 17	Solid	04/24/25 15:05	04/25/25 08:30	0.5
890-8033-10	HA - 17	Solid	04/24/25 16:00	04/25/25 08:30	1
890-8033-11	HA - 17	Solid	04/24/25 16:10	04/25/25 08:30	2



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 992-0900
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

Chain of Custody

Work Order No:

www.xenco.com Page 1 of 2

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hognose Viper Federal Com #602H	Turn Around	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	2783	☒ Routine ☐ Rush				None: NO DI Water: H ₂ O
Project Location:	Lea County, NM	Due Date:				90% Cool MeOH: Me
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm				2% HC HNO ₃ : HN
POWO #:						SO ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No		PO ₄ : HP
Samples Received Intact:	Yes No	Thermometer ID:	Correction Factor:			HSO ₄ : NABIS
Cooler Custody Seals:	Yes No	Temperature Reading:				I ₂ S ₂ O ₈ : NaSO ₃
Sample Custody Seals:	Yes No	Corrected Temperature:				Zn Acetate+NaOH: Zn
Total Containers:						NaOH+Ascorbic Acid: SAPC



890-8033 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp # of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
HA-14	S	4.24.25	14:30	0.5	Grab/ 1	X	X	X			Incident Number NAPP2500721668
HA-14	S	4.24.25	14:40	1	Grab/ 1	X	X	X			
HA-14	S	4.24.25	14:50	2	Grab/ 1	X	X	X			
HA-15	S	4.24.25	15:00	0.5	Grab/ 1	X	X	X			
HA-15	S	4.24.25	15:10	1	Grab/ 1	X	X	X			
HA-15	S	4.24.25	15:20	2	Grab/ 1	X	X	X			
HA-16	S	4.24.25	15:30	0.5	Grab/ 1	X	X	X			
HA-16	S	4.24.25	15:40	1	Grab/ 1	X	X	X			
HA-17	S	4.24.25	15:50	0.5	Grab/ 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 SiO₂ Na Sr Ti 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
		4/25 8:30			



Environment Testing
Xenoco

Houston, TX (281) 249-4286 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.xenoco.com Page 2 of 2

Chain of Custody

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

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:	Hognose Viper Federal Com #602H	☒ Routine ☐ Rush		Pres. Code	ANALYSIS REQUEST																Preservative Codes		
Project Number:	2783																			None: NO	DI Water: H ₂ O		
Project Location:	Lea County, NM	Due Date:	Routine TAT																	Cool: Cool	MeOH: Me		
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																		HCL: HC	HNO ₃ : HN		
POWVO #:		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No	Parameters																H ₃ PO ₄ : HP	
SAMPLE RECEIPT		Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	71111111																	NaHSO ₄ : NABIS	
Cooler Custody Seals:		Yes	No	Correction Factor:	-0.2																	Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:		Yes	No	Temperature Reading:	-1.6																	Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:	-1.1																	NaOH+Ascorbic Acid: SAPC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush											Sample Comments	
HA-17	S	4.24.25	16:00	1	Grab/	1	X	X	X											Incident Number			
HA-17	S	4.24.25	16:10	2	Grab/	1	X	X	X											nAPP2500721668			

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 SiO₂ Na Sr Ti Sn U V Zn

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 Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenoco 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 Xenoco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenoco, 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
<i>[Signature]</i>	<i>[Signature]</i>	4/25 8:30			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8033-1

SDG Number: Lea County, NM

Login Number: 8033

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: 890-8033-1

SDG Number: Lea County, NM

Login Number: 8033

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 04/28/25 11:12 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 5/27/2025 8:29:11 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8180-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



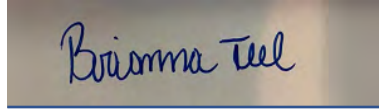
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
5/27/2025 8:29:11 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8180-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8180-1

Job ID: 890-8180-1**Eurofins Carlsbad**

Job Narrative
890-8180-1

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 5/19/2025 9:03 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 -1.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA - 1 (890-8180-1), HA - 1 (890-8180-2), HA - 2 (890-8180-3), HA - 3 (890-8180-4), HA - 3 (890-8180-5), HA - 4 (890-8180-6), HA - 4 (890-8180-7), HA - 4 (890-8180-8), HA - 7 (890-8180-9), HA - 7 (890-8180-10), HA - 8 (890-8180-11), HA - 8 (890-8180-12), HA - 9 (890-8180-13), HA - 9 (890-8180-14), HA - 10 (890-8180-15), HA - 10 (890-8180-16), HA - 11A (890-8180-17), HA - 11B (890-8180-18), HA - 12A (890-8180-19), HA - 12B (890-8180-20), HA - 13A (890-8180-21), HA - 18 (890-8180-22), HA - 18 (890-8180-23), HA - 19 (890-8180-24) and HA - 19 (890-8180-25).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: HA - 9 (890-8180-14), HA - 10 (890-8180-15), HA - 10 (890-8180-16), HA - 11A (890-8180-17), HA - 11B (890-8180-18), HA - 12A (890-8180-19), HA - 12B (890-8180-20), HA - 13A (890-8180-21), HA - 18 (890-8180-22), HA - 18 (890-8180-23), HA - 19 (890-8180-24), HA - 19 (890-8180-25), (CCV 880-110491/2), (CCV 880-110491/20), (CCV 880-110491/33), (LCS 880-110495/1-A), (LCSD 880-110495/2-A), (890-8180-A-14-E MS) and (890-8180-A-14-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-110485/2-A). 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

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110451 and analytical batch 880-110505 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.

The associated samples are: HA - 1 (890-8180-1), HA - 2 (890-8180-3), HA - 3 (890-8180-4), HA - 4 (890-8180-6), HA - 4 (890-8180-7), HA - 7 (890-8180-9), (890-8173-A-1-D), (890-8173-A-1-E MS) and (890-8173-A-1-F MSD).

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110451 and analytical batch 880-110505 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.

The associated samples are: HA - 8 (890-8180-11), HA - 8 (890-8180-12), HA - 9 (890-8180-13), HA - 9 (890-8180-14), HA - 10 (890-8180-15), HA - 10 (890-8180-16), HA - 11A (890-8180-17), HA - 11B (890-8180-18), HA - 12A (890-8180-19), (890-8180-A-10-B MS) and (890-8180-A-10-C MSD).

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Case Narrative

Client: Earth Systems Response and Restoration
Project: Hognose Viper Federal Com #602H

Job ID: 890-8180-1

Job ID: 890-8180-1 (Continued) **Eurofins Carlsbad**

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8180-1

Date Collected: 05/15/25 13:00

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 16:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 16:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 16:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 16:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 16:28	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 16:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/20/25 08:38	05/20/25 16:28	1
1,4-Difluorobenzene (Surr)	82		70 - 130	05/20/25 08:38	05/20/25 16:28	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			05/20/25 16:28	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			05/22/25 05:36	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		05/20/25 08:01	05/22/25 05:36	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 05:36	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 05:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130	05/20/25 08:01	05/22/25 05:36	1
o-Terphenyl	85		70 - 130	05/20/25 08:01	05/22/25 05:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.6		9.96		mg/Kg			05/20/25 11:04	1

Client Sample ID: HA - 2

Lab Sample ID: 890-8180-3

Date Collected: 05/15/25 13:10

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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		05/20/25 08:38	05/20/25 16:49	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:38	05/20/25 16:49	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:38	05/20/25 16:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 08:38	05/20/25 16:49	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:38	05/20/25 16:49	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 08:38	05/20/25 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/20/25 08:38	05/20/25 16:49	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 2

Lab Sample ID: 890-8180-3

Date Collected: 05/15/25 13:10

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81		70 - 130	05/20/25 08:38	05/20/25 16:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/20/25 16:49	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			05/22/25 05:52	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		05/20/25 08:01	05/22/25 05:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:01	05/22/25 05:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:01	05/22/25 05:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				05/20/25 08:01	05/22/25 05:52	1
o-Terphenyl	86		70 - 130				05/20/25 08:01	05/22/25 05:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.5		10.0		mg/Kg			05/20/25 11:25	1

Client Sample ID: HA - 3

Lab Sample ID: 890-8180-4

Date Collected: 05/15/25 13:15

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 17:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:09	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 17:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:09	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	05/20/25 08:38	05/20/25 17:09	1
1,4-Difluorobenzene (Surr)	84		70 - 130	05/20/25 08:38	05/20/25 17:09	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			05/20/25 17:09	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			05/22/25 06:08	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 3

Lab Sample ID: 890-8180-4

Date Collected: 05/15/25 13:15

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:01	05/22/25 06:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				05/20/25 08:01	05/22/25 06:08	1
o-Terphenyl	96		70 - 130				05/20/25 08:01	05/22/25 06:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.5		9.98		mg/Kg			05/20/25 11:32	1

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-6

Date Collected: 05/15/25 13:25

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:38	05/20/25 17:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 17:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 17:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 17:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 17:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 17:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				05/20/25 08:38	05/20/25 17:30	1
1,4-Difluorobenzene (Surr)	82		70 - 130				05/20/25 08:38	05/20/25 17:30	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			05/20/25 17:30	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			05/22/25 06:25	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		05/20/25 08:01	05/22/25 06:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				05/20/25 08:01	05/22/25 06:25	1
o-Terphenyl	92		70 - 130				05/20/25 08:01	05/22/25 06:25	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-6

Date Collected: 05/15/25 13:25

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		10.0		mg/Kg			05/20/25 11:39	1

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-7

Date Collected: 05/15/25 13:30

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 17:50	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:50	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 17:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 17:50	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				05/20/25 08:38	05/20/25 17:50	1
1,4-Difluorobenzene (Surr)	83		70 - 130				05/20/25 08:38	05/20/25 17:50	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			05/20/25 17:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			05/22/25 06:40	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	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 06:40	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 06:40	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 06:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				05/20/25 08:01	05/22/25 06:40	1
o-Terphenyl	87		70 - 130				05/20/25 08:01	05/22/25 06:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44.5		10.0		mg/Kg			05/20/25 11:46	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 7

Lab Sample ID: 890-8180-9

Date Collected: 05/15/25 13:55

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 18:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 18:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 18:11	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/20/25 08:38	05/20/25 18:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 18:11	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/20/25 08:38	05/20/25 18:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	05/20/25 08:38	05/20/25 18:11	1
1,4-Difluorobenzene (Surr)	81		70 - 130	05/20/25 08:38	05/20/25 18:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			05/20/25 18:11	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			05/22/25 06:57	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		05/20/25 08:01	05/22/25 06:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:01	05/22/25 06:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/20/25 08:01	05/22/25 06:57	1
o-Terphenyl	88		70 - 130	05/20/25 08:01	05/22/25 06:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	37.7		10.1		mg/Kg			05/20/25 11:53	1

Client Sample ID: HA - 7

Lab Sample ID: 890-8180-10

Date Collected: 05/15/25 14:00

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 18:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 18:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 18:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/20/25 08:38	05/20/25 18:31	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 7

Lab Sample ID: 890-8180-10

Date Collected: 05/15/25 14:00

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82		70 - 130	05/20/25 08:38	05/20/25 18:31	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			05/20/25 18:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/22/25 07:13	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		05/20/25 08:01	05/22/25 07:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:01	05/22/25 07:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:01	05/22/25 07:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				05/20/25 08:01	05/22/25 07:13	1
o-Terphenyl	93		70 - 130				05/20/25 08:01	05/22/25 07:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.7	F1	9.98		mg/Kg			05/20/25 12:00	1

Client Sample ID: HA - 8

Lab Sample ID: 890-8180-11

Date Collected: 05/15/25 14:05

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:38	05/20/25 18:52	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:52	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 18:52	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:38	05/20/25 18:52	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 08:38	05/20/25 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/20/25 08:38	05/20/25 18:52	1
1,4-Difluorobenzene (Surr)	72		70 - 130	05/20/25 08:38	05/20/25 18:52	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			05/20/25 18:52	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			05/22/25 07:30	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 8

Lab Sample ID: 890-8180-11

Date Collected: 05/15/25 14:05

Matrix: Solid

Date Received: 05/19/25 09:03

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	<49.8	U	49.8		mg/Kg		05/20/25 08:01	05/22/25 07:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:01	05/22/25 07:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:01	05/22/25 07:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				05/20/25 08:01	05/22/25 07:30	1
o-Terphenyl	90		70 - 130				05/20/25 08:01	05/22/25 07:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	87.9		9.92		mg/Kg			05/20/25 12:22	1

Client Sample ID: HA - 8

Lab Sample ID: 890-8180-12

Date Collected: 05/15/25 14:10

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:38	05/20/25 19:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 19:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 19:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 19:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 19:12	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:38	05/20/25 19:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				05/20/25 08:38	05/20/25 19:12	1
1,4-Difluorobenzene (Surr)	83		70 - 130				05/20/25 08:38	05/20/25 19:12	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			05/20/25 19:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/22/25 07:45	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		05/20/25 08:01	05/22/25 07:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:01	05/22/25 07:45	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:01	05/22/25 07:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/20/25 08:01	05/22/25 07:45	1
o-Terphenyl	100		70 - 130				05/20/25 08:01	05/22/25 07:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 8

Lab Sample ID: 890-8180-12

Date Collected: 05/15/25 14:10

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	81.1		10.1		mg/Kg			05/20/25 12:29	1

Client Sample ID: HA - 9

Lab Sample ID: 890-8180-13

Date Collected: 05/15/25 14:15

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/20/25 08:38	05/20/25 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				05/20/25 08:38	05/20/25 19:33	1
1,4-Difluorobenzene (Surr)	78		70 - 130				05/20/25 08:38	05/20/25 19:33	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			05/20/25 19:33	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			05/22/25 08:01	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		05/20/25 08:01	05/22/25 08:01	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 08:01	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/20/25 08:01	05/22/25 08:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				05/20/25 08:01	05/22/25 08:01	1
o-Terphenyl	89		70 - 130				05/20/25 08:01	05/22/25 08:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.5		10.1		mg/Kg			05/20/25 12:50	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 9

Lab Sample ID: 890-8180-14

Date Collected: 05/15/25 14:20

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:43	05/20/25 11:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:43	05/20/25 11:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:43	05/20/25 11:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	05/20/25 08:43	05/20/25 11:49	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/20/25 08:43	05/20/25 11:49	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			05/20/25 11:49	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			05/23/25 11:04	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	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 11:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 11:04	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 11:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	118		70 - 130	05/20/25 08:02	05/23/25 11:04	1
o-Terphenyl	127		70 - 130	05/20/25 08:02	05/23/25 11:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.5		10.0		mg/Kg			05/20/25 12:57	1

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-15

Date Collected: 05/15/25 14:25

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:43	05/20/25 12:10	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 12:10	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 12:10	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 12:10	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 12:10	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 12:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130	05/20/25 08:43	05/20/25 12:10	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-15

Date Collected: 05/15/25 14:25

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	05/20/25 08:43	05/20/25 12:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/20/25 12:10	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			05/23/25 11:48	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	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 11:48	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 11:48	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 11:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				05/20/25 08:02	05/23/25 11:48	1
o-Terphenyl	121		70 - 130				05/20/25 08:02	05/23/25 11:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	265		9.98		mg/Kg			05/20/25 13:04	1

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-16

Date Collected: 05/15/25 14:30

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:43	05/20/25 12:30	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 12:30	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 12:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 08:43	05/20/25 12:30	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 12:30	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 08:43	05/20/25 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	05/20/25 08:43	05/20/25 12:30	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/20/25 08:43	05/20/25 12:30	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			05/20/25 12:30	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			05/23/25 12:04	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-16

Date Collected: 05/15/25 14:30

Matrix: Solid

Date Received: 05/19/25 09:03

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	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 12:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 12:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 12:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				05/20/25 08:02	05/23/25 12:04	1
o-Terphenyl	121		70 - 130				05/20/25 08:02	05/23/25 12:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	79.4		10.0		mg/Kg			05/20/25 13:11	1

Client Sample ID: HA - 11A

Lab Sample ID: 890-8180-17

Date Collected: 05/15/25 14:35

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/20/25 08:43	05/20/25 12:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130				05/20/25 08:43	05/20/25 12:50	1
1,4-Difluorobenzene (Surr)	87		70 - 130				05/20/25 08:43	05/20/25 12:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/20/25 12:50	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			05/23/25 12:19	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		05/20/25 08:02	05/23/25 12:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 12:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 12:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130				05/20/25 08:02	05/23/25 12:19	1
o-Terphenyl	120		70 - 130				05/20/25 08:02	05/23/25 12:19	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 11A

Lab Sample ID: 890-8180-17

Date Collected: 05/15/25 14:35

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		9.98		mg/Kg			05/20/25 13:18	1

Client Sample ID: HA - 11B

Lab Sample ID: 890-8180-18

Date Collected: 05/15/25 14:40

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:43	05/20/25 13:11	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 13:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 13:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 13:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 13:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 13:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130				05/20/25 08:43	05/20/25 13:11	1
1,4-Difluorobenzene (Surr)	89		70 - 130				05/20/25 08:43	05/20/25 13:11	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/20/25 13:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			05/23/25 12:34	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	<49.7	U	49.7		mg/Kg		05/20/25 08:02	05/23/25 12:34	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/20/25 08:02	05/23/25 12:34	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/20/25 08:02	05/23/25 12:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				05/20/25 08:02	05/23/25 12:34	1
o-Terphenyl	122		70 - 130				05/20/25 08:02	05/23/25 12:34	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	320		10.1		mg/Kg			05/20/25 13:25	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 12A

Lab Sample ID: 890-8180-19

Date Collected: 05/15/25 14:45

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:43	05/20/25 13:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 13:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 13:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 08:43	05/20/25 13:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 08:43	05/20/25 13:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 08:43	05/20/25 13:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	05/20/25 08:43	05/20/25 13:31	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/20/25 08:43	05/20/25 13:31	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			05/20/25 13:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/23/25 12:49	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		05/20/25 08:02	05/23/25 12:49	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 12:49	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	05/20/25 08:02	05/23/25 12:49	1
o-Terphenyl	120		70 - 130	05/20/25 08:02	05/23/25 12:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.0		10.1		mg/Kg			05/20/25 13:32	1

Client Sample ID: HA - 12B

Lab Sample ID: 890-8180-20

Date Collected: 05/15/25 14:50

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:43	05/20/25 13:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/20/25 08:43	05/20/25 13:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/20/25 08:43	05/20/25 13:52	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/20/25 08:43	05/20/25 13:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/20/25 08:43	05/20/25 13:52	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/20/25 08:43	05/20/25 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130	05/20/25 08:43	05/20/25 13:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 12B

Lab Sample ID: 890-8180-20

Date Collected: 05/15/25 14:50

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	88		70 - 130	05/20/25 08:43	05/20/25 13:52	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/20/25 13:52	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			05/23/25 13:05	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		05/20/25 08:02	05/23/25 13:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 13:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 13:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/20/25 08:02	05/23/25 13:05	1
o-Terphenyl	115		70 - 130				05/20/25 08:02	05/23/25 13:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	104		9.98		mg/Kg			05/20/25 16:00	1

Client Sample ID: HA - 13A

Lab Sample ID: 890-8180-21

Date Collected: 05/15/25 14:55

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:43	05/20/25 14:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 14:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 14:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 08:43	05/20/25 14:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 14:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/20/25 08:43	05/20/25 14:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	05/20/25 08:43	05/20/25 14:12	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/20/25 08:43	05/20/25 14:12	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			05/20/25 14:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/23/25 13:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 13A

Lab Sample ID: 890-8180-21

Date Collected: 05/15/25 14:55

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:02	05/23/25 13:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 13:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 13:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				05/20/25 08:02	05/23/25 13:21	1
o-Terphenyl	112		70 - 130				05/20/25 08:02	05/23/25 13:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	85.2		9.92		mg/Kg			05/20/25 16:20	1

Client Sample ID: HA - 18

Lab Sample ID: 890-8180-22

Date Collected: 05/15/25 15:15

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/20/25 08:43	05/20/25 14:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130				05/20/25 08:43	05/20/25 14:32	1
1,4-Difluorobenzene (Surr)	90		70 - 130				05/20/25 08:43	05/20/25 14:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/20/25 14:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/23/25 13:37	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		05/20/25 08:02	05/23/25 13:37	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 13:37	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 13:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/20/25 08:02	05/23/25 13:37	1
o-Terphenyl	108		70 - 130				05/20/25 08:02	05/23/25 13:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 18

Lab Sample ID: 890-8180-22

Date Collected: 05/15/25 15:15

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	417		10.1		mg/Kg			05/20/25 16:27	1

Client Sample ID: HA - 18

Lab Sample ID: 890-8180-23

Date Collected: 05/15/25 15:20

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		05/20/25 08:43	05/20/25 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	142	S1+	70 - 130				05/20/25 08:43	05/20/25 14:53	1
1,4-Difluorobenzene (Surr)	89		70 - 130				05/20/25 08:43	05/20/25 14:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			05/20/25 14:53	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			05/23/25 13:52	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		05/20/25 08:02	05/23/25 13:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/20/25 08:02	05/23/25 13:52	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/20/25 08:02	05/23/25 13:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/20/25 08:02	05/23/25 13:52	1
o-Terphenyl	107		70 - 130				05/20/25 08:02	05/23/25 13:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	123		9.94		mg/Kg			05/20/25 16:34	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 19

Lab Sample ID: 890-8180-24

Date Collected: 05/15/25 15:25

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

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		05/20/25 08:43	05/20/25 16:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 16:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 16:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/20/25 08:43	05/20/25 16:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 16:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/20/25 08:43	05/20/25 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	05/20/25 08:43	05/20/25 16:27	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/20/25 08:43	05/20/25 16:27	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			05/20/25 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	173		49.8		mg/Kg			05/23/25 14:08	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		05/20/25 08:02	05/23/25 14:08	1
Diesel Range Organics (Over C10-C28)	173		49.8		mg/Kg		05/20/25 08:02	05/23/25 14:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	05/20/25 08:02	05/23/25 14:08	1
o-Terphenyl	111		70 - 130	05/20/25 08:02	05/23/25 14:08	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1140		10.0		mg/Kg			05/20/25 16:41	1

Client Sample ID: HA - 19

Lab Sample ID: 890-8180-25

Date Collected: 05/15/25 15:30

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 08:43	05/20/25 16:48	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 16:48	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 16:48	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 16:48	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 08:43	05/20/25 16:48	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 08:43	05/20/25 16:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	150	S1+	70 - 130	05/20/25 08:43	05/20/25 16:48	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 19

Lab Sample ID: 890-8180-25

Date Collected: 05/15/25 15:30

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	80		70 - 130	05/20/25 08:43	05/20/25 16:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/20/25 16:48	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			05/23/25 14:25	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		05/20/25 08:02	05/23/25 14:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 14:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 14:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				05/20/25 08:02	05/23/25 14:25	1
o-Terphenyl	110		70 - 130				05/20/25 08:02	05/23/25 14:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	121		10.0		mg/Kg			05/20/25 17:01	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-8180-1	HA - 1	105	82
890-8180-3	HA - 2	108	81
890-8180-4	HA - 3	107	84
890-8180-6	HA - 4	108	82
890-8180-7	HA - 4	107	83
890-8180-9	HA - 7	113	81
890-8180-10	HA - 7	104	82
890-8180-11	HA - 8	94	72
890-8180-12	HA - 8	103	83
890-8180-13	HA - 9	105	78
890-8180-14	HA - 9	147 S1+	92
890-8180-14 MS	HA - 9	133 S1+	96
890-8180-14 MSD	HA - 9	133 S1+	96
890-8180-15	HA - 10	137 S1+	92
890-8180-16	HA - 10	140 S1+	89
890-8180-17	HA - 11A	138 S1+	87
890-8180-18	HA - 11B	140 S1+	89
890-8180-19	HA - 12A	140 S1+	92
890-8180-20	HA - 12B	143 S1+	88
890-8180-21	HA - 13A	134 S1+	91
890-8180-22	HA - 18	132 S1+	90
890-8180-23	HA - 18	142 S1+	89
890-8180-24	HA - 19	147 S1+	91
890-8180-25	HA - 19	150 S1+	80
LCS 880-110494/1-A	Lab Control Sample	102	100
LCS 880-110495/1-A	Lab Control Sample	132 S1+	95
LCSD 880-110494/2-A	Lab Control Sample Dup	108	102
LCSD 880-110495/2-A	Lab Control Sample Dup	136 S1+	94
MB 880-110494/5-A	Method Blank	103	78
MB 880-110495/5-A	Method Blank	124	89

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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-8180-1	HA - 1	88	85
890-8180-3	HA - 2	88	86
890-8180-4	HA - 3	96	96
890-8180-6	HA - 4	96	92
890-8180-7	HA - 4	88	87
890-8180-9	HA - 7	91	88
890-8180-10	HA - 7	92	93
890-8180-11	HA - 8	89	90
890-8180-12	HA - 8	102	100

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Surrogate Summary

Client: Earth Systems Response and Restoration
 Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
 SDG: Lea 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)
890-8180-13	HA - 9	89	89
890-8180-14	HA - 9	118	127
890-8180-14 MS	HA - 9	118	118
890-8180-14 MSD	HA - 9	117	116
890-8180-15	HA - 10	113	121
890-8180-16	HA - 10	115	121
890-8180-17	HA - 11A	113	120
890-8180-18	HA - 11B	115	122
890-8180-19	HA - 12A	111	120
890-8180-20	HA - 12B	108	115
890-8180-21	HA - 13A	105	112
890-8180-22	HA - 18	102	108
890-8180-23	HA - 18	102	107
890-8180-24	HA - 19	107	111
890-8180-25	HA - 19	102	110
LCS 880-110484/2-A	Lab Control Sample	85	92
LCS 880-110485/2-A	Lab Control Sample	135 S1+	135 S1+
LCSD 880-110484/3-A	Lab Control Sample Dup	83	90
LCSD 880-110485/3-A	Lab Control Sample Dup	118	118
MB 880-110484/1-A	Method Blank	75	75
MB 880-110485/1-A	Method Blank	92	98

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-110494/5-A

Matrix: Solid

Analysis Batch: 110489

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 11:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 11:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 11:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 08:38	05/20/25 11:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:38	05/20/25 11:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/20/25 08:38	05/20/25 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/20/25 08:38	05/20/25 11:27	1
1,4-Difluorobenzene (Surr)	78		70 - 130	05/20/25 08:38	05/20/25 11:27	1

Lab Sample ID: LCS 880-110494/1-A

Matrix: Solid

Analysis Batch: 110489

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09064		mg/Kg		91	70 - 130
Toluene	0.100	0.09176		mg/Kg		92	70 - 130
Ethylbenzene	0.100	0.09319		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1908		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09530		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-110494/2-A

Matrix: Solid

Analysis Batch: 110489

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09790		mg/Kg		98	70 - 130	8	35
Toluene	0.100	0.1018		mg/Kg		102	70 - 130	10	35
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.2124		mg/Kg		106	70 - 130	11	35
o-Xylene	0.100	0.1057		mg/Kg		106	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: MB 880-110495/5-A

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:27	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-110495/5-A

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110495

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 08:43	05/20/25 11:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 08:43	05/20/25 11:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/20/25 08:43	05/20/25 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	05/20/25 08:43	05/20/25 11:27	1
1,4-Difluorobenzene (Surr)	89		70 - 130	05/20/25 08:43	05/20/25 11:27	1

Lab Sample ID: LCS 880-110495/1-A

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110495

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1007		mg/Kg		101	70 - 130
Toluene	0.100	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1139		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130
o-Xylene	0.100	0.1126		mg/Kg		113	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-110495/2-A

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110495

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1021		mg/Kg		102	70 - 130	1	35
Toluene	0.100	0.1092		mg/Kg		109	70 - 130	1	35
Ethylbenzene	0.100	0.1136		mg/Kg		114	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2249		mg/Kg		112	70 - 130	0	35
o-Xylene	0.100	0.1129		mg/Kg		113	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	136	S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-8180-14 MS

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: HA - 9

Prep Type: Total/NA

Prep Batch: 110495

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09541		mg/Kg		95	70 - 130
Toluene	<0.00200	U	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1047		mg/Kg		105	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2050		mg/Kg		103	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8180-14 MS

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: HA - 9

Prep Type: Total/NA

Prep Batch: 110495

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00200	U	0.100	0.1023		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130						
1,4-Difluorobenzene (Surr)	96		70 - 130						

Lab Sample ID: 890-8180-14 MSD

Matrix: Solid

Analysis Batch: 110491

Client Sample ID: HA - 9

Prep Type: Total/NA

Prep Batch: 110495

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	0.09460		mg/Kg		95	70 - 130	1	35
Toluene	<0.00200	U	0.100	0.1025		mg/Kg		102	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.100	0.1072		mg/Kg		107	70 - 130	2	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2132		mg/Kg		107	70 - 130	4	35
o-Xylene	<0.00200	U	0.100	0.1065		mg/Kg		106	70 - 130	4	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	133	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	96		70 - 130								

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

Lab Sample ID: MB 880-110484/1-A

Matrix: Solid

Analysis Batch: 110685

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110484

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		05/20/25 07:54	05/22/25 01:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 07:54	05/22/25 01:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 07:54	05/22/25 01:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	75		70 - 130						
o-Terphenyl	75		70 - 130						

Lab Sample ID: LCS 880-110484/2-A

Matrix: Solid

Analysis Batch: 110685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110484

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	867.2		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	871.2		mg/Kg		87	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-110484/2-A

Matrix: Solid

Analysis Batch: 110685

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110484

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: LCSD 880-110484/3-A

Matrix: Solid

Analysis Batch: 110685

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110484

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	829.2		mg/Kg		83	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	841.9		mg/Kg		84	70 - 130	3	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	83		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: MB 880-110485/1-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110485

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		05/20/25 07:55	05/23/25 08:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1

	MB	MB					Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				05/20/25 07:55	05/23/25 08:44	1
o-Terphenyl	98		70 - 130				05/20/25 07:55	05/23/25 08:44	1

Lab Sample ID: LCS 880-110485/2-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110485

	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1105		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	989.7		mg/Kg		99	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-110485/3-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	986.7		mg/Kg		99	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130	12	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	118		70 - 130						
o-Terphenyl	118		70 - 130						

Lab Sample ID: 890-8180-14 MS

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: HA - 9

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	922.7		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	806.0		mg/Kg		77	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	118		70 - 130								

Lab Sample ID: 890-8180-14 MSD

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: HA - 9

Prep Type: Total/NA

Prep Batch: 110485

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	<50.0	U	1000	918.0		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	848.9		mg/Kg		81	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	117		70 - 130								
o-Terphenyl	116		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-110451/1-A

Matrix: Solid

Analysis Batch: 110505

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			05/20/25 10:00	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-110451/2-A

Matrix: Solid

Analysis Batch: 110505

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.7		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-110451/3-A

Matrix: Solid

Analysis Batch: 110505

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	250.4		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-8180-10 MS

Matrix: Solid

Analysis Batch: 110505

Client Sample ID: HA - 7

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	66.7	F1	250	368.6	F1	mg/Kg		121	90 - 110

Lab Sample ID: 890-8180-10 MSD

Matrix: Solid

Analysis Batch: 110505

Client Sample ID: HA - 7

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	66.7	F1	250	368.6	F1	mg/Kg		121	90 - 110	0	20

Lab Sample ID: MB 880-110452/1-A

Matrix: Solid

Analysis Batch: 110527

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			05/20/25 15:39	1

Lab Sample ID: LCS 880-110452/2-A

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	268.0		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-110452/3-A

Matrix: Solid

Analysis Batch: 110527

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	270.3		mg/Kg		108	90 - 110	1	20

Lab Sample ID: 890-8180-20 MS

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: HA - 12B

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	104		250	372.9		mg/Kg		108	90 - 110

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-8180-20 MSD

Client Sample ID: HA - 12B

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 110527

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	104		250	372.8		mg/Kg		108	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 110489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	8021B	110494
890-8180-3	HA - 2	Total/NA	Solid	8021B	110494
890-8180-4	HA - 3	Total/NA	Solid	8021B	110494
890-8180-6	HA - 4	Total/NA	Solid	8021B	110494
890-8180-7	HA - 4	Total/NA	Solid	8021B	110494
890-8180-9	HA - 7	Total/NA	Solid	8021B	110494
890-8180-10	HA - 7	Total/NA	Solid	8021B	110494
890-8180-11	HA - 8	Total/NA	Solid	8021B	110494
890-8180-12	HA - 8	Total/NA	Solid	8021B	110494
890-8180-13	HA - 9	Total/NA	Solid	8021B	110494
MB 880-110494/5-A	Method Blank	Total/NA	Solid	8021B	110494
LCS 880-110494/1-A	Lab Control Sample	Total/NA	Solid	8021B	110494
LCSD 880-110494/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	110494

Analysis Batch: 110491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-14	HA - 9	Total/NA	Solid	8021B	110495
890-8180-15	HA - 10	Total/NA	Solid	8021B	110495
890-8180-16	HA - 10	Total/NA	Solid	8021B	110495
890-8180-17	HA - 11A	Total/NA	Solid	8021B	110495
890-8180-18	HA - 11B	Total/NA	Solid	8021B	110495
890-8180-19	HA - 12A	Total/NA	Solid	8021B	110495
890-8180-20	HA - 12B	Total/NA	Solid	8021B	110495
890-8180-21	HA - 13A	Total/NA	Solid	8021B	110495
890-8180-22	HA - 18	Total/NA	Solid	8021B	110495
890-8180-23	HA - 18	Total/NA	Solid	8021B	110495
890-8180-24	HA - 19	Total/NA	Solid	8021B	110495
890-8180-25	HA - 19	Total/NA	Solid	8021B	110495
MB 880-110495/5-A	Method Blank	Total/NA	Solid	8021B	110495
LCS 880-110495/1-A	Lab Control Sample	Total/NA	Solid	8021B	110495
LCSD 880-110495/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	110495
890-8180-14 MS	HA - 9	Total/NA	Solid	8021B	110495
890-8180-14 MSD	HA - 9	Total/NA	Solid	8021B	110495

Prep Batch: 110494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	5035	
890-8180-3	HA - 2	Total/NA	Solid	5035	
890-8180-4	HA - 3	Total/NA	Solid	5035	
890-8180-6	HA - 4	Total/NA	Solid	5035	
890-8180-7	HA - 4	Total/NA	Solid	5035	
890-8180-9	HA - 7	Total/NA	Solid	5035	
890-8180-10	HA - 7	Total/NA	Solid	5035	
890-8180-11	HA - 8	Total/NA	Solid	5035	
890-8180-12	HA - 8	Total/NA	Solid	5035	
890-8180-13	HA - 9	Total/NA	Solid	5035	
MB 880-110494/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-110494/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-110494/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

GC VOA

Prep Batch: 110495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-14	HA - 9	Total/NA	Solid	5035	
890-8180-15	HA - 10	Total/NA	Solid	5035	
890-8180-16	HA - 10	Total/NA	Solid	5035	
890-8180-17	HA - 11A	Total/NA	Solid	5035	
890-8180-18	HA - 11B	Total/NA	Solid	5035	
890-8180-19	HA - 12A	Total/NA	Solid	5035	
890-8180-20	HA - 12B	Total/NA	Solid	5035	
890-8180-21	HA - 13A	Total/NA	Solid	5035	
890-8180-22	HA - 18	Total/NA	Solid	5035	
890-8180-23	HA - 18	Total/NA	Solid	5035	
890-8180-24	HA - 19	Total/NA	Solid	5035	
890-8180-25	HA - 19	Total/NA	Solid	5035	
MB 880-110495/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-110495/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-110495/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8180-14 MS	HA - 9	Total/NA	Solid	5035	
890-8180-14 MSD	HA - 9	Total/NA	Solid	5035	

Analysis Batch: 110618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	Total BTEX	
890-8180-3	HA - 2	Total/NA	Solid	Total BTEX	
890-8180-4	HA - 3	Total/NA	Solid	Total BTEX	
890-8180-6	HA - 4	Total/NA	Solid	Total BTEX	
890-8180-7	HA - 4	Total/NA	Solid	Total BTEX	
890-8180-9	HA - 7	Total/NA	Solid	Total BTEX	
890-8180-10	HA - 7	Total/NA	Solid	Total BTEX	
890-8180-11	HA - 8	Total/NA	Solid	Total BTEX	
890-8180-12	HA - 8	Total/NA	Solid	Total BTEX	
890-8180-13	HA - 9	Total/NA	Solid	Total BTEX	
890-8180-14	HA - 9	Total/NA	Solid	Total BTEX	
890-8180-15	HA - 10	Total/NA	Solid	Total BTEX	
890-8180-16	HA - 10	Total/NA	Solid	Total BTEX	
890-8180-17	HA - 11A	Total/NA	Solid	Total BTEX	
890-8180-18	HA - 11B	Total/NA	Solid	Total BTEX	
890-8180-19	HA - 12A	Total/NA	Solid	Total BTEX	
890-8180-20	HA - 12B	Total/NA	Solid	Total BTEX	
890-8180-21	HA - 13A	Total/NA	Solid	Total BTEX	
890-8180-22	HA - 18	Total/NA	Solid	Total BTEX	
890-8180-23	HA - 18	Total/NA	Solid	Total BTEX	
890-8180-24	HA - 19	Total/NA	Solid	Total BTEX	
890-8180-25	HA - 19	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 110484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	8015NM Prep	
890-8180-3	HA - 2	Total/NA	Solid	8015NM Prep	
890-8180-4	HA - 3	Total/NA	Solid	8015NM Prep	
890-8180-6	HA - 4	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 110484 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-7	HA - 4	Total/NA	Solid	8015NM Prep	
890-8180-9	HA - 7	Total/NA	Solid	8015NM Prep	
890-8180-10	HA - 7	Total/NA	Solid	8015NM Prep	
890-8180-11	HA - 8	Total/NA	Solid	8015NM Prep	
890-8180-12	HA - 8	Total/NA	Solid	8015NM Prep	
890-8180-13	HA - 9	Total/NA	Solid	8015NM Prep	
MB 880-110484/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-110484/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-110484/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 110485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-14	HA - 9	Total/NA	Solid	8015NM Prep	
890-8180-15	HA - 10	Total/NA	Solid	8015NM Prep	
890-8180-16	HA - 10	Total/NA	Solid	8015NM Prep	
890-8180-17	HA - 11A	Total/NA	Solid	8015NM Prep	
890-8180-18	HA - 11B	Total/NA	Solid	8015NM Prep	
890-8180-19	HA - 12A	Total/NA	Solid	8015NM Prep	
890-8180-20	HA - 12B	Total/NA	Solid	8015NM Prep	
890-8180-21	HA - 13A	Total/NA	Solid	8015NM Prep	
890-8180-22	HA - 18	Total/NA	Solid	8015NM Prep	
890-8180-23	HA - 18	Total/NA	Solid	8015NM Prep	
890-8180-24	HA - 19	Total/NA	Solid	8015NM Prep	
890-8180-25	HA - 19	Total/NA	Solid	8015NM Prep	
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8180-14 MS	HA - 9	Total/NA	Solid	8015NM Prep	
890-8180-14 MSD	HA - 9	Total/NA	Solid	8015NM Prep	

Analysis Batch: 110685

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	8015B NM	110484
890-8180-3	HA - 2	Total/NA	Solid	8015B NM	110484
890-8180-4	HA - 3	Total/NA	Solid	8015B NM	110484
890-8180-6	HA - 4	Total/NA	Solid	8015B NM	110484
890-8180-7	HA - 4	Total/NA	Solid	8015B NM	110484
890-8180-9	HA - 7	Total/NA	Solid	8015B NM	110484
890-8180-10	HA - 7	Total/NA	Solid	8015B NM	110484
890-8180-11	HA - 8	Total/NA	Solid	8015B NM	110484
890-8180-12	HA - 8	Total/NA	Solid	8015B NM	110484
890-8180-13	HA - 9	Total/NA	Solid	8015B NM	110484
MB 880-110484/1-A	Method Blank	Total/NA	Solid	8015B NM	110484
LCS 880-110484/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	110484
LCSD 880-110484/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	110484

Analysis Batch: 110732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Total/NA	Solid	8015 NM	
890-8180-3	HA - 2	Total/NA	Solid	8015 NM	
890-8180-4	HA - 3	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 110732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-6	HA - 4	Total/NA	Solid	8015 NM	
890-8180-7	HA - 4	Total/NA	Solid	8015 NM	
890-8180-9	HA - 7	Total/NA	Solid	8015 NM	
890-8180-10	HA - 7	Total/NA	Solid	8015 NM	
890-8180-11	HA - 8	Total/NA	Solid	8015 NM	
890-8180-12	HA - 8	Total/NA	Solid	8015 NM	
890-8180-13	HA - 9	Total/NA	Solid	8015 NM	
890-8180-14	HA - 9	Total/NA	Solid	8015 NM	
890-8180-15	HA - 10	Total/NA	Solid	8015 NM	
890-8180-16	HA - 10	Total/NA	Solid	8015 NM	
890-8180-17	HA - 11A	Total/NA	Solid	8015 NM	
890-8180-18	HA - 11B	Total/NA	Solid	8015 NM	
890-8180-19	HA - 12A	Total/NA	Solid	8015 NM	
890-8180-20	HA - 12B	Total/NA	Solid	8015 NM	
890-8180-21	HA - 13A	Total/NA	Solid	8015 NM	
890-8180-22	HA - 18	Total/NA	Solid	8015 NM	
890-8180-23	HA - 18	Total/NA	Solid	8015 NM	
890-8180-24	HA - 19	Total/NA	Solid	8015 NM	
890-8180-25	HA - 19	Total/NA	Solid	8015 NM	

Analysis Batch: 110845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-14	HA - 9	Total/NA	Solid	8015B NM	110485
890-8180-15	HA - 10	Total/NA	Solid	8015B NM	110485
890-8180-16	HA - 10	Total/NA	Solid	8015B NM	110485
890-8180-17	HA - 11A	Total/NA	Solid	8015B NM	110485
890-8180-18	HA - 11B	Total/NA	Solid	8015B NM	110485
890-8180-19	HA - 12A	Total/NA	Solid	8015B NM	110485
890-8180-20	HA - 12B	Total/NA	Solid	8015B NM	110485
890-8180-21	HA - 13A	Total/NA	Solid	8015B NM	110485
890-8180-22	HA - 18	Total/NA	Solid	8015B NM	110485
890-8180-23	HA - 18	Total/NA	Solid	8015B NM	110485
890-8180-24	HA - 19	Total/NA	Solid	8015B NM	110485
890-8180-25	HA - 19	Total/NA	Solid	8015B NM	110485
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015B NM	110485
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	110485
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	110485
890-8180-14 MS	HA - 9	Total/NA	Solid	8015B NM	110485
890-8180-14 MSD	HA - 9	Total/NA	Solid	8015B NM	110485

HPLC/IC

Leach Batch: 110451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Soluble	Solid	DI Leach	
890-8180-3	HA - 2	Soluble	Solid	DI Leach	
890-8180-4	HA - 3	Soluble	Solid	DI Leach	
890-8180-6	HA - 4	Soluble	Solid	DI Leach	
890-8180-7	HA - 4	Soluble	Solid	DI Leach	
890-8180-9	HA - 7	Soluble	Solid	DI Leach	
890-8180-10	HA - 7	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

HPLC/IC (Continued)

Leach Batch: 110451 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-11	HA - 8	Soluble	Solid	DI Leach	
890-8180-12	HA - 8	Soluble	Solid	DI Leach	
890-8180-13	HA - 9	Soluble	Solid	DI Leach	
890-8180-14	HA - 9	Soluble	Solid	DI Leach	
890-8180-15	HA - 10	Soluble	Solid	DI Leach	
890-8180-16	HA - 10	Soluble	Solid	DI Leach	
890-8180-17	HA - 11A	Soluble	Solid	DI Leach	
890-8180-18	HA - 11B	Soluble	Solid	DI Leach	
890-8180-19	HA - 12A	Soluble	Solid	DI Leach	
MB 880-110451/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-110451/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-110451/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8180-10 MS	HA - 7	Soluble	Solid	DI Leach	
890-8180-10 MSD	HA - 7	Soluble	Solid	DI Leach	

Leach Batch: 110452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-20	HA - 12B	Soluble	Solid	DI Leach	
890-8180-21	HA - 13A	Soluble	Solid	DI Leach	
890-8180-22	HA - 18	Soluble	Solid	DI Leach	
890-8180-23	HA - 18	Soluble	Solid	DI Leach	
890-8180-24	HA - 19	Soluble	Solid	DI Leach	
890-8180-25	HA - 19	Soluble	Solid	DI Leach	
MB 880-110452/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8180-20 MS	HA - 12B	Soluble	Solid	DI Leach	
890-8180-20 MSD	HA - 12B	Soluble	Solid	DI Leach	

Analysis Batch: 110505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-1	HA - 1	Soluble	Solid	300.0	110451
890-8180-3	HA - 2	Soluble	Solid	300.0	110451
890-8180-4	HA - 3	Soluble	Solid	300.0	110451
890-8180-6	HA - 4	Soluble	Solid	300.0	110451
890-8180-7	HA - 4	Soluble	Solid	300.0	110451
890-8180-9	HA - 7	Soluble	Solid	300.0	110451
890-8180-10	HA - 7	Soluble	Solid	300.0	110451
890-8180-11	HA - 8	Soluble	Solid	300.0	110451
890-8180-12	HA - 8	Soluble	Solid	300.0	110451
890-8180-13	HA - 9	Soluble	Solid	300.0	110451
890-8180-14	HA - 9	Soluble	Solid	300.0	110451
890-8180-15	HA - 10	Soluble	Solid	300.0	110451
890-8180-16	HA - 10	Soluble	Solid	300.0	110451
890-8180-17	HA - 11A	Soluble	Solid	300.0	110451
890-8180-18	HA - 11B	Soluble	Solid	300.0	110451
890-8180-19	HA - 12A	Soluble	Solid	300.0	110451
MB 880-110451/1-A	Method Blank	Soluble	Solid	300.0	110451
LCS 880-110451/2-A	Lab Control Sample	Soluble	Solid	300.0	110451
LCSD 880-110451/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	110451
890-8180-10 MS	HA - 7	Soluble	Solid	300.0	110451

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 110505 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-10 MSD	HA - 7	Soluble	Solid	300.0	110451

Analysis Batch: 110527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8180-20	HA - 12B	Soluble	Solid	300.0	110452
890-8180-21	HA - 13A	Soluble	Solid	300.0	110452
890-8180-22	HA - 18	Soluble	Solid	300.0	110452
890-8180-23	HA - 18	Soluble	Solid	300.0	110452
890-8180-24	HA - 19	Soluble	Solid	300.0	110452
890-8180-25	HA - 19	Soluble	Solid	300.0	110452
MB 880-110452/1-A	Method Blank	Soluble	Solid	300.0	110452
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	300.0	110452
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	110452
890-8180-20 MS	HA - 12B	Soluble	Solid	300.0	110452
890-8180-20 MSD	HA - 12B	Soluble	Solid	300.0	110452

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 1

Lab Sample ID: 890-8180-1

Date Collected: 05/15/25 13:00

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 16:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 16:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 05:36	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 05:36	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:04	SMC	EET MID

Client Sample ID: HA - 2

Lab Sample ID: 890-8180-3

Date Collected: 05/15/25 13:10

Matrix: Solid

Date Received: 05/19/25 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 16:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 16:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 05:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 05:52	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:25	SMC	EET MID

Client Sample ID: HA - 3

Lab Sample ID: 890-8180-4

Date Collected: 05/15/25 13:15

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 17:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 17:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 06:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 06:08	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:32	SMC	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-6

Date Collected: 05/15/25 13:25

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 17:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 17:30	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-6

Date Collected: 05/15/25 13:25

Matrix: Solid

Date Received: 05/19/25 09:03

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			110732	05/22/25 06:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 06:25	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:39	SMC	EET MID

Client Sample ID: HA - 4

Lab Sample ID: 890-8180-7

Date Collected: 05/15/25 13:30

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 17:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 17:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 06:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 06:40	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:46	SMC	EET MID

Client Sample ID: HA - 7

Lab Sample ID: 890-8180-9

Date Collected: 05/15/25 13:55

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 18:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 18:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 06:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 06:57	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 11:53	SMC	EET MID

Client Sample ID: HA - 7

Lab Sample ID: 890-8180-10

Date Collected: 05/15/25 14:00

Matrix: Solid

Date Received: 05/19/25 09:03

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 18:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 18:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 07:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 07:13	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 7**Lab Sample ID: 890-8180-10****Date Collected: 05/15/25 14:00****Matrix: Solid****Date Received: 05/19/25 09:03**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1	0 mL	1.0 mL	110505	05/20/25 12:00	SMC	EET MID

Client Sample ID: HA - 8**Lab Sample ID: 890-8180-11****Date Collected: 05/15/25 14:05****Matrix: Solid****Date Received: 05/19/25 09:03**

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 18:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 07:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 07:30	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 12:22	SMC	EET MID

Client Sample ID: HA - 8**Lab Sample ID: 890-8180-12****Date Collected: 05/15/25 14:10****Matrix: Solid****Date Received: 05/19/25 09:03**

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 19:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 19:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 07:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 07:45	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 12:29	SMC	EET MID

Client Sample ID: HA - 9**Lab Sample ID: 890-8180-13****Date Collected: 05/15/25 14:15****Matrix: Solid****Date Received: 05/19/25 09:03**

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	110494	05/20/25 08:38	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110489	05/20/25 19:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/22/25 08:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	110484	05/20/25 08:01	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110685	05/22/25 08:01	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 12:50	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 9

Lab Sample ID: 890-8180-14

Date Collected: 05/15/25 14:20

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 11:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 11:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 11:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 11:04	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 12:57	SMC	EET MID

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-15

Date Collected: 05/15/25 14:25

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 12:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 12:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 11:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 11:48	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 13:04	SMC	EET MID

Client Sample ID: HA - 10

Lab Sample ID: 890-8180-16

Date Collected: 05/15/25 14:30

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 12:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 12:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 12:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 12:04	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 13:11	SMC	EET MID

Client Sample ID: HA - 11A

Lab Sample ID: 890-8180-17

Date Collected: 05/15/25 14:35

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 12:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 12:50	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 11A

Lab Sample ID: 890-8180-17

Date Collected: 05/15/25 14:35

Matrix: Solid

Date Received: 05/19/25 09:03

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			110732	05/23/25 12:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 12:19	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 13:18	SMC	EET MID

Client Sample ID: HA - 11B

Lab Sample ID: 890-8180-18

Date Collected: 05/15/25 14:40

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 13:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 13:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 12:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 12:34	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 13:25	SMC	EET MID

Client Sample ID: HA - 12A

Lab Sample ID: 890-8180-19

Date Collected: 05/15/25 14:45

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 13:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 13:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 12:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 12:49	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	110451	05/19/25 14:02	SA	EET MID
Soluble	Analysis	300.0		1			110505	05/20/25 13:32	SMC	EET MID

Client Sample ID: HA - 12B

Lab Sample ID: 890-8180-20

Date Collected: 05/15/25 14:50

Matrix: Solid

Date Received: 05/19/25 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 13:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 13:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 13:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 13:05	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 12B

Lab Sample ID: 890-8180-20

Date Collected: 05/15/25 14:50

Matrix: Solid

Date Received: 05/19/25 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 16:00	SMC	EET MID

Client Sample ID: HA - 13A

Lab Sample ID: 890-8180-21

Date Collected: 05/15/25 14:55

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 14:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 14:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 13:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 13:21	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 16:20	SMC	EET MID

Client Sample ID: HA - 18

Lab Sample ID: 890-8180-22

Date Collected: 05/15/25 15:15

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 14:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 14:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 13:37	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 13:37	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 16:27	SMC	EET MID

Client Sample ID: HA - 18

Lab Sample ID: 890-8180-23

Date Collected: 05/15/25 15:20

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 14:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 14:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 13:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 13:52	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 16:34	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Client Sample ID: HA - 19

Lab Sample ID: 890-8180-24

Date Collected: 05/15/25 15:25

Matrix: Solid

Date Received: 05/19/25 09:03

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	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 16:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 16:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 14:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 14:08	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 16:41	SMC	EET MID

Client Sample ID: HA - 19

Lab Sample ID: 890-8180-25

Date Collected: 05/15/25 15:30

Matrix: Solid

Date Received: 05/19/25 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	110495	05/20/25 08:43	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110491	05/20/25 16:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110618	05/20/25 16:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			110732	05/23/25 14:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 14:25	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:01	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8180-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8180-1	HA - 1	Solid	05/15/25 13:00	05/19/25 09:03	4
890-8180-3	HA - 2	Solid	05/15/25 13:10	05/19/25 09:03	4
890-8180-4	HA - 3	Solid	05/15/25 13:15	05/19/25 09:03	4
890-8180-6	HA - 4	Solid	05/15/25 13:25	05/19/25 09:03	2
890-8180-7	HA - 4	Solid	05/15/25 13:30	05/19/25 09:03	4
890-8180-9	HA - 7	Solid	05/15/25 13:55	05/19/25 09:03	2
890-8180-10	HA - 7	Solid	05/15/25 14:00	05/19/25 09:03	4
890-8180-11	HA - 8	Solid	05/15/25 14:05	05/19/25 09:03	2
890-8180-12	HA - 8	Solid	05/15/25 14:10	05/19/25 09:03	4
890-8180-13	HA - 9	Solid	05/15/25 14:15	05/19/25 09:03	2
890-8180-14	HA - 9	Solid	05/15/25 14:20	05/19/25 09:03	4
890-8180-15	HA - 10	Solid	05/15/25 14:25	05/19/25 09:03	2
890-8180-16	HA - 10	Solid	05/15/25 14:30	05/19/25 09:03	4
890-8180-17	HA - 11A	Solid	05/15/25 14:35	05/19/25 09:03	2
890-8180-18	HA - 11B	Solid	05/15/25 14:40	05/19/25 09:03	2
890-8180-19	HA - 12A	Solid	05/15/25 14:45	05/19/25 09:03	2
890-8180-20	HA - 12B	Solid	05/15/25 14:50	05/19/25 09:03	2
890-8180-21	HA - 13A	Solid	05/15/25 14:55	05/19/25 09:03	2
890-8180-22	HA - 18	Solid	05/15/25 15:15	05/19/25 09:03	0.5
890-8180-23	HA - 18	Solid	05/15/25 15:20	05/19/25 09:03	2
890-8180-24	HA - 19	Solid	05/15/25 15:25	05/19/25 09:03	0.5
890-8180-25	HA - 19	Solid	05/15/25 15:30	05/19/25 09:03	2



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 3

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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/PRP	RRRC Superfund
State of Project:	
Reporting: Level II	Level III PST/UST TRRP Level IV
Deliverables: EDD	ADAPT Other:



890-8150 Chain of Custody

Project Name:	Hognose Viper Federal Com #602H	Turn Around	Pres. Code	Analytical	
Project Number:	2783	☒ Routine ☐ Rush			
Project Location:	Lea County, NM	Due Date:	Routine TAT		
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm			
CCWO #:	1094080601				
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:			
Cooler Custody Seals:	Yes No	Correction Factor:			
Sample Custody Seals:	Yes No	Temperature Reading:			
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
HA-1	S	5.15.25	13:00	4	Grab/1	1	X	X	X			Incident Number NAPP2500721668
HA-1	S	5.15.25	13:05	6	Grab/1	1	X	X	X			
HA-2	S	5.15.25	13:10	4	Grab/1	1	X	X	X			
HA-3	S	5.15.25	13:15	4	Grab/1	1	X	X	X			
HA-3	S	5.15.25	13:20	6	Grab/1	1	X	X	X			
HA-4	S	5.15.25	13:25	2	Grab/1	1	X	X	X			
HA-4	S	5.15.25	13:30	4	Grab/1	1	X	X	X			
HA-4	S	5.15.25	13:35	6	Grab/1	1	X	X	X			
HA-7	S	5.15.25	13:55	2	Grab/1	1	X	X	X			

Total 200.7 / 601.0 200.8 / 602.0: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
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
		5/19/2			
		4			
		6			



Environment Testing
Xenco

Houston, TX (281) 240-4200 Dallas, TX (214) 502-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1295
Hobbs, NM (575) 392-7550 Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 2 of 3

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

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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	2783	Due Date:	Routine TAT		
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Santiago Giron				
CCMO #:	1094080601				
SAMPLE RECEIPT	Temp Blank: Yes No	Wet Ice: Yes No			
Samples Received Intact:	Yes No	Thermometer ID:	Three		
Cooler Custody Seals:	Yes No	Correction Factor:	-2.0		
Sample Custody Seals:	Yes No	Temperature Reading:	-1.9		
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	ANALYSIS REQUEST										Preservative Codes
							TPH -NM	Chloride -NM	BTEX -NM	Hold	24 Hr Rush						
HA-7	S	5.15.25	14:00	4	Grab/	1	X	X	X								None: NO DI Water: H ₂ O
HA-8	S	5.15.25	14:05	2	Grab/	1	X	X	X								Cool: Cool MeOH: Me
HA-8	S	5.15.25	14:10	4	Grab/	1	X	X	X								HCL: HC HNO ₃ : HN
HA-9	S	5.15.25	14:15	2	Grab/	1	X	X	X								H ₂ SO ₄ : H ₂ NaOH: Na
HA-9	S	5.15.25	14:20	4	Grab/	1	X	X	X								H ₃ PO ₄ : HP
HA-10	S	5.15.25	14:25	2	Grab/	1	X	X	X								NaHSO ₄ : NABIS
HA-10	S	5.15.25	14:30	4	Grab/	1	X	X	X								Na ₂ S ₂ O ₃ : NaSO ₃
HA-11A	S	5.15.25	14:35	2	Grab/	1	X	X	X								Zn Acetate+NaOH: Zn
HA-11B	S	5.15.25	14:40	2	Grab/	1	X	X	X								NaOH+Ascorbic Acid: SASC

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 SiO₂ Na Sr Ti Sn U V Zn
Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9:03 5/19			



Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0360
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1295
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 985-3199

Work Order No

www.xenco.com Page 3 of 3

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:		Hognose Viper Federal Com #602H	Turn Around		Pres. Code	ANALYSIS REQUEST												Preservative Codes	
Project Number:	2783	☒ Routine ☐ Rush															None: NO	DI Water: H2O	
Project Location:	Lea County, NM	Due Date:		Routine TAT <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Coat: Cool</td> <td>MeOH: Me</td>													Coat: Cool	MeOH: Me	
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																HCL: HC	HNO3: HN
CCAWO #:	1094080601																H2SO4: H2	NaOH: Na	
SAMPLE RECEIPT		Temp Blank:	Yes	No	Wet Ice:	Yes	No											H3PO4: HP	
Samples Received Intact:	Yes	No	Thermometer ID:														NaHSO4: NABIS		
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:													Na2S2O3: NaSO3		
Sample Custody Seals:	Yes	No	N/A	Temperature Reading:													Zn Acetate+NaOH: Zn		
Total Containers:				Corrected Temperature:													NaOH+Ascorbic Acid: SAPC		
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont											Sample Comments	
HA-12A	S	5.15.25	14:45	2	Grab/	1	X	TPH -NM	X	Chloride-NM	X	BTEX-NM	Hold	24 Hr Rush				Incident Number	
HA-12B	S	5.15.25	14:50	2	Grab/	1	X	X	X	X	X							nAPP2500721668	
HA-13A	S	5.15.25	14:55	2	Grab/	1	X	X	X	X	X								
HA-18	S	5.15.25	15:15	0.5	Grab/	1	X	X	X	X									
HA-18	S	5.15.25	15:20	2	Grab/	1	X	X	X	X									
HA-19	S	5.15.25	15:25	0.5	Grab/	1	X	X	X	X									
HA-19	S	5.15.25	15:30	2	Grab/	1	X	X	X	X									

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, but not analyzed. These terms will be enforced unless previously negotiated.

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed		

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Hg: 1631 / 245.1 / 7470 / 74

Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9.03.2019			

Enforced Date: 08/25/2020 RAW 2020

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s)		COC No:														
Client Contact:		N/A	Teel, Brianna	N/A		890-5156-1														
Shipping/Receiving:		N/A	E-Mail:	State of Origin:		Page 1 of 3														
Company:		Eurofins Environment Testing South Cent	Accreditations Required (See note):		TEXAS	Job #														
Address:		1211 W. Florida Ave.	NELAP - Texas			890-8180-1														
City:		Midland	Due Date Requested:			Preservation Codes:														
State, zip:		TX, 79701	TAT Requested (days):		N/A															
Phone:		432-704-5440(Tel)	PO #:																	
Email:		N/A	W/O #:																	
Project Name:		HOOGNOSE VIPER FEDERAL COM #602 H	Project #:		88001228															
Site:		N/A	SSON#:		N/A	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=organic, B=biological, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total BTEX_GCV	8021B/5035FP_Calc BTEX	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep 8015 NM	Total BTEX_GCV (Hold)	8021B/5035FP_Calc BTEX (Hold)	300_ORGFM_28D/DI_LEACH Chloride (Hold)	8015MOD_Calc (Hold)	8015MOD_NM/8015NM_S_Prep 8015 NM (Hold)	Total Number of containers	Special Instructions/Note:	
HA - 1 (890-8180-1)	5/15/25	13:00	Central	G	Solid			X	X	X	X								1	
HA - 1 (890-8180-2)	5/15/25	13:05	Central	G	Solid								X	X	X				1	
HA - 2 (890-8180-3)	5/15/25	13:10	Central	G	Solid			X	X	X	X								1	
HA - 3 (890-8180-4)	5/15/25	13:15	Central	G	Solid			X	X	X	X								1	
HA - 3 (890-8180-5)	5/15/25	13:20	Central	G	Solid							X	X	X	X				1	
HA - 4 (890-8180-6)	5/15/25	13:25	Central	G	Solid			X	X	X	X								1	
HA - 4 (890-8180-7)	5/15/25	13:30	Central	G	Solid			X	X	X	X								1	
HA - 4 (890-8180-8)	5/15/25	13:35	Central	G	Solid							X	X	X	X				1	
HA - 7 (890-8180-9)	5/15/25	13:55	Central	G	Solid			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 subcontracted 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/test/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

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: _____ Date/Time: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Date/Time: _____ Company: _____

Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler:	N/A	Lab PM:	Teel, Brianna	Carrier Tracking No(s):	N/A	COC No:	890-5156.2	
Client Contact:		Phone:	N/A	E-Mail:	Brianna.Teel@eurofins.com	State of Origin:	Texas	Page:	Page 2 of 3	
Shipping/Receiving:		Address:	1211 W. Florida Ave.	Accreditations Required (See note):	NELAP - Texas		Job #:	890-8180-1		
Company:	Eurofins Environment Testing South Cent	Due Date Requested:	5/23/2025	Analysis Requested					Preservation Codes:	
City:	Midland	TAT Requested (days):	N/A							
State, Zip:	TX, 79701	PO #:	N/A							
Phone:	432-704-5440(Tel)	WO #:	N/A							
Email:	N/A	Project #:	88001228							
Project Name:	HOGNOSE VIPER FEDERAL COM #602 H	SSOM#:	N/A							
Site:	N/A								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=oil, B=bitumen, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total_BTEX_GCV	8021B/5035FP_Calc BTEX	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_Calc	8015MOD_NM/8015NM_S_Prep 8015 NM	Total_BTEX_GCV (Hold)	8021B/5035FP_Calc BTEX (Hold)	300_ORGFM_28D/DI_LEACH Chloride (Hold)	8015MOD_Calc (Hold)	8015MOD_NM/8015NM_S_Prep 8015 NM (Hold)	Total Number of containers	Special Instructions/Note:
HA - 7 (890-8180-10)	5/15/25	14:00	G	Solid			X	X	X	X	X						1	
HA - 8 (890-8180-11)	5/15/25	14:05	G	Solid			X	X	X	X	X						1	
HA - 8 (890-8180-12)	5/15/25	14:10	G	Solid			X	X	X	X	X						1	
HA - 9 (890-8180-13)	5/15/25	14:15	G	Solid			X	X	X	X	X						1	
HA - 9 (890-8180-14)	5/15/25	14:20	G	Solid			X	X	X	X	X						1	
HA - 10 (890-8180-15)	5/15/25	14:25	G	Solid			X	X	X	X	X						1	
HA - 10 (890-8180-16)	5/15/25	14:30	G	Solid			X	X	X	X	X						1	
HA - 11A (890-8180-17)	5/15/25	14:35	G	Solid			X	X	X	X	X						1	
HA - 11B (890-8180-18)	5/15/25	14:40	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 subcontracted 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, 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

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>Brian</i>	5/15/25	16:30	
Relinquished by:	Date:	Time:	
Relinquished by:	Date:	Time:	
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact	N/A	Teel, Brianna	N/A		890-5156-3
Shipping/Receiving	N/A	E-Mail: Brianna.Teel@eurofins.com	State of Origin: Texas	Page 3 of 3	
Company: Eurofins Environment Testing South Central		Accreditations Required (See note): NELAP - Texas		Job #	890-8180-1
Address: 1211 W. Florida Ave, Midland TX, 79701		Due Date Requested: 5/23/2025		Preservation Codes:	
City:	Midland	TAT Requested (days):	N/A		
State, Zip:	TX, 79701	PO #:	N/A		
Phone:	432-704-5440(Tel)	WO #	N/A		
Email:	N/A	Project #:	88001228		
Project Name:	HOGNOSE VIPER FEDERAL COM #602 H	SSOM#:	N/A		
Site:	N/A	Field Filtered Sample (Yes or No)	☒	Other: N/A	
Sample Identification - Client ID (Lab ID)		Perform MS/MSD (Yes or No)	☒	Special Instructions/Note:	
HA - 12A (890-8180-19)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=Solid, O=Organic, BT=Trace, AA=)	Total Number of containers
HA - 12A (890-8180-19)	5/15/25	14:45	G	Solid	1
HA - 12B (890-8180-20)	5/15/25	14:50	G	Solid	1
HA - 13A (890-8180-21)	5/15/25	14:55	G	Solid	1
HA - 18 (890-8180-22)	5/15/25	15:15	G	Solid	1
HA - 18 (890-8180-23)	5/15/25	15:20	G	Solid	1
HA - 19 (890-8180-24)	5/15/25	15:25	G	Solid	1
HA - 19 (890-8180-25)	5/15/25	15:30	G	Solid	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/shipment/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

Deliverable Requested: I, II, III, IV, Other (specify) _____

Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Empty Kit Relinquished by: _____

Relinquished by: _____

Relinquished by: _____

Relinquished by: _____

Custody Seals Intact: ☐ Yes ☐ No

Custody Seal No.: _____

Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8180-1

SDG Number: Lea County, NM

Login Number: 8180

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: 890-8180-1

SDG Number: Lea County, NM

Login Number: 8180

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 05/20/25 07:42 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 5/27/2025 8:29:04 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8181-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

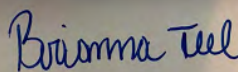
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
5/27/2025 8:29:04 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8181-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8181-1

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Job Narrative 890-8181-1

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 5/19/2025 9:03 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 -1.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-14 (890-8181-1), HA-15 (890-8181-2), HA-16 (890-8181-3), HA-20 (890-8181-4) and HA-21 (890-8181-5).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110535 and analytical batch 880-110573 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. do to human error

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-110573 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is:(CCV 880-110573/51).

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 sample was outside control limits: (LCS 880-110485/2-A). 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

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110452 and analytical batch 880-110527 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.

The associated samples are: HA-21 (890-8181-5), (890-8181-A-5-B MS) and (890-8181-A-5-C MSD).

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-14

Lab Sample ID: 890-8181-1

Date Collected: 05/15/25 15:00

Matrix: Solid

Date Received: 05/19/25 09:03

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 F1 F2	0.00200		mg/Kg		05/20/25 11:53	05/21/25 22:21	1
Toluene	<0.00200	U F1 F2	0.00200		mg/Kg		05/20/25 11:53	05/21/25 22:21	1
Ethylbenzene	<0.00200	U F1 F2	0.00200		mg/Kg		05/20/25 11:53	05/21/25 22:21	1
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.00399		mg/Kg		05/20/25 11:53	05/21/25 22:21	1
o-Xylene	<0.00200	U F1 F2	0.00200		mg/Kg		05/20/25 11:53	05/21/25 22:21	1
Xylenes, Total	<0.00399	U F1 F2	0.00399		mg/Kg		05/20/25 11:53	05/21/25 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	05/20/25 11:53	05/21/25 22:21	1
1,4-Difluorobenzene (Surr)	95		70 - 130	05/20/25 11:53	05/21/25 22:21	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			05/21/25 22:21	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			05/23/25 14:41	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		05/20/25 08:02	05/23/25 14:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 14:41	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 14:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	05/20/25 08:02	05/23/25 14:41	1
o-Terphenyl	108		70 - 130	05/20/25 08:02	05/23/25 14:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.4		10.0		mg/Kg			05/20/25 17:08	1

Client Sample ID: HA-15

Lab Sample ID: 890-8181-2

Date Collected: 05/15/25 15:05

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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		05/20/25 11:53	05/21/25 22:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 22:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 22:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 11:53	05/21/25 22:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 22:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 11:53	05/21/25 22:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/20/25 11:53	05/21/25 22:42	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-15

Lab Sample ID: 890-8181-2

Date Collected: 05/15/25 15:05

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	83		70 - 130	05/20/25 11:53	05/21/25 22:42	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/21/25 22:42	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			05/23/25 14:57	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		05/20/25 08:02	05/23/25 14:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 14:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 14:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130				05/20/25 08:02	05/23/25 14:57	1
o-Terphenyl	108		70 - 130				05/20/25 08:02	05/23/25 14:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		10.1		mg/Kg			05/20/25 17:15	1

Client Sample ID: HA-16

Lab Sample ID: 890-8181-3

Date Collected: 05/15/25 15:10

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 11:53	05/21/25 23:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/21/25 23:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/21/25 23:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 11:53	05/21/25 23:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/21/25 23:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 11:53	05/21/25 23:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	05/20/25 11:53	05/21/25 23:02	1
1,4-Difluorobenzene (Surr)	102		70 - 130	05/20/25 11:53	05/21/25 23:02	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			05/21/25 23:02	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			05/23/25 15:12	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-16

Lab Sample ID: 890-8181-3

Date Collected: 05/15/25 15:10

Matrix: Solid

Date Received: 05/19/25 09:03

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	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 15:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 15:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 15:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				05/20/25 08:02	05/23/25 15:12	1
o-Terphenyl	105		70 - 130				05/20/25 08:02	05/23/25 15:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.5		10.1		mg/Kg			05/20/25 17:21	1

Client Sample ID: HA-20

Lab Sample ID: 890-8181-4

Date Collected: 05/15/25 15:35

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/20/25 11:53	05/21/25 23:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				05/20/25 11:53	05/21/25 23:23	1
1,4-Difluorobenzene (Surr)	88		70 - 130				05/20/25 11:53	05/21/25 23:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/21/25 23:23	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			05/23/25 15:28	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		05/20/25 08:02	05/23/25 15:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 15:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 08:02	05/23/25 15:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130				05/20/25 08:02	05/23/25 15:28	1
o-Terphenyl	103		70 - 130				05/20/25 08:02	05/23/25 15:28	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-20

Lab Sample ID: 890-8181-4

Date Collected: 05/15/25 15:35

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		9.96		mg/Kg			05/20/25 17:28	1

Client Sample ID: HA-21

Lab Sample ID: 890-8181-5

Date Collected: 05/15/25 15:40

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 0.5

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		05/20/25 11:53	05/21/25 23:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 23:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 23:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/20/25 11:53	05/21/25 23:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/20/25 11:53	05/21/25 23:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/20/25 11:53	05/21/25 23:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				05/20/25 11:53	05/21/25 23:43	1
1,4-Difluorobenzene (Surr)	104		70 - 130				05/20/25 11:53	05/21/25 23:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/21/25 23:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	60.5		49.8		mg/Kg			05/23/25 15:44	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		05/20/25 08:02	05/23/25 15:44	1
Diesel Range Organics (Over C10-C28)	60.5		49.8		mg/Kg		05/20/25 08:02	05/23/25 15:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 15:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				05/20/25 08:02	05/23/25 15:44	1
o-Terphenyl	109		70 - 130				05/20/25 08:02	05/23/25 15:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	387	F1	9.92		mg/Kg			05/20/25 17:35	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea 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)
890-8181-1	HA-14	87	95
890-8181-1 MS	HA-14	91	76
890-8181-1 MSD	HA-14	103	97
890-8181-2	HA-15	100	83
890-8181-3	HA-16	94	102
890-8181-4	HA-20	103	88
890-8181-5	HA-21	95	104
LCS 880-110535/1-A	Lab Control Sample	109	99
LCSD 880-110535/2-A	Lab Control Sample Dup	114	97
MB 880-110535/5-A	Method Blank	91	100
MB 880-110588/5-A	Method Blank	88	94
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)
890-8181-1	HA-14	102	108
890-8181-2	HA-15	105	108
890-8181-3	HA-16	98	105
890-8181-4	HA-20	87	103
890-8181-5	HA-21	91	109
LCS 880-110485/2-A	Lab Control Sample	135 S1+	135 S1+
LCSD 880-110485/3-A	Lab Control Sample Dup	118	118
MB 880-110485/1-A	Method Blank	92	98
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-110535/5-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/20/25 11:53	05/21/25 21:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/20/25 11:53	05/21/25 21:59	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/20/25 11:53	05/21/25 21:59	1

Lab Sample ID: LCS 880-110535/1-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1003		mg/Kg		100	70 - 130
Toluene	0.100	0.09712		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1157		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2169		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-110535/2-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09699		mg/Kg		97	70 - 130	3	35
Toluene	0.100	0.08466		mg/Kg		85	70 - 130	14	35
Ethylbenzene	0.100	0.1095		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2104		mg/Kg		105	70 - 130	3	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-8181-1 MS

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: HA-14

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1 F2	0.100	0.004588	F1	mg/Kg		5	70 - 130
Toluene	<0.00200	U F1 F2	0.100	0.004442	F1	mg/Kg		4	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8181-1 MS

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: HA-14

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U F1 F2	0.100	0.004768	F1	mg/Kg		5	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.009528	F1	mg/Kg		5	70 - 130
o-Xylene	<0.00200	U F1 F2	0.100	0.005423	F1	mg/Kg		5	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-8181-1 MSD

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: HA-14

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.100	0.05983	F1 F2	mg/Kg		60	70 - 130	172	35
Toluene	<0.00200	U F1 F2	0.100	0.03734	F1 F2	mg/Kg		37	70 - 130	157	35
Ethylbenzene	<0.00200	U F1 F2	0.100	0.02899	F1 F2	mg/Kg		29	70 - 130	143	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.04958	F1 F2	mg/Kg		25	70 - 130	136	35
o-Xylene	<0.00200	U F1 F2	0.100	0.02927	F1 F2	mg/Kg		29	70 - 130	137	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-110588/5-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/25 10:00	05/21/25 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	05/21/25 10:00	05/21/25 11:20	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/21/25 10:00	05/21/25 11:20	1

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

Lab Sample ID: MB 880-110485/1-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110485

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		05/20/25 07:55	05/23/25 08:44	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-110485/1-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110485

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				05/20/25 07:55	05/23/25 08:44	1
o-Terphenyl	98		70 - 130				05/20/25 07:55	05/23/25 08:44	1

Lab Sample ID: LCS 880-110485/2-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1105		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	989.7		mg/Kg		99	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	135	S1+	70 - 130				
o-Terphenyl	135	S1+	70 - 130				

Lab Sample ID: LCSD 880-110485/3-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	986.7		mg/Kg		99	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130	12	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	118		70 - 130						
o-Terphenyl	118		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-110452/1-A

Matrix: Solid

Analysis Batch: 110527

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			05/20/25 15:39	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-110452/2-A

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	268.0		mg/Kg		107	90 - 110

Lab Sample ID: LCSD 880-110452/3-A

Matrix: Solid

Analysis Batch: 110527

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	270.3		mg/Kg		108	90 - 110	1	20

Lab Sample ID: 890-8181-5 MS

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: HA-21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	387	F1	248	690.6	F1	mg/Kg		122	90 - 110

Lab Sample ID: 890-8181-5 MSD

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: HA-21

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	387	F1	248	690.7	F1	mg/Kg		122	90 - 110	0	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

GC VOA

Prep Batch: 110535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	5035	
890-8181-2	HA-15	Total/NA	Solid	5035	
890-8181-3	HA-16	Total/NA	Solid	5035	
890-8181-4	HA-20	Total/NA	Solid	5035	
890-8181-5	HA-21	Total/NA	Solid	5035	
MB 880-110535/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-110535/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-110535/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8181-1 MS	HA-14	Total/NA	Solid	5035	
890-8181-1 MSD	HA-14	Total/NA	Solid	5035	

Analysis Batch: 110573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	8021B	110535
890-8181-2	HA-15	Total/NA	Solid	8021B	110535
890-8181-3	HA-16	Total/NA	Solid	8021B	110535
890-8181-4	HA-20	Total/NA	Solid	8021B	110535
890-8181-5	HA-21	Total/NA	Solid	8021B	110535
MB 880-110535/5-A	Method Blank	Total/NA	Solid	8021B	110535
MB 880-110588/5-A	Method Blank	Total/NA	Solid	8021B	110588
LCS 880-110535/1-A	Lab Control Sample	Total/NA	Solid	8021B	110535
LCSD 880-110535/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	110535
890-8181-1 MS	HA-14	Total/NA	Solid	8021B	110535
890-8181-1 MSD	HA-14	Total/NA	Solid	8021B	110535

Prep Batch: 110588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-110588/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 110753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	Total BTEX	
890-8181-2	HA-15	Total/NA	Solid	Total BTEX	
890-8181-3	HA-16	Total/NA	Solid	Total BTEX	
890-8181-4	HA-20	Total/NA	Solid	Total BTEX	
890-8181-5	HA-21	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 110485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	8015NM Prep	
890-8181-2	HA-15	Total/NA	Solid	8015NM Prep	
890-8181-3	HA-16	Total/NA	Solid	8015NM Prep	
890-8181-4	HA-20	Total/NA	Solid	8015NM Prep	
890-8181-5	HA-21	Total/NA	Solid	8015NM Prep	
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 110845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	8015B NM	110485
890-8181-2	HA-15	Total/NA	Solid	8015B NM	110485
890-8181-3	HA-16	Total/NA	Solid	8015B NM	110485
890-8181-4	HA-20	Total/NA	Solid	8015B NM	110485
890-8181-5	HA-21	Total/NA	Solid	8015B NM	110485
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015B NM	110485
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	110485
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	110485

Analysis Batch: 110943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Total/NA	Solid	8015 NM	
890-8181-2	HA-15	Total/NA	Solid	8015 NM	
890-8181-3	HA-16	Total/NA	Solid	8015 NM	
890-8181-4	HA-20	Total/NA	Solid	8015 NM	
890-8181-5	HA-21	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 110452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Soluble	Solid	DI Leach	
890-8181-2	HA-15	Soluble	Solid	DI Leach	
890-8181-3	HA-16	Soluble	Solid	DI Leach	
890-8181-4	HA-20	Soluble	Solid	DI Leach	
890-8181-5	HA-21	Soluble	Solid	DI Leach	
MB 880-110452/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8181-5 MS	HA-21	Soluble	Solid	DI Leach	
890-8181-5 MSD	HA-21	Soluble	Solid	DI Leach	

Analysis Batch: 110527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8181-1	HA-14	Soluble	Solid	300.0	110452
890-8181-2	HA-15	Soluble	Solid	300.0	110452
890-8181-3	HA-16	Soluble	Solid	300.0	110452
890-8181-4	HA-20	Soluble	Solid	300.0	110452
890-8181-5	HA-21	Soluble	Solid	300.0	110452
MB 880-110452/1-A	Method Blank	Soluble	Solid	300.0	110452
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	300.0	110452
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	110452
890-8181-5 MS	HA-21	Soluble	Solid	300.0	110452
890-8181-5 MSD	HA-21	Soluble	Solid	300.0	110452

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-14

Lab Sample ID: 890-8181-1

Date Collected: 05/15/25 15:00

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/21/25 22:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110753	05/21/25 22:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			110943	05/23/25 14:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 14:41	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:08	SMC	EET MID

Client Sample ID: HA-15

Lab Sample ID: 890-8181-2

Date Collected: 05/15/25 15:05

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/21/25 22:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110753	05/21/25 22:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			110943	05/23/25 14:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 14:57	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:15	SMC	EET MID

Client Sample ID: HA-16

Lab Sample ID: 890-8181-3

Date Collected: 05/15/25 15:10

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/21/25 23:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110753	05/21/25 23:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			110943	05/23/25 15:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 15:12	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:21	SMC	EET MID

Client Sample ID: HA-20

Lab Sample ID: 890-8181-4

Date Collected: 05/15/25 15:35

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/21/25 23:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110753	05/21/25 23:23	SM	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Client Sample ID: HA-20

Date Collected: 05/15/25 15:35

Date Received: 05/19/25 09:03

Lab Sample ID: 890-8181-4

Matrix: Solid

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			110943	05/23/25 15:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 15:28	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:28	SMC	EET MID

Client Sample ID: HA-21

Date Collected: 05/15/25 15:40

Date Received: 05/19/25 09:03

Lab Sample ID: 890-8181-5

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/21/25 23:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110753	05/21/25 23:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			110943	05/23/25 15:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 15:44	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:35	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8181-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8181-1	HA-14	Solid	05/15/25 15:00	05/19/25 09:03	4
890-8181-2	HA-15	Solid	05/15/25 15:05	05/19/25 09:03	4
890-8181-3	HA-16	Solid	05/15/25 15:10	05/19/25 09:03	4
890-8181-4	HA-20	Solid	05/15/25 15:35	05/19/25 09:03	0.5
890-8181-5	HA-21	Solid	05/15/25 15:40	05/19/25 09:03	0.5

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Environment Testing
Xenco

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

Chain of Custody

Work

890-8181 Chain of Custody

www.xenco.com Page 1 of 1

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

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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code	ANALYSIS REQUEST																Preservative Codes		
Project Number:	2783	Due Date:	Routine TAT																		None: NO	DI Water: H ₂ O	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm																				Cool: Cool	MeOH: Me
Sampler's Name:	Santiago Giron																					HCL: HC	HNO ₃ : HN
CCW/O #:	1094080601																					H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Yes No																	H ₃ PO ₄ : HP		
Samples Received Intact:	Yes No	Thermometer ID:	10.7																			NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes No	Correction Factor:	-0.2																			Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes No	Temperature Reading:	-1.5																			Zn Acetate+NaOH: Zn	
Total Containers:	Corrected Temperature:																				NaOH+Ascorbic Acid: SAPC		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush											Sample Comments	
HA-14	S	5.15.25	15:00	4	Grab/	1	X	X	X													Incident Number	
HA-15	S	5.15.25	15:05	4	Grab/	1	X	X	X													nAPP2500721668	
HA-16	S	5.15.25	15:10	4	Grab/	1	X	X	X														
HA-20	S	5.15.25	15:35	0.5	Grab/	1	X	X	X														
HA-21	S	5.15.25	15:40	0.5	Grab/	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 SiO₂ Na Sr Ti 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 \$65.00 will be applied to each project and a charge of \$8 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
		9:02 5/16			

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler	N/A	Lab PM	Teel, Brianna	Carrier Tracking No(s):	N/A	COC No	890-5157.1
Client Contact	Phone: N/A	E-Mail	Brianna.Teel@eurofins.com	State of Origin	Texas	Page	Page 1 of 1	Page	Page 1 of 1
Shipping/Receiving	N/A	Company	Eurofins Environment Testing South Cent	Accreditations Required (See note)	NE LAP - Texas	Lab #	890-8181-1	Preservation Codes:	
Address		Due Date Requested:	5/23/2025	Analysis Requested					
City	Midland	TAT Requested (days):	N/A						
State, Zip	TX, 79701	PO #	N/A						
Phone	432-704-5440(Tel)	WO #	N/A						
Email	N/A	Project #	88001228						
Project Name	HOGNOSE VIPER FEDERAL COM #602 H	SSOV#	N/A						
Site	N/A	Field Filtered Sample (Yes or No)							
Perform MS/MSD (Yes or No)									
Total_BTEX_GCV									
8021B/5035FP_Calc BTEX									
300_ORGFM_28D/DI_LEACH Chloride									
8015MOD_Calc									
8015MOD_NM/8015NM_S_Prep 8015 NM									
Total Number of containers									
Special Instructions/Note:									
Sample Identification - Client ID (Lab ID)									
HA-14 (890-8181-1)	5/15/25	15:00	Central	G	Solid				1
HA-15 (890-8181-2)	5/15/25	15:05	Central	G	Solid				1
HA-16 (890-8181-3)	5/15/25	15:10	Central	G	Solid				1
HA-20 (890-8181-4)	5/15/25	15:35	Central	G	Solid				1
HA-21 (890-8181-5)	5/15/25	15:40	Central	G	Solid				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/test/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

Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: _____

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: ☐ Yes ☐ No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8181-1

SDG Number: Lea County, NM

Login Number: 8181

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: 890-8181-1

SDG Number: Lea County, NM

Login Number: 8181

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 05/20/25 07:42 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 10:48:27 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8734-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



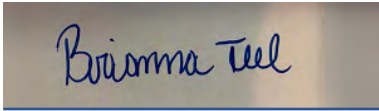
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 10:48:27 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8734-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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
SQL	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: Hognose Viper Federal Com #602H

Job ID: 890-8734-1

Job ID: 890-8734-1

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Job Narrative 890-8734-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-118217 and analytical batch 880-118210 was outside the upper control limits.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-1

Lab Sample ID: 890-8734-1

Date Collected: 08/29/25 09:00

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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		09/03/25 12:17	09/05/25 04:00	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 04:00	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 04:00	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 12:17	09/05/25 04:00	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 04:00	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 12:17	09/05/25 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/03/25 12:17	09/05/25 04:00	1
1,4-Difluorobenzene (Surr)	114		70 - 130	09/03/25 12:17	09/05/25 04:00	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			09/05/25 04:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	168		49.9		mg/Kg			09/09/25 04:13	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		09/02/25 16:27	09/09/25 04:13	1
Diesel Range Organics (Over C10-C28)	168		49.9		mg/Kg		09/02/25 16:27	09/09/25 04:13	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 04:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/02/25 16:27	09/09/25 04:13	1
o-Terphenyl	86		70 - 130	09/02/25 16:27	09/09/25 04:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	361		10.1		mg/Kg			09/04/25 20:55	1

Client Sample ID: CS-2

Lab Sample ID: 890-8734-2

Date Collected: 08/29/25 09:05

Matrix: Solid

Date Received: 09/02/25 08:05

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		09/03/25 12:17	09/05/25 04:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 04:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 04:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 12:17	09/05/25 04:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 04:21	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 12:17	09/05/25 04:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	09/03/25 12:17	09/05/25 04:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-2

Lab Sample ID: 890-8734-2

Date Collected: 08/29/25 09:05

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	118		70 - 130	09/03/25 12:17	09/05/25 04:21	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			09/05/25 04:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	205		49.9		mg/Kg			09/09/25 04:28	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		09/02/25 16:27	09/09/25 04:28	1
Diesel Range Organics (Over C10-C28)	205		49.9		mg/Kg		09/02/25 16:27	09/09/25 04:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 04:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/02/25 16:27	09/09/25 04:28	1
o-Terphenyl	81		70 - 130				09/02/25 16:27	09/09/25 04:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	360		10.1		mg/Kg			09/04/25 11:26	1

Client Sample ID: CS-3

Lab Sample ID: 890-8734-3

Date Collected: 08/28/25 09:00

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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		09/03/25 12:17	09/05/25 04:41	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 04:41	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 04:41	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 12:17	09/05/25 04:41	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 04:41	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 12:17	09/05/25 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/03/25 12:17	09/05/25 04:41	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/03/25 12:17	09/05/25 04:41	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			09/05/25 04:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	109		50.0		mg/Kg			09/09/25 04:43	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-3

Lab Sample ID: 890-8734-3

Date Collected: 08/28/25 09:00

Matrix: Solid

Date Received: 09/02/25 08:05

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	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 04:43	1
Diesel Range Organics (Over C10-C28)	109		50.0		mg/Kg		09/02/25 16:27	09/09/25 04:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 04:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/02/25 16:27	09/09/25 04:43	1
o-Terphenyl	79		70 - 130				09/02/25 16:27	09/09/25 04:43	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	307		10.0		mg/Kg			09/04/25 11:46	1

Client Sample ID: CS-4

Lab Sample ID: 890-8734-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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		09/03/25 12:17	09/05/25 05:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 12:17	09/05/25 05:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 12:17	09/05/25 05:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 12:17	09/05/25 05:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 12:17	09/05/25 05:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 12:17	09/05/25 05:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				09/03/25 12:17	09/05/25 05:02	1
1,4-Difluorobenzene (Surr)	114		70 - 130				09/03/25 12:17	09/05/25 05:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/05/25 05:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	109		49.8		mg/Kg			09/09/25 04:58	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		09/02/25 16:27	09/09/25 04:58	1
Diesel Range Organics (Over C10-C28)	109		49.8		mg/Kg		09/02/25 16:27	09/09/25 04:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 04:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/02/25 16:27	09/09/25 04:58	1
o-Terphenyl	87		70 - 130				09/02/25 16:27	09/09/25 04:58	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-4

Lab Sample ID: 890-8734-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	144		10.0		mg/Kg			09/04/25 11:52	1

Client Sample ID: CS-5

Lab Sample ID: 890-8734-5

Date Collected: 08/28/25 09:05

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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		09/03/25 12:17	09/05/25 05:22	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 05:22	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 05:22	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 12:17	09/05/25 05:22	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 12:17	09/05/25 05:22	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 12:17	09/05/25 05:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				09/03/25 12:17	09/05/25 05:22	1
1,4-Difluorobenzene (Surr)	117		70 - 130				09/03/25 12:17	09/05/25 05:22	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			09/05/25 05:22	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			09/09/25 05:14	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		09/02/25 16:27	09/09/25 05:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				09/02/25 16:27	09/09/25 05:14	1
o-Terphenyl	76		70 - 130				09/02/25 16:27	09/09/25 05:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	89.6		9.98		mg/Kg			09/04/25 11:59	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-6

Lab Sample ID: 890-8734-6

Date Collected: 08/29/25 09:15

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 2

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		09/03/25 12:17	09/05/25 05:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 05:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 05:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 12:17	09/05/25 05:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 12:17	09/05/25 05:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 12:17	09/05/25 05:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/03/25 12:17	09/05/25 05:43	1
1,4-Difluorobenzene (Surr)	119		70 - 130	09/03/25 12:17	09/05/25 05:43	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			09/05/25 05:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	77.4		50.0		mg/Kg			09/09/25 05:28	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		09/02/25 16:27	09/09/25 05:28	1
Diesel Range Organics (Over C10-C28)	77.4		50.0		mg/Kg		09/02/25 16:27	09/09/25 05:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 05:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/02/25 16:27	09/09/25 05:28	1
o-Terphenyl	88		70 - 130	09/02/25 16:27	09/09/25 05:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.1		9.96		mg/Kg			09/04/25 12:05	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea 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)
890-8734-1	CS-1	106	114
890-8734-2	CS-2	115	118
890-8734-3	CS-3	109	117
890-8734-4	CS-4	104	114
890-8734-5	CS-5	114	117
890-8734-6	CS-6	114	119
LCS 880-118166/1-A	Lab Control Sample	92	98
LCSD 880-118166/2-A	Lab Control Sample Dup	97	97
MB 880-118166/5-A	Method Blank	93	130
MB 880-118217/5-A	Method Blank	94	138 S1+

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)
890-8734-1	CS-1	102	86
890-8734-2	CS-2	100	81
890-8734-3	CS-3	100	79
890-8734-4	CS-4	98	87
890-8734-5	CS-5	94	76
890-8734-6	CS-6	103	88
LCS 880-118102/2-A	Lab Control Sample	93	90
LCSD 880-118102/3-A	Lab Control Sample Dup	96	94
MB 880-118102/1-A	Method Blank	96	83

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118166/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/04/25 22:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/03/25 12:17	09/04/25 22:40	1
1,4-Difluorobenzene (Surr)	130		70 - 130	09/03/25 12:17	09/04/25 22:40	1

Lab Sample ID: LCS 880-118166/1-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07431		mg/Kg		74	70 - 130
Toluene	0.100	0.08130		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07819		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	0.200	0.1527		mg/Kg		76	70 - 130
o-Xylene	0.100	0.07819		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-118166/2-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118166

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07799		mg/Kg		78	70 - 130	5	35
Toluene	0.100	0.08691		mg/Kg		87	70 - 130	7	35
Ethylbenzene	0.100	0.08282		mg/Kg		83	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1661		mg/Kg		83	70 - 130	8	35
o-Xylene	0.100	0.08557		mg/Kg		86	70 - 130	9	35

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

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/04/25 09:06	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	138	S1+	70 - 130	09/04/25 09:06	09/04/25 11:41	1

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

Lab Sample ID: MB 880-118102/1-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118102

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		09/02/25 16:27	09/09/25 02:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/02/25 16:27	09/09/25 02:12	1
o-Terphenyl	83		70 - 130	09/02/25 16:27	09/09/25 02:12	1

Lab Sample ID: LCS 880-118102/2-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	911.0		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	791.8		mg/Kg		79	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	922.5		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	805.6		mg/Kg		81	70 - 130	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	94		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118093/1-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<10.0	U	10.0		mg/Kg			09/04/25 20:14	1	

Lab Sample ID: LCS 880-118093/2-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	256.5		mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-118093/3-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	256.8		mg/Kg		103	90 - 110	0	20

Lab Sample ID: MB 880-118101/1-A

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<10.0	U	10.0		mg/Kg			09/04/25 11:06	1		

Lab Sample ID: LCS 880-118101/2-A

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	229.9		mg/Kg		92	90 - 110	

Lab Sample ID: LCSD 880-118101/3-A

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	237.8		mg/Kg		95	90 - 110	3	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-8734-2 MS										Client Sample ID: CS-2		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 118187												
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits			
Chloride	360		252	599.5		mg/Kg		95	90 - 110			

Lab Sample ID: 890-8734-2 MSD										Client Sample ID: CS-2		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 118187												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	360		252	618.5		mg/Kg		102	90 - 110	3	20	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	5035	
890-8734-2	CS-2	Total/NA	Solid	5035	
890-8734-3	CS-3	Total/NA	Solid	5035	
890-8734-4	CS-4	Total/NA	Solid	5035	
890-8734-5	CS-5	Total/NA	Solid	5035	
890-8734-6	CS-6	Total/NA	Solid	5035	
MB 880-118166/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118166/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118166/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	8021B	118166
890-8734-2	CS-2	Total/NA	Solid	8021B	118166
890-8734-3	CS-3	Total/NA	Solid	8021B	118166
890-8734-4	CS-4	Total/NA	Solid	8021B	118166
890-8734-5	CS-5	Total/NA	Solid	8021B	118166
890-8734-6	CS-6	Total/NA	Solid	8021B	118166
MB 880-118166/5-A	Method Blank	Total/NA	Solid	8021B	118166
MB 880-118217/5-A	Method Blank	Total/NA	Solid	8021B	118217
LCS 880-118166/1-A	Lab Control Sample	Total/NA	Solid	8021B	118166
LCSD 880-118166/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118166

Prep Batch: 118217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-118217/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 118324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	Total BTEX	
890-8734-2	CS-2	Total/NA	Solid	Total BTEX	
890-8734-3	CS-3	Total/NA	Solid	Total BTEX	
890-8734-4	CS-4	Total/NA	Solid	Total BTEX	
890-8734-5	CS-5	Total/NA	Solid	Total BTEX	
890-8734-6	CS-6	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	8015NM Prep	
890-8734-2	CS-2	Total/NA	Solid	8015NM Prep	
890-8734-3	CS-3	Total/NA	Solid	8015NM Prep	
890-8734-4	CS-4	Total/NA	Solid	8015NM Prep	
890-8734-5	CS-5	Total/NA	Solid	8015NM Prep	
890-8734-6	CS-6	Total/NA	Solid	8015NM Prep	
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 118481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	8015B NM	118102
890-8734-2	CS-2	Total/NA	Solid	8015B NM	118102
890-8734-3	CS-3	Total/NA	Solid	8015B NM	118102
890-8734-4	CS-4	Total/NA	Solid	8015B NM	118102
890-8734-5	CS-5	Total/NA	Solid	8015B NM	118102
890-8734-6	CS-6	Total/NA	Solid	8015B NM	118102
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015B NM	118102
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118102
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118102

Analysis Batch: 118540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Total/NA	Solid	8015 NM	
890-8734-2	CS-2	Total/NA	Solid	8015 NM	
890-8734-3	CS-3	Total/NA	Solid	8015 NM	
890-8734-4	CS-4	Total/NA	Solid	8015 NM	
890-8734-5	CS-5	Total/NA	Solid	8015 NM	
890-8734-6	CS-6	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Soluble	Solid	DI Leach	
MB 880-118093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 118101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-2	CS-2	Soluble	Solid	DI Leach	
890-8734-3	CS-3	Soluble	Solid	DI Leach	
890-8734-4	CS-4	Soluble	Solid	DI Leach	
890-8734-5	CS-5	Soluble	Solid	DI Leach	
890-8734-6	CS-6	Soluble	Solid	DI Leach	
MB 880-118101/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8734-2 MS	CS-2	Soluble	Solid	DI Leach	
890-8734-2 MSD	CS-2	Soluble	Solid	DI Leach	

Analysis Batch: 118175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-1	CS-1	Soluble	Solid	300.0	118093
MB 880-118093/1-A	Method Blank	Soluble	Solid	300.0	118093
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	300.0	118093
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118093

Analysis Batch: 118187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-2	CS-2	Soluble	Solid	300.0	118101

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

HPLC/IC (Continued)

Analysis Batch: 118187 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8734-3	CS-3	Soluble	Solid	300.0	118101
890-8734-4	CS-4	Soluble	Solid	300.0	118101
890-8734-5	CS-5	Soluble	Solid	300.0	118101
890-8734-6	CS-6	Soluble	Solid	300.0	118101
MB 880-118101/1-A	Method Blank	Soluble	Solid	300.0	118101
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	300.0	118101
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118101
890-8734-2 MS	CS-2	Soluble	Solid	300.0	118101
890-8734-2 MSD	CS-2	Soluble	Solid	300.0	118101

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-1

Lab Sample ID: 890-8734-1

Date Collected: 08/29/25 09:00

Matrix: Solid

Date Received: 09/02/25 08:05

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 04:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 04:00	SA	EET MID
Total/NA	Analysis	8015 NM		1			118540	09/09/25 04:13	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 04:13	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 20:55	SMC	EET MID

Client Sample ID: CS-2

Lab Sample ID: 890-8734-2

Date Collected: 08/29/25 09:05

Matrix: Solid

Date Received: 09/02/25 08:05

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 04:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 04:21	SA	EET MID
Total/NA	Analysis	8015 NM		1			118540	09/09/25 04:28	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 04:28	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 11:26	SMC	EET MID

Client Sample ID: CS-3

Lab Sample ID: 890-8734-3

Date Collected: 08/28/25 09:00

Matrix: Solid

Date Received: 09/02/25 08:05

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 04:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 04:41	SA	EET MID
Total/NA	Analysis	8015 NM		1			118540	09/09/25 04:43	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 04:43	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 11:46	SMC	EET MID

Client Sample ID: CS-4

Lab Sample ID: 890-8734-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 05:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 05:02	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Client Sample ID: CS-4

Lab Sample ID: 890-8734-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

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			118540	09/09/25 04:58	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 04:58	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 11:52	SMC	EET MID

Client Sample ID: CS-5

Lab Sample ID: 890-8734-5

Date Collected: 08/28/25 09:05

Matrix: Solid

Date Received: 09/02/25 08:05

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 05:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 05:22	SA	EET MID
Total/NA	Analysis	8015 NM		1			118540	09/09/25 05:14	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 05:14	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 11:59	SMC	EET MID

Client Sample ID: CS-6

Lab Sample ID: 890-8734-6

Date Collected: 08/29/25 09:15

Matrix: Solid

Date Received: 09/02/25 08:05

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 05:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118324	09/05/25 05:43	SA	EET MID
Total/NA	Analysis	8015 NM		1			118540	09/09/25 05:28	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 05:28	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 12:05	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8734-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8734-1	CS-1	Solid	08/29/25 09:00	09/02/25 08:05	2
890-8734-2	CS-2	Solid	08/29/25 09:05	09/02/25 08:05	2
890-8734-3	CS-3	Solid	08/28/25 09:00	09/02/25 08:05	2
890-8734-4	CS-4	Solid	08/29/25 09:10	09/02/25 08:05	2
890-8734-5	CS-5	Solid	08/28/25 09:05	09/02/25 08:05	2
890-8734-6	CS-6	Solid	08/29/25 09:15	09/02/25 08:05	2

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Environment Testing
Xenco

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

Chain of Custody



890-8734 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hogase Viper Federal Corn #602H	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes	
Project Number:	2783	☒ Routine ☐ Rush																	None: NO	DI Water: H ₂ O	
Project Location:	Lee County, NM	Due Date:																	Cool: Cool	MeOH: Me	
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																	HCL: HC	HNO ₃ : HN	
CC/WO #:	1094080601																		H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	(Yes) No	Wet Ice:	Yes	No														H ₃ PO ₄ : HP		
Samples Received Intact:	Yes	No	Thermometer ID:																NaHSO ₄ : NABIS		
Cooler Custody Seal:	Yes	No	Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃		
Sample Custody Seals:	Yes	No	Temperature Reading:																Zn Acetate+NaOH: Zn		
Total Containers:			Corrected Temperature:																NaOH+Ascorbic Acid: SAPC		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush									Sample Comments	
CS-1	S	8.29.25	9:00	2	Comp	1	X	X	X											Incident Number	
CS-2	S	8.29.25	9:05	2	Comp	1	X	X	X											nAPP2500721668	
CS-3	S	8.28.25	9:00	2	Comp	1	X	X	X												
CS-4	S	8.29.25	9:10	2	Comp	1	X	X	X												
CS-5	S	8.28.25	9:05	2	Comp	1	X	X	X												
CS-6	S	8.29.25	9:15	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	Ti	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
		8:05 PM			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8734-1

SDG Number: Lea County, NM

Login Number: 8734

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: 890-8734-1

SDG Number: Lea County, NM

Login Number: 8734

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 5/27/2025 8:29:31 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8182-1

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1089 N Canal St.
Carlsbad NM 88220



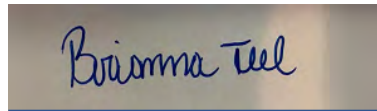
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Job Notes

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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Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8182-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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
Project: Hognose Viper Federal Com #602H

Job ID: 890-8182-1

Job ID: 890-8182-1

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Job Narrative 890-8182-1

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 5/19/2025 9:03 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 -1.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HA-5 (890-8182-1), HA-5 (890-8182-2) and HA-5 (890-8182-3).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-110573 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is:(CCV 880-110573/51).

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 sample was outside control limits: (LCS 880-110485/2-A). 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

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110452 and analytical batch 880-110527 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.

The associated samples are: HA-5 (890-8182-1), HA-5 (890-8182-2), HA-5 (890-8182-3), (890-8181-A-5-A), (890-8181-A-5-B MS) and (890-8181-A-5-C MSD).

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

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Client Sample ID: HA-5

Lab Sample ID: 890-8182-1

Date Collected: 05/15/25 13:40

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 2

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		05/20/25 11:53	05/22/25 00:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/22/25 00:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/22/25 00:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/20/25 11:53	05/22/25 00:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/20/25 11:53	05/22/25 00:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/20/25 11:53	05/22/25 00:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	05/20/25 11:53	05/22/25 00:04	1
1,4-Difluorobenzene (Surr)	97		70 - 130	05/20/25 11:53	05/22/25 00:04	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			05/22/25 00:04	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			05/23/25 15:59	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		05/20/25 08:02	05/23/25 15:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 15:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	05/20/25 08:02	05/23/25 15:59	1
o-Terphenyl	109		70 - 130	05/20/25 08:02	05/23/25 15:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1180		10.0		mg/Kg			05/20/25 17:55	1

Client Sample ID: HA-5

Lab Sample ID: 890-8182-2

Date Collected: 05/15/25 13:45

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 11:53	05/22/25 00:24	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/20/25 11:53	05/22/25 00:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/20/25 11:53	05/22/25 00:24	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/20/25 11:53	05/22/25 00:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/20/25 11:53	05/22/25 00:24	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/20/25 11:53	05/22/25 00:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/20/25 11:53	05/22/25 00:24	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Client Sample ID: HA-5

Lab Sample ID: 890-8182-2

Date Collected: 05/15/25 13:45

Matrix: Solid

Date Received: 05/19/25 09:03

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	82		70 - 130	05/20/25 11:53	05/22/25 00:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/22/25 00:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	239		49.8		mg/Kg			05/23/25 16:42	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		05/20/25 08:02	05/23/25 16:42	1
Diesel Range Organics (Over C10-C28)	239		49.8		mg/Kg		05/20/25 08:02	05/23/25 16:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/20/25 08:02	05/23/25 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				05/20/25 08:02	05/23/25 16:42	1
o-Terphenyl	120		70 - 130				05/20/25 08:02	05/23/25 16:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	203		10.0		mg/Kg			05/20/25 18:02	1

Client Sample ID: HA-5

Lab Sample ID: 890-8182-3

Date Collected: 05/15/25 13:50

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 11:53	05/22/25 00:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/22/25 00:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/22/25 00:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 11:53	05/22/25 00:45	1
o-Xylene	0.00907		0.00200		mg/Kg		05/20/25 11:53	05/22/25 00:45	1
Xylenes, Total	0.00907		0.00400		mg/Kg		05/20/25 11:53	05/22/25 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	05/20/25 11:53	05/22/25 00:45	1
1,4-Difluorobenzene (Surr)	88		70 - 130	05/20/25 11:53	05/22/25 00:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00907		0.00400		mg/Kg			05/22/25 00:45	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			05/23/25 16:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Client Sample ID: HA-5

Lab Sample ID: 890-8182-3

Date Collected: 05/15/25 13:50

Matrix: Solid

Date Received: 05/19/25 09:03

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		05/20/25 08:02	05/23/25 16:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 16:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/20/25 08:02	05/23/25 16:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130				05/20/25 08:02	05/23/25 16:57	1
o-Terphenyl	114		70 - 130				05/20/25 08:02	05/23/25 16:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.0		10.0		mg/Kg			05/20/25 18:23	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea 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)
890-8182-1	HA-5	86	97
890-8182-2	HA-5	104	82
890-8182-3	HA-5	107	88
LCS 880-110535/1-A	Lab Control Sample	109	99
LCSD 880-110535/2-A	Lab Control Sample Dup	114	97
MB 880-110535/5-A	Method Blank	91	100
MB 880-110588/5-A	Method Blank	88	94
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)
890-8182-1	HA-5	91	109
890-8182-2	HA-5	100	120
890-8182-3	HA-5	108	114
LCS 880-110485/2-A	Lab Control Sample	135 S1+	135 S1+
LCSD 880-110485/3-A	Lab Control Sample Dup	118	118
MB 880-110485/1-A	Method Blank	92	98
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-110535/5-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110535

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/20/25 11:53	05/21/25 21:59	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/20/25 11:53	05/21/25 21:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/20/25 11:53	05/21/25 21:59	1
1,4-Difluorobenzene (Surr)	100		70 - 130	05/20/25 11:53	05/21/25 21:59	1

Lab Sample ID: LCS 880-110535/1-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1003		mg/Kg		100	70 - 130
Toluene	0.100	0.09712		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.1157		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	0.200	0.2169		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1086		mg/Kg		109	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-110535/2-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110535

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09699		mg/Kg		97	70 - 130	3	35
Toluene	0.100	0.08466		mg/Kg		85	70 - 130	14	35
Ethylbenzene	0.100	0.1095		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2104		mg/Kg		105	70 - 130	3	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: MB 880-110588/5-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-110588/5-A

Matrix: Solid

Analysis Batch: 110573

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/21/25 10:00	05/21/25 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/21/25 10:00	05/21/25 11:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	05/21/25 10:00	05/21/25 11:20	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/21/25 10:00	05/21/25 11:20	1

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

Lab Sample ID: MB 880-110485/1-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 110485

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		05/20/25 07:55	05/23/25 08:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/20/25 07:55	05/23/25 08:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	05/20/25 07:55	05/23/25 08:44	1
o-Terphenyl	98		70 - 130	05/20/25 07:55	05/23/25 08:44	1

Lab Sample ID: LCS 880-110485/2-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1105		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	1000	989.7		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

Lab Sample ID: LCSD 880-110485/3-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110485

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	986.7		mg/Kg		99	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	873.3		mg/Kg		87	70 - 130	12	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-110485/3-A

Matrix: Solid

Analysis Batch: 110845

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 110485

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-110452/1-A

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			05/20/25 15:39	1

Lab Sample ID: LCS 880-110452/2-A

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250	268.0		mg/Kg		107	90 - 110		

Lab Sample ID: LCSD 880-110452/3-A

Matrix: Solid

Analysis Batch: 110527

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	250	270.3		mg/Kg		108	90 - 110	1	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

GC VOA

Prep Batch: 110535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	5035	
890-8182-2	HA-5	Total/NA	Solid	5035	
890-8182-3	HA-5	Total/NA	Solid	5035	
MB 880-110535/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-110535/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-110535/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 110573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	8021B	110535
890-8182-2	HA-5	Total/NA	Solid	8021B	110535
890-8182-3	HA-5	Total/NA	Solid	8021B	110535
MB 880-110535/5-A	Method Blank	Total/NA	Solid	8021B	110535
MB 880-110588/5-A	Method Blank	Total/NA	Solid	8021B	110588
LCS 880-110535/1-A	Lab Control Sample	Total/NA	Solid	8021B	110535
LCSD 880-110535/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	110535

Prep Batch: 110588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-110588/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 110754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	Total BTEX	
890-8182-2	HA-5	Total/NA	Solid	Total BTEX	
890-8182-3	HA-5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 110485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	8015NM Prep	
890-8182-2	HA-5	Total/NA	Solid	8015NM Prep	
890-8182-3	HA-5	Total/NA	Solid	8015NM Prep	
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 110845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	8015B NM	110485
890-8182-2	HA-5	Total/NA	Solid	8015B NM	110485
890-8182-3	HA-5	Total/NA	Solid	8015B NM	110485
MB 880-110485/1-A	Method Blank	Total/NA	Solid	8015B NM	110485
LCS 880-110485/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	110485
LCSD 880-110485/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	110485

Analysis Batch: 110944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Total/NA	Solid	8015 NM	
890-8182-2	HA-5	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 110944 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-3	HA-5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 110452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Soluble	Solid	DI Leach	
890-8182-2	HA-5	Soluble	Solid	DI Leach	
890-8182-3	HA-5	Soluble	Solid	DI Leach	
MB 880-110452/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 110527

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8182-1	HA-5	Soluble	Solid	300.0	110452
890-8182-2	HA-5	Soluble	Solid	300.0	110452
890-8182-3	HA-5	Soluble	Solid	300.0	110452
MB 880-110452/1-A	Method Blank	Soluble	Solid	300.0	110452
LCS 880-110452/2-A	Lab Control Sample	Soluble	Solid	300.0	110452
LCSD 880-110452/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	110452

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Client Sample ID: HA-5

Lab Sample ID: 890-8182-1

Date Collected: 05/15/25 13:40

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/22/25 00:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110754	05/22/25 00:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			110944	05/23/25 15:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 15:59	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 17:55	SMC	EET MID

Client Sample ID: HA-5

Lab Sample ID: 890-8182-2

Date Collected: 05/15/25 13:45

Matrix: Solid

Date Received: 05/19/25 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/22/25 00:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110754	05/22/25 00:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			110944	05/23/25 16:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 16:42	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 18:02	SMC	EET MID

Client Sample ID: HA-5

Lab Sample ID: 890-8182-3

Date Collected: 05/15/25 13:50

Matrix: Solid

Date Received: 05/19/25 09:03

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	110535	05/20/25 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	110573	05/22/25 00:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			110754	05/22/25 00:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			110944	05/23/25 16:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	110485	05/20/25 08:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	110845	05/23/25 16:57	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	110452	05/19/25 14:08	SA	EET MID
Soluble	Analysis	300.0		1			110527	05/20/25 18:23	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8182-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8182-1	HA-5	Solid	05/15/25 13:40	05/19/25 09:03	2
890-8182-2	HA-5	Solid	05/15/25 13:45	05/19/25 09:03	4
890-8182-3	HA-5	Solid	05/15/25 13:50	05/19/25 09:03	6

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Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (916) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody



890-8182 Chain of Custody

www.xencu.com

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes																			
Project Number:	2783																					None, NO DI Water, H ₂ O																			
Project Location:	Lea County, NM	Due Date:		Routine TAT																		Cool: Cool MeOH: Me																			
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																				HCL: HC HNO ₃ : HN																			
CC/MO #	1094080601																					H ₂ SO ₄ : H ₂ NaOH: Na																			
SAMPLE RECEIPT	Temp Blank: ☒ No	Wet Ice: ☒ No																				H ₃ PO ₄ : HP																			
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	TAT 7																				NaHSO ₄ : NABIS																		
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:	-0.2																				Na ₂ S ₂ O ₃ : NaSO ₃																		
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:	-1.8																				Zn Acetate+NaOH: Zn																		
Total Containers:		Corrected Temperature:	-1.8																				NaOH+Ascorbic Acid: SAPC																		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush															Sample Comments															
HA-5	S	5.15.25	13:40	2	Grab/	1	X	X	X																	Incident Number															
HA-5	S	5.15.25	13:45	4	Grab/	1	X	X	X																	nAPP2500721668															
HA-5	S	5.15.25	13:50	6	Grab/	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 SiO₂ Na Sr Ti Sn U V Zn
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
		9:03 5/14/2			

Eurofins Carlsbad

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

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8182-1

SDG Number: Lea County, NM

Login Number: 8182

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: 890-8182-1

SDG Number: Lea County, NM

Login Number: 8182

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 05/20/25 07:42 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 10:48:32 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8733-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



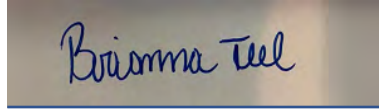
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 10:48:32 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8733-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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: Hognose Viper Federal Com #602H

Job ID: 890-8733-1

Job ID: 890-8733-1

Eurofins Carlsbad

Job Narrative 890-8733-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

Receipt Exceptions

The following were received and analyzed from an unpreserved bulk soil jar: CS-7 (890-8733-1), CS-8 (890-8733-2), CS-9 (890-8733-3), CS-10 (890-8733-4), CS-11 (890-8733-5), CS-12 (890-8733-6), CS-13 (890-8733-7), CS-14 (890-8733-8), CS-15 (890-8733-9), CS-16 (890-8733-10), CS-17 (890-8733-11), CS-18 (890-8733-12) and CS-19 (890-8733-13).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: CS-17 (890-8733-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-118102 and analytical batch 880-118481 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.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-118102 and analytical batch 880-118481 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-7

Lab Sample ID: 890-8733-1

Date Collected: 08/29/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/04/25 23:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 23:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 23:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/04/25 23:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 23:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/04/25 23:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	09/03/25 14:49	09/04/25 23:01	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/03/25 14:49	09/04/25 23:01	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			09/04/25 23:01	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			09/09/25 05:59	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		09/02/25 16:27	09/09/25 05:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/02/25 16:27	09/09/25 05:59	1
o-Terphenyl	86		70 - 130	09/02/25 16:27	09/09/25 05:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.1		9.96		mg/Kg			09/05/25 04:24	1

Client Sample ID: CS-8

Lab Sample ID: 890-8733-2

Date Collected: 08/29/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/04/25 23:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/04/25 23:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/04/25 23:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/04/25 23:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/04/25 23:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/04/25 23:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/03/25 14:49	09/04/25 23:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-8

Lab Sample ID: 890-8733-2

Date Collected: 08/29/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	09/03/25 14:49	09/04/25 23:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 23:21	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			09/09/25 06:29	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		09/02/25 16:27	09/09/25 06:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 06:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 06:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				09/02/25 16:27	09/09/25 06:29	1
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/09/25 06:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	260		9.96		mg/Kg			09/05/25 04:31	1

Client Sample ID: CS-9

Lab Sample ID: 890-8733-3

Date Collected: 08/29/25 09:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/04/25 23:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/04/25 23:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/04/25 23:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/03/25 14:49	09/04/25 23:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/04/25 23:42	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/03/25 14:49	09/04/25 23:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	09/03/25 14:49	09/04/25 23:42	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/03/25 14:49	09/04/25 23:42	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/04/25 23:42	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			09/09/25 06:44	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-9

Lab Sample ID: 890-8733-3

Date Collected: 08/29/25 09:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 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		09/02/25 16:27	09/09/25 06:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 06:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 06:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130				09/02/25 16:27	09/09/25 06:44	1
o-Terphenyl	89		70 - 130				09/02/25 16:27	09/09/25 06:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	204		9.92		mg/Kg			09/05/25 04:50	1

Client Sample ID: CS-10

Lab Sample ID: 890-8733-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 00:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 00:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 00:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 00:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 00:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 00:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130				09/03/25 14:49	09/05/25 00:02	1
1,4-Difluorobenzene (Surr)	96		70 - 130				09/03/25 14:49	09/05/25 00:02	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			09/05/25 00:02	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			09/09/25 07:00	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		09/02/25 16:27	09/09/25 07:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/02/25 16:27	09/09/25 07:00	1
o-Terphenyl	86		70 - 130				09/02/25 16:27	09/09/25 07:00	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-10

Lab Sample ID: 890-8733-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	240		10.0		mg/Kg			09/05/25 04:57	1

Client Sample ID: CS-11

Lab Sample ID: 890-8733-5

Date Collected: 08/29/25 09:35

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 00:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 00:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 00:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/05/25 00:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 00:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/05/25 00:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130				09/03/25 14:49	09/05/25 00:23	1
1,4-Difluorobenzene (Surr)	95		70 - 130				09/03/25 14:49	09/05/25 00:23	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			09/05/25 00:23	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			09/09/25 07:15	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	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:15	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:15	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				09/02/25 16:27	09/09/25 07:15	1
o-Terphenyl	86		70 - 130				09/02/25 16:27	09/09/25 07:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111		10.1		mg/Kg			09/05/25 05:17	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-12

Lab Sample ID: 890-8733-6

Date Collected: 08/28/25 09:15

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 00:43	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 00:43	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 00:43	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 00:43	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 00:43	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 00:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/03/25 14:49	09/05/25 00:43	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/03/25 14:49	09/05/25 00:43	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			09/05/25 00:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	239		50.0		mg/Kg			09/09/25 07:31	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		09/02/25 16:27	09/09/25 07:31	1
Diesel Range Organics (Over C10-C28)	239		50.0		mg/Kg		09/02/25 16:27	09/09/25 07:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	09/02/25 16:27	09/09/25 07:31	1
o-Terphenyl	90		70 - 130	09/02/25 16:27	09/09/25 07:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	278		9.94		mg/Kg			09/05/25 05:23	1

Client Sample ID: CS-13

Lab Sample ID: 890-8733-7

Date Collected: 08/28/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 01:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 01:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 01:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	09/03/25 14:49	09/05/25 01:04	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-13

Lab Sample ID: 890-8733-7

Date Collected: 08/28/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	09/03/25 14:49	09/05/25 01:04	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/05/25 01:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	64.2		49.8		mg/Kg			09/09/25 07:45	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		09/02/25 16:27	09/09/25 07:45	1
Diesel Range Organics (Over C10-C28)	64.2		49.8		mg/Kg		09/02/25 16:27	09/09/25 07:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				09/02/25 16:27	09/09/25 07:45	1
o-Terphenyl	90		70 - 130				09/02/25 16:27	09/09/25 07:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	317		10.0		mg/Kg			09/05/25 05:30	1

Client Sample ID: CS-14

Lab Sample ID: 890-8733-8

Date Collected: 08/28/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 01:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 01:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 01:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 01:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/03/25 14:49	09/05/25 01:24	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/03/25 14:49	09/05/25 01:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/05/25 01:24	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			09/09/25 08:01	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-14

Lab Sample ID: 890-8733-8

Date Collected: 08/28/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 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		09/02/25 16:27	09/09/25 08:01	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:01	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				09/02/25 16:27	09/09/25 08:01	1
o-Terphenyl	90		70 - 130				09/02/25 16:27	09/09/25 08:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	327		10.0		mg/Kg			09/05/25 05:36	1

Client Sample ID: CS-15

Lab Sample ID: 890-8733-9

Date Collected: 08/29/25 09:40

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 01:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 01:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 01:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 01:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 01:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 01:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130				09/03/25 14:49	09/05/25 01:44	1
1,4-Difluorobenzene (Surr)	93		70 - 130				09/03/25 14:49	09/05/25 01:44	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			09/05/25 01:44	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			09/09/25 08:15	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		09/02/25 16:27	09/09/25 08:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				09/02/25 16:27	09/09/25 08:15	1
o-Terphenyl	86		70 - 130				09/02/25 16:27	09/09/25 08:15	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-15

Lab Sample ID: 890-8733-9

Date Collected: 08/29/25 09:40

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	230		10.0		mg/Kg			09/05/25 05:43	1

Client Sample ID: CS-16

Lab Sample ID: 890-8733-10

Date Collected: 08/29/25 09:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 02:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 02:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 02:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/05/25 02:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 02:05	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/05/25 02:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/03/25 14:49	09/05/25 02:05	1
1,4-Difluorobenzene (Surr)	93		70 - 130				09/03/25 14:49	09/05/25 02:05	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			09/05/25 02:05	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			09/09/25 08:31	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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130				09/02/25 16:27	09/09/25 08:31	1
o-Terphenyl	88		70 - 130				09/02/25 16:27	09/09/25 08:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	289		10.1		mg/Kg			09/05/25 05:50	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-17

Lab Sample ID: 890-8733-11

Date Collected: 08/29/25 09:45

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 03:39	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 03:39	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 03:39	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 03:39	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 03:39	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 03:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	09/03/25 14:49	09/05/25 03:39	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/03/25 14:49	09/05/25 03:39	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/05/25 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			09/09/25 08:45	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		09/02/25 16:27	09/09/25 08:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	09/02/25 16:27	09/09/25 08:45	1
o-Terphenyl	86		70 - 130	09/02/25 16:27	09/09/25 08:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	263		10.1		mg/Kg			09/05/25 05:56	1

Client Sample ID: CS-18

Lab Sample ID: 890-8733-12

Date Collected: 08/29/25 09:50

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/05/25 04:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/05/25 04:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/05/25 04:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/03/25 14:49	09/05/25 04:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/03/25 14:49	09/05/25 04:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/03/25 14:49	09/05/25 04:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/03/25 14:49	09/05/25 04:00	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-18

Lab Sample ID: 890-8733-12

Date Collected: 08/29/25 09:50

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	09/03/25 14:49	09/05/25 04:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/05/25 04:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1700		50.0		mg/Kg			09/09/25 03:13	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 F2	50.0		mg/Kg		09/02/25 16:27	09/09/25 03:13	1
Diesel Range Organics (Over C10-C28)	1700	F1	50.0		mg/Kg		09/02/25 16:27	09/09/25 03:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 03:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/02/25 16:27	09/09/25 03:13	1
o-Terphenyl	94		70 - 130				09/02/25 16:27	09/09/25 03:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	291		10.1		mg/Kg			09/04/25 20:32	1

Client Sample ID: CS-19

Lab Sample ID: 890-8733-13

Date Collected: 08/29/25 09:55

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 14:49	09/05/25 04:20	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 04:20	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 04:20	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 04:20	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 04:20	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 04:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/03/25 14:49	09/05/25 04:20	1
1,4-Difluorobenzene (Surr)	94		70 - 130	09/03/25 14:49	09/05/25 04:20	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			09/05/25 04:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.9		49.8		mg/Kg			09/09/25 03:58	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-19

Lab Sample ID: 890-8733-13

Date Collected: 08/29/25 09:55

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 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		09/02/25 16:27	09/09/25 03:58	1
Diesel Range Organics (Over C10-C28)	86.9		49.8		mg/Kg		09/02/25 16:27	09/09/25 03:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 03:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130				09/02/25 16:27	09/09/25 03:58	1
o-Terphenyl	96		70 - 130				09/02/25 16:27	09/09/25 03:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	293		10.0		mg/Kg			09/04/25 20:49	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea 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)
890-8733-1	CS-7	124	101
890-8733-1 MS	CS-7	110	98
890-8733-1 MSD	CS-7	112	100
890-8733-2	CS-8	116	96
890-8733-3	CS-9	108	96
890-8733-4	CS-10	117	96
890-8733-5	CS-11	115	95
890-8733-6	CS-12	116	100
890-8733-7	CS-13	115	99
890-8733-8	CS-14	110	97
890-8733-9	CS-15	109	93
890-8733-10	CS-16	110	93
890-8733-11	CS-17	135 S1+	98
890-8733-12	CS-18	111	97
890-8733-13	CS-19	121	94
LCS 880-118181/1-A	Lab Control Sample	108	96
LCSD 880-118181/2-A	Lab Control Sample Dup	113	105
MB 880-118122/5-A	Method Blank	113	96
MB 880-118181/5-A	Method Blank	113	93

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)
890-8733-1	CS-7	89	86
890-8733-2	CS-8	93	91
890-8733-3	CS-9	92	89
890-8733-4	CS-10	88	86
890-8733-5	CS-11	89	86
890-8733-6	CS-12	90	90
890-8733-7	CS-13	91	90
890-8733-8	CS-14	91	90
890-8733-9	CS-15	89	86
890-8733-10	CS-16	90	88
890-8733-11	CS-17	85	86
890-8733-12	CS-18	96	94
890-8733-12 MS	CS-18	122	109
890-8733-12 MSD	CS-18	89	105
890-8733-13	CS-19	128	96
LCS 880-118100/2-A	Lab Control Sample	99	93
LCS 880-118102/2-A	Lab Control Sample	93	90
LCSD 880-118100/3-A	Lab Control Sample Dup	82	94
LCSD 880-118102/3-A	Lab Control Sample Dup	96	94
MB 880-118100/1-A	Method Blank	82	83

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea 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)				
MB 880-118102/1-A	Method Blank	96	83				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118122/5-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 08:47	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/03/25 08:47	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/03/25 08:47	09/04/25 11:41	1

Lab Sample ID: MB 880-118181/5-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/04/25 22:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/03/25 14:49	09/04/25 22:39	1
1,4-Difluorobenzene (Surr)	93		70 - 130	09/03/25 14:49	09/04/25 22:39	1

Lab Sample ID: LCS 880-118181/1-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08867		mg/Kg		89	70 - 130
Toluene	0.100	0.08866		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2033		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1059		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-118181/2-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09133		mg/Kg		91	70 - 130	3	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118181/2-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09270		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.1069		mg/Kg		107	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2151		mg/Kg		108	70 - 130	6	35
o-Xylene	0.100	0.1128		mg/Kg		113	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-8733-1 MS

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: CS-7

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.07446		mg/Kg		74	70 - 130
Toluene	<0.00200	U	0.100	0.07659		mg/Kg		77	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.08679		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1728		mg/Kg		86	70 - 130
o-Xylene	<0.00200	U	0.100	0.08910		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 890-8733-1 MSD

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: CS-7

Prep Type: Total/NA

Prep Batch: 118181

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	0.07615		mg/Kg		76	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.07798		mg/Kg		78	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.08772		mg/Kg		88	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1728		mg/Kg		86	70 - 130	0	35
o-Xylene	<0.00200	U	0.100	0.08976		mg/Kg		90	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-118100/1-A

Matrix: Solid

Analysis Batch: 118435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118100

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		09/02/25 16:27	09/09/25 02:12	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118100/1-A

Matrix: Solid

Analysis Batch: 118435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118100

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	82		70 - 130				09/02/25 16:27	09/09/25 02:12	1
o-Terphenyl	83		70 - 130				09/02/25 16:27	09/09/25 02:12	1

Lab Sample ID: LCS 880-118100/2-A

Matrix: Solid

Analysis Batch: 118435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	949.8		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	866.6		mg/Kg		87	70 - 130		
Surrogate	LCS	LCS	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	93		70 - 130						

Lab Sample ID: LCSD 880-118100/3-A

Matrix: Solid

Analysis Batch: 118435

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118100

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	988.5		mg/Kg		99	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	966.1		mg/Kg		97	70 - 130	11	20
Surrogate	LCSD	LCSD	Limits						
1-Chlorooctane	82		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: MB 880-118102/1-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118102

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	96		70 - 130				09/02/25 16:27	09/09/25 02:12	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118102/1-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118102

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	83		70 - 130	09/02/25 16:27	09/09/25 02:12	1

Lab Sample ID: LCS 880-118102/2-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike		LCS	LCS	Unit	D	%Rec	%Rec		
	Added		Result	Qualifier				Limits		
Gasoline Range Organics (GRO)-C6-C10	1000		911.0		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	1000		791.8		mg/Kg		79	70 - 130		
Surrogate	LCS	LCS								
	%Recovery	Qualifier	Limits							
1-Chlorooctane	93		70 - 130							
o-Terphenyl	90		70 - 130							

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

Analyte			Spike	LCSD	LCSD				%Rec		RPD
			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10			1000	922.5		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	805.6		mg/Kg		81	70 - 130	2	20
		LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130								
o-Terphenyl	94		70 - 130								

Lab Sample ID: 890-8733-12 MS

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: CS-18

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	999	975.9		mg/Kg		98	70 - 130			
Diesel Range Organics (Over C10-C28)	1700	F1	999	1829	F1	mg/Kg		12	70 - 130			
		MS	MS									
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	122		70 - 130									
o-Terphenyl	109		70 - 130									

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8733-12 MSD

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: CS-18

Prep Type: Total/NA

Prep Batch: 118102

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	<50.0	U F2	999	767.6	F2	mg/Kg		77	70 - 130	24	20
Diesel Range Organics (Over C10-C28)	1700	F1	999	1754	F1	mg/Kg		5	70 - 130	4	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	89		70 - 130								
o-Terphenyl	105		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118092/1-A

Matrix: Solid

Analysis Batch: 118157

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			09/05/25 02:39	1

Lab Sample ID: LCS 880-118092/2-A

Matrix: Solid

Analysis Batch: 118157

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.3		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-118092/3-A

Matrix: Solid

Analysis Batch: 118157

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	240.0		mg/Kg		96	90 - 110	1	20

Lab Sample ID: 890-8733-2 MS

Matrix: Solid

Analysis Batch: 118157

Client Sample ID: CS-8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	260		249	520.7		mg/Kg		105	90 - 110

Lab Sample ID: 890-8733-2 MSD

Matrix: Solid

Analysis Batch: 118157

Client Sample ID: CS-8

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	260		249	520.5		mg/Kg		104	90 - 110	0	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-118093/1-A

Matrix: Solid

Analysis Batch: 118175

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			09/04/25 20:14	1

Lab Sample ID: LCS 880-118093/2-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-118093/3-A

Matrix: Solid

Analysis Batch: 118175

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	256.8		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-8733-12 MS

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: CS-18

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	291		252	550.9		mg/Kg		103	90 - 110

Lab Sample ID: 890-8733-12 MSD

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: CS-18

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	291		252	544.3		mg/Kg		101	90 - 110	1	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-118122/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 118181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	5035	
890-8733-2	CS-8	Total/NA	Solid	5035	
890-8733-3	CS-9	Total/NA	Solid	5035	
890-8733-4	CS-10	Total/NA	Solid	5035	
890-8733-5	CS-11	Total/NA	Solid	5035	
890-8733-6	CS-12	Total/NA	Solid	5035	
890-8733-7	CS-13	Total/NA	Solid	5035	
890-8733-8	CS-14	Total/NA	Solid	5035	
890-8733-9	CS-15	Total/NA	Solid	5035	
890-8733-10	CS-16	Total/NA	Solid	5035	
890-8733-11	CS-17	Total/NA	Solid	5035	
890-8733-12	CS-18	Total/NA	Solid	5035	
890-8733-13	CS-19	Total/NA	Solid	5035	
MB 880-118181/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118181/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118181/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8733-1 MS	CS-7	Total/NA	Solid	5035	
890-8733-1 MSD	CS-7	Total/NA	Solid	5035	

Analysis Batch: 118208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	8021B	118181
890-8733-2	CS-8	Total/NA	Solid	8021B	118181
890-8733-3	CS-9	Total/NA	Solid	8021B	118181
890-8733-4	CS-10	Total/NA	Solid	8021B	118181
890-8733-5	CS-11	Total/NA	Solid	8021B	118181
890-8733-6	CS-12	Total/NA	Solid	8021B	118181
890-8733-7	CS-13	Total/NA	Solid	8021B	118181
890-8733-8	CS-14	Total/NA	Solid	8021B	118181
890-8733-9	CS-15	Total/NA	Solid	8021B	118181
890-8733-10	CS-16	Total/NA	Solid	8021B	118181
890-8733-11	CS-17	Total/NA	Solid	8021B	118181
890-8733-12	CS-18	Total/NA	Solid	8021B	118181
890-8733-13	CS-19	Total/NA	Solid	8021B	118181
MB 880-118122/5-A	Method Blank	Total/NA	Solid	8021B	118122
MB 880-118181/5-A	Method Blank	Total/NA	Solid	8021B	118181
LCS 880-118181/1-A	Lab Control Sample	Total/NA	Solid	8021B	118181
LCSD 880-118181/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118181
890-8733-1 MS	CS-7	Total/NA	Solid	8021B	118181
890-8733-1 MSD	CS-7	Total/NA	Solid	8021B	118181

Analysis Batch: 118319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	Total BTEX	
890-8733-2	CS-8	Total/NA	Solid	Total BTEX	
890-8733-3	CS-9	Total/NA	Solid	Total BTEX	
890-8733-4	CS-10	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

GC VOA (Continued)

Analysis Batch: 118319 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-5	CS-11	Total/NA	Solid	Total BTEX	
890-8733-6	CS-12	Total/NA	Solid	Total BTEX	
890-8733-7	CS-13	Total/NA	Solid	Total BTEX	
890-8733-8	CS-14	Total/NA	Solid	Total BTEX	
890-8733-9	CS-15	Total/NA	Solid	Total BTEX	
890-8733-10	CS-16	Total/NA	Solid	Total BTEX	
890-8733-11	CS-17	Total/NA	Solid	Total BTEX	
890-8733-12	CS-18	Total/NA	Solid	Total BTEX	
890-8733-13	CS-19	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	8015NM Prep	
890-8733-2	CS-8	Total/NA	Solid	8015NM Prep	
890-8733-3	CS-9	Total/NA	Solid	8015NM Prep	
890-8733-4	CS-10	Total/NA	Solid	8015NM Prep	
890-8733-5	CS-11	Total/NA	Solid	8015NM Prep	
890-8733-6	CS-12	Total/NA	Solid	8015NM Prep	
890-8733-7	CS-13	Total/NA	Solid	8015NM Prep	
890-8733-8	CS-14	Total/NA	Solid	8015NM Prep	
890-8733-9	CS-15	Total/NA	Solid	8015NM Prep	
890-8733-10	CS-16	Total/NA	Solid	8015NM Prep	
890-8733-11	CS-17	Total/NA	Solid	8015NM Prep	
MB 880-118100/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118100/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118100/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 118102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-12	CS-18	Total/NA	Solid	8015NM Prep	
890-8733-13	CS-19	Total/NA	Solid	8015NM Prep	
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8733-12 MS	CS-18	Total/NA	Solid	8015NM Prep	
890-8733-12 MSD	CS-18	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	8015B NM	118100
890-8733-2	CS-8	Total/NA	Solid	8015B NM	118100
890-8733-3	CS-9	Total/NA	Solid	8015B NM	118100
890-8733-4	CS-10	Total/NA	Solid	8015B NM	118100
890-8733-5	CS-11	Total/NA	Solid	8015B NM	118100
890-8733-6	CS-12	Total/NA	Solid	8015B NM	118100
890-8733-7	CS-13	Total/NA	Solid	8015B NM	118100
890-8733-8	CS-14	Total/NA	Solid	8015B NM	118100
890-8733-9	CS-15	Total/NA	Solid	8015B NM	118100
890-8733-10	CS-16	Total/NA	Solid	8015B NM	118100

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 118435 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-11	CS-17	Total/NA	Solid	8015B NM	118100
MB 880-118100/1-A	Method Blank	Total/NA	Solid	8015B NM	118100
LCS 880-118100/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118100
LCSD 880-118100/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118100

Analysis Batch: 118481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-12	CS-18	Total/NA	Solid	8015B NM	118102
890-8733-13	CS-19	Total/NA	Solid	8015B NM	118102
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015B NM	118102
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118102
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118102
890-8733-12 MS	CS-18	Total/NA	Solid	8015B NM	118102
890-8733-12 MSD	CS-18	Total/NA	Solid	8015B NM	118102

Analysis Batch: 118539

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Total/NA	Solid	8015 NM	
890-8733-2	CS-8	Total/NA	Solid	8015 NM	
890-8733-3	CS-9	Total/NA	Solid	8015 NM	
890-8733-4	CS-10	Total/NA	Solid	8015 NM	
890-8733-5	CS-11	Total/NA	Solid	8015 NM	
890-8733-6	CS-12	Total/NA	Solid	8015 NM	
890-8733-7	CS-13	Total/NA	Solid	8015 NM	
890-8733-8	CS-14	Total/NA	Solid	8015 NM	
890-8733-9	CS-15	Total/NA	Solid	8015 NM	
890-8733-10	CS-16	Total/NA	Solid	8015 NM	
890-8733-11	CS-17	Total/NA	Solid	8015 NM	
890-8733-12	CS-18	Total/NA	Solid	8015 NM	
890-8733-13	CS-19	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Soluble	Solid	DI Leach	
890-8733-2	CS-8	Soluble	Solid	DI Leach	
890-8733-3	CS-9	Soluble	Solid	DI Leach	
890-8733-4	CS-10	Soluble	Solid	DI Leach	
890-8733-5	CS-11	Soluble	Solid	DI Leach	
890-8733-6	CS-12	Soluble	Solid	DI Leach	
890-8733-7	CS-13	Soluble	Solid	DI Leach	
890-8733-8	CS-14	Soluble	Solid	DI Leach	
890-8733-9	CS-15	Soluble	Solid	DI Leach	
890-8733-10	CS-16	Soluble	Solid	DI Leach	
890-8733-11	CS-17	Soluble	Solid	DI Leach	
MB 880-118092/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118092/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118092/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8733-2 MS	CS-8	Soluble	Solid	DI Leach	
890-8733-2 MSD	CS-8	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 118093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-12	CS-18	Soluble	Solid	DI Leach	
890-8733-13	CS-19	Soluble	Solid	DI Leach	
MB 880-118093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8733-12 MS	CS-18	Soluble	Solid	DI Leach	
890-8733-12 MSD	CS-18	Soluble	Solid	DI Leach	

Analysis Batch: 118157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-1	CS-7	Soluble	Solid	300.0	118092
890-8733-2	CS-8	Soluble	Solid	300.0	118092
890-8733-3	CS-9	Soluble	Solid	300.0	118092
890-8733-4	CS-10	Soluble	Solid	300.0	118092
890-8733-5	CS-11	Soluble	Solid	300.0	118092
890-8733-6	CS-12	Soluble	Solid	300.0	118092
890-8733-7	CS-13	Soluble	Solid	300.0	118092
890-8733-8	CS-14	Soluble	Solid	300.0	118092
890-8733-9	CS-15	Soluble	Solid	300.0	118092
890-8733-10	CS-16	Soluble	Solid	300.0	118092
890-8733-11	CS-17	Soluble	Solid	300.0	118092
MB 880-118092/1-A	Method Blank	Soluble	Solid	300.0	118092
LCS 880-118092/2-A	Lab Control Sample	Soluble	Solid	300.0	118092
LCSD 880-118092/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118092
890-8733-2 MS	CS-8	Soluble	Solid	300.0	118092
890-8733-2 MSD	CS-8	Soluble	Solid	300.0	118092

Analysis Batch: 118175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8733-12	CS-18	Soluble	Solid	300.0	118093
890-8733-13	CS-19	Soluble	Solid	300.0	118093
MB 880-118093/1-A	Method Blank	Soluble	Solid	300.0	118093
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	300.0	118093
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118093
890-8733-12 MS	CS-18	Soluble	Solid	300.0	118093
890-8733-12 MSD	CS-18	Soluble	Solid	300.0	118093

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-7

Lab Sample ID: 890-8733-1

Date Collected: 08/29/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/04/25 23:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/04/25 23:01	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 05:59	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 05:59	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 04:24	SMC	EET MID

Client Sample ID: CS-8

Lab Sample ID: 890-8733-2

Date Collected: 08/29/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/04/25 23:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/04/25 23:21	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 06:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 06:29	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 04:31	SMC	EET MID

Client Sample ID: CS-9

Lab Sample ID: 890-8733-3

Date Collected: 08/29/25 09:30

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/04/25 23:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/04/25 23:42	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 06:44	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 06:44	FC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 04:50	SMC	EET MID

Client Sample ID: CS-10

Lab Sample ID: 890-8733-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 00:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 00:02	SA	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-10

Lab Sample ID: 890-8733-4

Date Collected: 08/29/25 09:10

Matrix: Solid

Date Received: 09/02/25 08:05

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			118539	09/09/25 07:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 07:00	FC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 04:57	SMC	EET MID

Client Sample ID: CS-11

Lab Sample ID: 890-8733-5

Date Collected: 08/29/25 09:35

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 00:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 00:23	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 07:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 07:15	FC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:17	SMC	EET MID

Client Sample ID: CS-12

Lab Sample ID: 890-8733-6

Date Collected: 08/28/25 09:15

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 00:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 00:43	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 07:31	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 07:31	FC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:23	SMC	EET MID

Client Sample ID: CS-13

Lab Sample ID: 890-8733-7

Date Collected: 08/28/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 01:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 01:04	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 07:45	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 07:45	FC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-13

Lab Sample ID: 890-8733-7

Date Collected: 08/28/25 09:20

Matrix: Solid

Date Received: 09/02/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:30	SMC	EET MID

Client Sample ID: CS-14

Lab Sample ID: 890-8733-8

Date Collected: 08/28/25 09:25

Matrix: Solid

Date Received: 09/02/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 01:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 01:24	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 08:01	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 08:01	FC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:36	SMC	EET MID

Client Sample ID: CS-15

Lab Sample ID: 890-8733-9

Date Collected: 08/29/25 09:40

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 01:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 01:44	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 08:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 08:15	FC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:43	SMC	EET MID

Client Sample ID: CS-16

Lab Sample ID: 890-8733-10

Date Collected: 08/29/25 09:30

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 02:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 02:05	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 08:31	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 08:31	FC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:50	SMC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Client Sample ID: CS-17

Lab Sample ID: 890-8733-11

Date Collected: 08/29/25 09:45

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 03:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 03:39	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 08:45	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118100	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118435	09/09/25 08:45	FC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118092	09/02/25 16:18	SA	EET MID
Soluble	Analysis	300.0		1			118157	09/05/25 05:56	SMC	EET MID

Client Sample ID: CS-18

Lab Sample ID: 890-8733-12

Date Collected: 08/29/25 09:50

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 04:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 04:00	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 03:13	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 03:13	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 20:32	SMC	EET MID

Client Sample ID: CS-19

Lab Sample ID: 890-8733-13

Date Collected: 08/29/25 09:55

Matrix: Solid

Date Received: 09/02/25 08:05

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 04:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118319	09/05/25 04:20	SA	EET MID
Total/NA	Analysis	8015 NM		1			118539	09/09/25 03:58	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 03:58	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 20:49	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8733-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8733-1	CS-7	Solid	08/29/25 09:20	09/02/25 08:05	1
890-8733-2	CS-8	Solid	08/29/25 09:25	09/02/25 08:05	1
890-8733-3	CS-9	Solid	08/29/25 09:30	09/02/25 08:05	1
890-8733-4	CS-10	Solid	08/29/25 09:10	09/02/25 08:05	1
890-8733-5	CS-11	Solid	08/29/25 09:35	09/02/25 08:05	1
890-8733-6	CS-12	Solid	08/28/25 09:15	09/02/25 08:05	1
890-8733-7	CS-13	Solid	08/28/25 09:20	09/02/25 08:05	1
890-8733-8	CS-14	Solid	08/28/25 09:25	09/02/25 08:05	1
890-8733-9	CS-15	Solid	08/29/25 09:40	09/02/25 08:05	1
890-8733-10	CS-16	Solid	08/29/25 09:30	09/02/25 08:05	1
890-8733-11	CS-17	Solid	08/29/25 09:45	09/02/25 08:05	1
890-8733-12	CS-18	Solid	08/29/25 09:50	09/02/25 08:05	1
890-8733-13	CS-19	Solid	08/29/25 09:55	09/02/25 08:05	1



Environment Testing

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

Chain of Custody

Who

890-8733 Chain of Custody



www.xenco.com

Page 1 of 2

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

[illegible]

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be analyzed

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

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 Xeno. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 service. Eurofins Xeno. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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
		9.05 9/12			

Student Data: 09/05/2020 Row: 2020



Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes																				
Project Number:	2783	Due Date:	Routine TAT																			None: NO DI Water: H ₂ O																				
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm																				Cool: Cool MeOH: Me																				
Sampler's Name:	Santiago Giron																					HCL: HC HNO ₃ : HN																				
CCW/O #:	1094080601																					H ₂ SO ₄ : H ₂ NaOH: Na																				
SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No																	H ₃ PO ₄ : HP																					
Samples Received In:	Yes ☒ No ☐	Thermometer ID:	T-1001																			NaHSO ₄ : NABIS																				
Cooler-Custody Seals:	Yes ☒ No ☐	Correction Factor:	0.2																			Na ₂ S ₂ O ₃ : NaSO ₃																				
Sample Custody Seals:	Yes ☒ No ☐	Temperature Reading:	-7.2																			Zn Acetate+NaOH: Zn																				
Total Containers:	Yes ☒ No ☐	Corrected Temperature:	-7.2																			NaOH+Ascorbic Acid: SAPC																				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush															Sample Comments																
CS-16	S	8.28.25	9:30	1	Comp	1	X	X	X																		Incident Number															
CS-17	S	8.29.25	9:45	1	Comp	1	X	X	X																		nAPP2500721668															
CS-18	S	8.29.25	9:50	1	Comp	1	X	X	X																																	
CS-19	S	8.29.25	9:55	1	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 Ti 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
		8/05/02			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8733-1

SDG Number: Lea County, NM

Login Number: 8733

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: 890-8733-1

SDG Number: Lea County, NM

Login Number: 8733

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 10:49:13 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8735-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



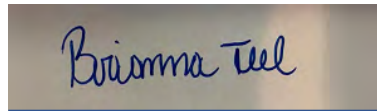
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 10:49:13 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8735-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance 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
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: Hognose Viper Federal Com #602H

Job ID: 890-8735-1

Job ID: 890-8735-1

Eurofins Carlsbad

Job Narrative 890-8735-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 9:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-118184 and analytical batch 880-118209 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: The surrogate recovery for the blank associated with preparation batch 880-118217 and analytical batch 880-118210 was outside the upper control limits.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-20

Lab Sample ID: 890-8735-1

Date Collected: 08/28/25 09:35

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 14:06	1
Toluene	<0.00198	U *	0.00198		mg/Kg		09/03/25 15:42	09/04/25 14:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 14:06	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 14:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 14:06	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/03/25 15:42	09/04/25 14:06	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/03/25 15:42	09/04/25 14:06	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			09/04/25 14:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	546		49.7		mg/Kg			09/09/25 05:44	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		09/02/25 16:27	09/09/25 05:44	1
Diesel Range Organics (Over C10-C28)	546		49.7		mg/Kg		09/02/25 16:27	09/09/25 05:44	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/02/25 16:27	09/09/25 05:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	09/02/25 16:27	09/09/25 05:44	1
o-Terphenyl	88		70 - 130	09/02/25 16:27	09/09/25 05:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	266		9.96		mg/Kg			09/04/25 21:01	1

Client Sample ID: CS-21

Lab Sample ID: 890-8735-2

Date Collected: 08/28/25 09:40

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 14:26	1
Toluene	<0.00201	U *	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:26	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:26	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 14:26	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:26	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 14:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/03/25 15:42	09/04/25 14:26	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-21

Lab Sample ID: 890-8735-2

Date Collected: 08/28/25 09:40

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	93		70 - 130	09/03/25 15:42	09/04/25 14:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 14:26	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			09/09/25 05:59	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		09/02/25 16:27	09/09/25 05:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 05:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/02/25 16:27	09/09/25 05:59	1
o-Terphenyl	90		70 - 130				09/02/25 16:27	09/09/25 05:59	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	62.8		9.92		mg/Kg			09/04/25 21:07	1

Client Sample ID: CS-22

Lab Sample ID: 890-8735-3

Date Collected: 08/29/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 14:47	1
Toluene	<0.00201	U *	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:47	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 14:47	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 14:47	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 14:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	09/03/25 15:42	09/04/25 14:47	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/03/25 15:42	09/04/25 14:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 14:47	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			09/09/25 06:29	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-22

Lab Sample ID: 890-8735-3

Date Collected: 08/29/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:07

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	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 06:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 06:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 06:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/02/25 16:27	09/09/25 06:29	1
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/09/25 06:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.3		9.98		mg/Kg			09/04/25 21:24	1

Client Sample ID: CS-23

Lab Sample ID: 890-8735-4

Date Collected: 08/29/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 15:07	1
Toluene	<0.00199	U *	0.00199		mg/Kg		09/03/25 15:42	09/04/25 15:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 15:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 15:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 15:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 15:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130				09/03/25 15:42	09/04/25 15:07	1
1,4-Difluorobenzene (Surr)	93		70 - 130				09/03/25 15:42	09/04/25 15:07	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			09/04/25 15:07	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			09/09/25 06:44	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		09/02/25 16:27	09/09/25 06:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 06:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 06:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130				09/02/25 16:27	09/09/25 06:44	1
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/09/25 06:44	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-23

Lab Sample ID: 890-8735-4

Date Collected: 08/29/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.1		9.96		mg/Kg			09/04/25 21:30	1

Client Sample ID: CS-24

Lab Sample ID: 890-8735-5

Date Collected: 08/29/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:07

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		09/03/25 15:42	09/04/25 16:42	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/03/25 15:42	09/04/25 16:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 16:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 16:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 16:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 16:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				09/03/25 15:42	09/04/25 16:42	1
1,4-Difluorobenzene (Surr)	92		70 - 130				09/03/25 15:42	09/04/25 16:42	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			09/04/25 16:42	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			09/09/25 07:00	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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/02/25 16:27	09/09/25 07:00	1
o-Terphenyl	82		70 - 130				09/02/25 16:27	09/09/25 07:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26.5		9.98		mg/Kg			09/04/25 21:36	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-25

Lab Sample ID: 890-8735-6

Date Collected: 08/28/25 09:45

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 17:02	1
Toluene	<0.00201	U *-	0.00201		mg/Kg		09/03/25 15:42	09/04/25 17:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 17:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 17:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 17:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 17:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/03/25 15:42	09/04/25 17:02	1
1,4-Difluorobenzene (Surr)	91		70 - 130	09/03/25 15:42	09/04/25 17:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 17:02	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			09/09/25 07:15	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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:15	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:15	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 07:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	09/02/25 16:27	09/09/25 07:15	1
o-Terphenyl	88		70 - 130	09/02/25 16:27	09/09/25 07:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.7		9.94		mg/Kg			09/04/25 21:42	1

Client Sample ID: CS-26

Lab Sample ID: 890-8735-7

Date Collected: 08/29/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *-	0.00202		mg/Kg		09/03/25 15:42	09/04/25 17:23	1
Toluene	<0.00202	U *-	0.00202		mg/Kg		09/03/25 15:42	09/04/25 17:23	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/03/25 15:42	09/04/25 17:23	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/03/25 15:42	09/04/25 17:23	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/03/25 15:42	09/04/25 17:23	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/03/25 15:42	09/04/25 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/03/25 15:42	09/04/25 17:23	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-26

Lab Sample ID: 890-8735-7

Date Collected: 08/29/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:07

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	09/03/25 15:42	09/04/25 17:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/04/25 17:23	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			09/09/25 07:31	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	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:31	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 07:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/02/25 16:27	09/09/25 07:31	1
o-Terphenyl	85		70 - 130				09/02/25 16:27	09/09/25 07:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		9.92		mg/Kg			09/04/25 21:48	1

Client Sample ID: CS-27

Lab Sample ID: 890-8735-8

Date Collected: 08/29/25 10:20

Matrix: Solid

Date Received: 09/02/25 09:07

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		09/03/25 12:17	09/05/25 06:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 12:17	09/05/25 06:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 12:17	09/05/25 06:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/03/25 12:17	09/05/25 06:03	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/03/25 12:17	09/05/25 06:03	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			09/05/25 06:03	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			09/09/25 07:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-27

Lab Sample ID: 890-8735-8

Date Collected: 08/29/25 10:20

Matrix: Solid

Date Received: 09/02/25 09:07

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	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 07:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 07:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 07:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/02/25 16:27	09/09/25 07:45	1
o-Terphenyl	83		70 - 130				09/02/25 16:27	09/09/25 07:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.7		9.90		mg/Kg			09/04/25 21:54	1

Client Sample ID: CS-28

Lab Sample ID: 890-8735-9

Date Collected: 08/28/25 09:50

Matrix: Solid

Date Received: 09/02/25 09:07

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		09/03/25 12:17	09/05/25 06:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/05/25 06:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/05/25 06:24	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/05/25 06:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/03/25 12:17	09/05/25 06:24	1
1,4-Difluorobenzene (Surr)	119		70 - 130				09/03/25 12:17	09/05/25 06:24	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			09/05/25 06:24	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			09/09/25 08:01	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		09/02/25 16:27	09/09/25 08:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 08:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/09/25 08:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/02/25 16:27	09/09/25 08:01	1
o-Terphenyl	87		70 - 130				09/02/25 16:27	09/09/25 08:01	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-28
Date Collected: 08/28/25 09:50
Date Received: 09/02/25 09:07
Sample Depth: 2

Lab Sample ID: 890-8735-9
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	98.8		9.92		mg/Kg			09/04/25 22:11	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea 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)
890-8735-1	CS-20	111	92
890-8735-2	CS-21	112	93
890-8735-3	CS-22	120	86
890-8735-4	CS-23	110	93
890-8735-5	CS-24	103	92
890-8735-6	CS-25	105	91
890-8735-7	CS-26	110	92
890-8735-8	CS-27	104	113
890-8735-9	CS-28	113	119
LCS 880-118166/1-A	Lab Control Sample	92	98
LCS 880-118184/1-A	Lab Control Sample	115	94
LCSD 880-118166/2-A	Lab Control Sample Dup	97	97
LCSD 880-118184/2-A	Lab Control Sample Dup	118	96
MB 880-118166/5-A	Method Blank	93	130
MB 880-118184/5-A	Method Blank	104	86
MB 880-118217/5-A	Method Blank	94	138 S1+
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)
890-8735-1	CS-20	102	88
890-8735-2	CS-21	106	90
890-8735-3	CS-22	106	91
890-8735-4	CS-23	115	91
890-8735-5	CS-24	99	82
890-8735-6	CS-25	111	88
890-8735-7	CS-26	106	85
890-8735-8	CS-27	103	83
890-8735-9	CS-28	104	87
LCS 880-118102/2-A	Lab Control Sample	93	90
LCSD 880-118102/3-A	Lab Control Sample Dup	96	94
MB 880-118102/1-A	Method Blank	96	83
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118166/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118166

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 12:17	09/04/25 22:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 12:17	09/04/25 22:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	09/03/25 12:17	09/04/25 22:40	1
1,4-Difluorobenzene (Surr)	130		70 - 130	09/03/25 12:17	09/04/25 22:40	1

Lab Sample ID: LCS 880-118166/1-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118166

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07431		mg/Kg		74	70 - 130
Toluene	0.100	0.08130		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07819		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	0.200	0.1527		mg/Kg		76	70 - 130
o-Xylene	0.100	0.07819		mg/Kg		78	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 880-118166/2-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118166

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07799		mg/Kg		78	70 - 130	5	35
Toluene	0.100	0.08691		mg/Kg		87	70 - 130	7	35
Ethylbenzene	0.100	0.08282		mg/Kg		83	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.1661		mg/Kg		83	70 - 130	8	35
o-Xylene	0.100	0.08557		mg/Kg		86	70 - 130	9	35

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

Lab Sample ID: MB 880-118184/5-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118184/5-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/03/25 15:42	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/03/25 15:42	09/04/25 11:41	1

Lab Sample ID: LCS 880-118184/1-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06476	*-	mg/Kg		65	70 - 130
Toluene	0.100	0.06881	*-	mg/Kg		69	70 - 130
Ethylbenzene	0.100	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08611		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-118184/2-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07712		mg/Kg		77	70 - 130	17	35
Toluene	0.100	0.07666		mg/Kg		77	70 - 130	11	35
Ethylbenzene	0.100	0.09153		mg/Kg		92	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1839		mg/Kg		92	70 - 130	7	35
o-Xylene	0.100	0.09149		mg/Kg		91	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130				09/04/25 09:06	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	138	S1+	70 - 130				09/04/25 09:06	09/04/25 11:41	1

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

Lab Sample ID: MB 880-118102/1-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118102

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		09/02/25 16:27	09/09/25 02:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				09/02/25 16:27	09/09/25 02:12	1
o-Terphenyl	83		70 - 130				09/02/25 16:27	09/09/25 02:12	1

Lab Sample ID: LCS 880-118102/2-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	911.0		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	791.8		mg/Kg		79	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	93		70 - 130				
o-Terphenyl	90		70 - 130				

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	922.5		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	805.6		mg/Kg		81	70 - 130	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	94		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118093/1-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<10.0	U	10.0		mg/Kg			09/04/25 20:14		1

Lab Sample ID: LCS 880-118093/2-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride			250	256.5		mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-118093/3-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	256.8		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-8735-8 MS

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: CS-27

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	96.7		248	354.1		mg/Kg		104	90 - 110	

Lab Sample ID: 890-8735-8 MSD

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: CS-27

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	96.7		248	353.5		mg/Kg		104	90 - 110	0	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-8	CS-27	Total/NA	Solid	5035	
890-8735-9	CS-28	Total/NA	Solid	5035	
MB 880-118166/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118166/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118166/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 118184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	5035	
890-8735-2	CS-21	Total/NA	Solid	5035	
890-8735-3	CS-22	Total/NA	Solid	5035	
890-8735-4	CS-23	Total/NA	Solid	5035	
890-8735-5	CS-24	Total/NA	Solid	5035	
890-8735-6	CS-25	Total/NA	Solid	5035	
890-8735-7	CS-26	Total/NA	Solid	5035	
MB 880-118184/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	8021B	118184
890-8735-2	CS-21	Total/NA	Solid	8021B	118184
890-8735-3	CS-22	Total/NA	Solid	8021B	118184
890-8735-4	CS-23	Total/NA	Solid	8021B	118184
890-8735-5	CS-24	Total/NA	Solid	8021B	118184
890-8735-6	CS-25	Total/NA	Solid	8021B	118184
890-8735-7	CS-26	Total/NA	Solid	8021B	118184
MB 880-118184/5-A	Method Blank	Total/NA	Solid	8021B	118184
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	8021B	118184
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118184

Analysis Batch: 118210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-8	CS-27	Total/NA	Solid	8021B	118166
890-8735-9	CS-28	Total/NA	Solid	8021B	118166
MB 880-118166/5-A	Method Blank	Total/NA	Solid	8021B	118166
MB 880-118217/5-A	Method Blank	Total/NA	Solid	8021B	118217
LCS 880-118166/1-A	Lab Control Sample	Total/NA	Solid	8021B	118166
LCSD 880-118166/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118166

Prep Batch: 118217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-118217/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 118294

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	Total BTEX	
890-8735-2	CS-21	Total/NA	Solid	Total BTEX	
890-8735-3	CS-22	Total/NA	Solid	Total BTEX	
890-8735-4	CS-23	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

GC VOA (Continued)

Analysis Batch: 118294 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-5	CS-24	Total/NA	Solid	Total BTEX	
890-8735-6	CS-25	Total/NA	Solid	Total BTEX	
890-8735-7	CS-26	Total/NA	Solid	Total BTEX	
890-8735-8	CS-27	Total/NA	Solid	Total BTEX	
890-8735-9	CS-28	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	8015NM Prep	
890-8735-2	CS-21	Total/NA	Solid	8015NM Prep	
890-8735-3	CS-22	Total/NA	Solid	8015NM Prep	
890-8735-4	CS-23	Total/NA	Solid	8015NM Prep	
890-8735-5	CS-24	Total/NA	Solid	8015NM Prep	
890-8735-6	CS-25	Total/NA	Solid	8015NM Prep	
890-8735-7	CS-26	Total/NA	Solid	8015NM Prep	
890-8735-8	CS-27	Total/NA	Solid	8015NM Prep	
890-8735-9	CS-28	Total/NA	Solid	8015NM Prep	
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	8015B NM	118102
890-8735-2	CS-21	Total/NA	Solid	8015B NM	118102
890-8735-3	CS-22	Total/NA	Solid	8015B NM	118102
890-8735-4	CS-23	Total/NA	Solid	8015B NM	118102
890-8735-5	CS-24	Total/NA	Solid	8015B NM	118102
890-8735-6	CS-25	Total/NA	Solid	8015B NM	118102
890-8735-7	CS-26	Total/NA	Solid	8015B NM	118102
890-8735-8	CS-27	Total/NA	Solid	8015B NM	118102
890-8735-9	CS-28	Total/NA	Solid	8015B NM	118102
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015B NM	118102
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118102
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118102

Analysis Batch: 118541

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Total/NA	Solid	8015 NM	
890-8735-2	CS-21	Total/NA	Solid	8015 NM	
890-8735-3	CS-22	Total/NA	Solid	8015 NM	
890-8735-4	CS-23	Total/NA	Solid	8015 NM	
890-8735-5	CS-24	Total/NA	Solid	8015 NM	
890-8735-6	CS-25	Total/NA	Solid	8015 NM	
890-8735-7	CS-26	Total/NA	Solid	8015 NM	
890-8735-8	CS-27	Total/NA	Solid	8015 NM	
890-8735-9	CS-28	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

HPLC/IC

Leach Batch: 118093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Soluble	Solid	DI Leach	
890-8735-2	CS-21	Soluble	Solid	DI Leach	
890-8735-3	CS-22	Soluble	Solid	DI Leach	
890-8735-4	CS-23	Soluble	Solid	DI Leach	
890-8735-5	CS-24	Soluble	Solid	DI Leach	
890-8735-6	CS-25	Soluble	Solid	DI Leach	
890-8735-7	CS-26	Soluble	Solid	DI Leach	
890-8735-8	CS-27	Soluble	Solid	DI Leach	
890-8735-9	CS-28	Soluble	Solid	DI Leach	
MB 880-118093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8735-8 MS	CS-27	Soluble	Solid	DI Leach	
890-8735-8 MSD	CS-27	Soluble	Solid	DI Leach	

Analysis Batch: 118175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8735-1	CS-20	Soluble	Solid	300.0	118093
890-8735-2	CS-21	Soluble	Solid	300.0	118093
890-8735-3	CS-22	Soluble	Solid	300.0	118093
890-8735-4	CS-23	Soluble	Solid	300.0	118093
890-8735-5	CS-24	Soluble	Solid	300.0	118093
890-8735-6	CS-25	Soluble	Solid	300.0	118093
890-8735-7	CS-26	Soluble	Solid	300.0	118093
890-8735-8	CS-27	Soluble	Solid	300.0	118093
890-8735-9	CS-28	Soluble	Solid	300.0	118093
MB 880-118093/1-A	Method Blank	Soluble	Solid	300.0	118093
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	300.0	118093
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118093
890-8735-8 MS	CS-27	Soluble	Solid	300.0	118093
890-8735-8 MSD	CS-27	Soluble	Solid	300.0	118093

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-20

Lab Sample ID: 890-8735-1

Date Collected: 08/28/25 09:35

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 14:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 14:06	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 05:44	SA	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 05:44	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:01	SMC	EET MID

Client Sample ID: CS-21

Lab Sample ID: 890-8735-2

Date Collected: 08/28/25 09:40

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 14:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 14:26	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 05:59	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 05:59	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:07	SMC	EET MID

Client Sample ID: CS-22

Lab Sample ID: 890-8735-3

Date Collected: 08/29/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 14:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 14:47	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 06:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 06:29	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:24	SMC	EET MID

Client Sample ID: CS-23

Lab Sample ID: 890-8735-4

Date Collected: 08/29/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 15:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 15:07	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-23

Lab Sample ID: 890-8735-4

Date Collected: 08/29/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:07

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			118541	09/09/25 06:44	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 06:44	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:30	SMC	EET MID

Client Sample ID: CS-24

Lab Sample ID: 890-8735-5

Date Collected: 08/29/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 16:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 16:42	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 07:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 07:00	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:36	SMC	EET MID

Client Sample ID: CS-25

Lab Sample ID: 890-8735-6

Date Collected: 08/28/25 09:45

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 17:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 17:02	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 07:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 07:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:42	SMC	EET MID

Client Sample ID: CS-26

Lab Sample ID: 890-8735-7

Date Collected: 08/29/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 17:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/04/25 17:23	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 07:31	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 07:31	TKC	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Client Sample ID: CS-26

Lab Sample ID: 890-8735-7

Date Collected: 08/29/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:07

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	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:48	SMC	EET MID

Client Sample ID: CS-27

Lab Sample ID: 890-8735-8

Date Collected: 08/29/25 10:20

Matrix: Solid

Date Received: 09/02/25 09:07

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 06:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/05/25 06:03	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 07:45	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 07:45	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 21:54	SMC	EET MID

Client Sample ID: CS-28

Lab Sample ID: 890-8735-9

Date Collected: 08/28/25 09:50

Matrix: Solid

Date Received: 09/02/25 09:07

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	118166	09/03/25 12:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/05/25 06:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118294	09/05/25 06:24	SA	EET MID
Total/NA	Analysis	8015 NM		1			118541	09/09/25 08:01	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 08:01	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:11	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8735-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8735-1	CS-20	Solid	08/28/25 09:35	09/02/25 09:07	2
890-8735-2	CS-21	Solid	08/28/25 09:40	09/02/25 09:07	2
890-8735-3	CS-22	Solid	08/29/25 10:00	09/02/25 09:07	2
890-8735-4	CS-23	Solid	08/29/25 10:05	09/02/25 09:07	2
890-8735-5	CS-24	Solid	08/29/25 10:10	09/02/25 09:07	2
890-8735-6	CS-25	Solid	08/28/25 09:45	09/02/25 09:07	2
890-8735-7	CS-26	Solid	08/29/25 10:15	09/02/25 09:07	2
890-8735-8	CS-27	Solid	08/29/25 10:20	09/02/25 09:07	2
890-8735-9	CS-28	Solid	08/28/25 09:50	09/02/25 09:07	2





Environment Testing
Xenco

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) 794-1295
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



890-8735 Chain of Custody

www.xenco.com

Page 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
Address:	1910 Resource Ct.	Address:	
City, State ZIP:	Carlsbad, NM, 88220	City, State ZIP:	
Phone:	832-541-7719	Email:	gmorano@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: Hognose Viper Federal Com #602H				Turn Around		ANALYSIS REQUEST												Preservative Codes	
Project Number:	2783	☒ Routine	☐ Rush	Pres. Code														None: NO	DI Water: H ₂ O
Project Location:	Lea County, NM	Due Date:	Routine TAT															Cool: Cool	MeOH: Me
Sampler's Name:	Sanliago Giron	TAT starts the day received by the lab, if received by 4:30pm																HCL: HC	HNO ₃ : HN
CCMO #:	1094080601																	H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	☒ Yes	☐ No	Wet Ice:	☒ Yes	☐ No													H ₃ PO ₄ : HP
Samples Received Intact:	☒ Yes	☐ No	Thermometer ID:	TMA007														NaHSO ₄ : NABIS	
Cooler Custody Seals:	☒ Yes	☐ No	Correction Factor:	-0.2														Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	☒ Yes	☐ No	Temperature Reading:	-3.2														Zn Acetate+NaOH: Zn	
Total Containers:			Corrected Temperature:															NaOH+Ascorbic Acid: SARC	
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont												
CS-20		S	8.28.25	9:35	2	Comp	1	X	X	X	X								
CS-21		S	8.28.25	9:40	2	Comp	1	X	X	X	X								
CS-22		S	8.29.25	10:00	2	Comp	1	X	X	X	X								
CS-23		S	8.29.25	10:05	2	Comp	1	X	X	X	X								
CS-24		S	8.29.25	10:10	2	Comp	1	X	X	X	X								
CS-25		S	8.28.25	9:45	2	Comp	1	X	X	X	X								
CS-26		S	8.29.25	10:15	2	Comp	1	X	X	X	X								
CS-27		S	8.29.25	10:20	2	Comp	1	X	X	X	X								
CS-28		S	8.28.25	9:50	2	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	Ti	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
		8:07 PM			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8735-1

SDG Number: Lea County, NM

Login Number: 8735

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: 890-8735-1

SDG Number: Lea County, NM

Login Number: 8735

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 10:49:39 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8736-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



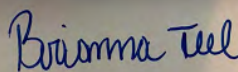
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 10:49:39 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8736-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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
SQL	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: Hognose Viper Federal Com #602H

Job ID: 890-8736-1

Job ID: 890-8736-1

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Job Narrative 890-8736-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 9:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS-29 (890-8736-1), CS-30 (890-8736-2), CS-31 (890-8736-3), CS-32 (890-8736-4), CS-33 (890-8736-5) and CS-34 (890-8736-6).

GC VOA

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-29

Lab Sample ID: 890-8736-1

Date Collected: 08/28/25 09:55

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/03/25 14:49	09/05/25 04:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 04:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 04:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/05/25 04:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 04:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/05/25 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	09/03/25 14:49	09/05/25 04:41	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/03/25 14:49	09/05/25 04:41	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			09/05/25 04:41	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			09/09/25 08:15	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		09/02/25 16:27	09/09/25 08:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/02/25 16:27	09/09/25 08:15	1
o-Terphenyl	85		70 - 130	09/02/25 16:27	09/09/25 08:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25.4		9.94		mg/Kg			09/04/25 22:17	1

Client Sample ID: CS-30

Lab Sample ID: 890-8736-2

Date Collected: 08/28/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/03/25 14:49	09/05/25 05:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 05:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 05:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/03/25 14:49	09/05/25 05:01	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-30

Lab Sample ID: 890-8736-2

Date Collected: 08/28/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:31

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	09/03/25 14:49	09/05/25 05:01	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			09/05/25 05:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	494		49.8		mg/Kg			09/09/25 08:31	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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Diesel Range Organics (Over C10-C28)	494		49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/02/25 16:27	09/09/25 08:31	1
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/09/25 08:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	221		10.1		mg/Kg			09/04/25 22:35	1

Client Sample ID: CS-31

Lab Sample ID: 890-8736-3

Date Collected: 08/28/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:31

Sample Depth: 4

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		09/03/25 14:49	09/05/25 05:21	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 05:21	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 05:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 05:21	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 14:49	09/05/25 05:21	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 14:49	09/05/25 05:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	09/03/25 14:49	09/05/25 05:21	1
1,4-Difluorobenzene (Surr)	95		70 - 130	09/03/25 14:49	09/05/25 05:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/05/25 05:21	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			09/09/25 08:45	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-31

Lab Sample ID: 890-8736-3

Date Collected: 08/28/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/02/25 16:27	09/09/25 08:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/09/25 08:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/02/25 16:27	09/09/25 08:45	1
o-Terphenyl	75		70 - 130				09/02/25 16:27	09/09/25 08:45	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.3		10.0		mg/Kg			09/04/25 22:41	1

Client Sample ID: CS-32

Lab Sample ID: 890-8736-4

Date Collected: 08/28/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/03/25 14:49	09/05/25 05:42	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:42	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:42	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 05:42	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 14:49	09/05/25 05:42	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 14:49	09/05/25 05:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130				09/03/25 14:49	09/05/25 05:42	1
1,4-Difluorobenzene (Surr)	96		70 - 130				09/03/25 14:49	09/05/25 05:42	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			09/05/25 05:42	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			09/08/25 11:21	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		09/02/25 16:27	09/08/25 11:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 11:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 11:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130				09/02/25 16:27	09/08/25 11:21	1
o-Terphenyl	92		70 - 130				09/02/25 16:27	09/08/25 11:21	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-32

Lab Sample ID: 890-8736-4

Date Collected: 08/28/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:31

Sample Depth: 4

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			09/04/25 22:47	1

Client Sample ID: CS-33

Lab Sample ID: 890-8736-5

Date Collected: 08/28/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/03/25 14:49	09/05/25 06:02	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 06:02	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 06:02	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 06:02	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 14:49	09/05/25 06:02	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 14:49	09/05/25 06:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130				09/03/25 14:49	09/05/25 06:02	1
1,4-Difluorobenzene (Surr)	100		70 - 130				09/03/25 14:49	09/05/25 06:02	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			09/05/25 06:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	273		50.0		mg/Kg			09/08/25 12:05	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		09/02/25 16:27	09/08/25 12:05	1
Diesel Range Organics (Over C10-C28)	273		50.0		mg/Kg		09/02/25 16:27	09/08/25 12:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 12:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				09/02/25 16:27	09/08/25 12:05	1
o-Terphenyl	87		70 - 130				09/02/25 16:27	09/08/25 12:05	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		10.1		mg/Kg			09/04/25 22:52	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-34

Lab Sample ID: 890-8736-6

Date Collected: 08/28/25 10:20

Matrix: Solid

Date Received: 09/02/25 09:31

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		09/03/25 14:49	09/05/25 06:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 06:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 06:23	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/05/25 06:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/05/25 06:23	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 14:49	09/05/25 06:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	09/03/25 14:49	09/05/25 06:23	1
1,4-Difluorobenzene (Surr)	98		70 - 130	09/03/25 14:49	09/05/25 06:23	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			09/05/25 06:23	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			09/08/25 12:19	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		09/02/25 16:27	09/08/25 12:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 12:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 12:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/02/25 16:27	09/08/25 12:19	1
o-Terphenyl	89		70 - 130	09/02/25 16:27	09/08/25 12:19	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	267		10.1		mg/Kg			09/04/25 22:58	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea 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)
890-8736-1	CS-29	116	102
890-8736-2	CS-30	114	100
890-8736-3	CS-31	123	95
890-8736-4	CS-32	113	96
890-8736-5	CS-33	123	100
890-8736-6	CS-34	119	98
LCS 880-118181/1-A	Lab Control Sample	108	96
LCSD 880-118181/2-A	Lab Control Sample Dup	113	105
MB 880-118122/5-A	Method Blank	113	96
MB 880-118181/5-A	Method Blank	113	93
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)
890-8736-1	CS-29	105	85
890-8736-2	CS-30	99	91
890-8736-3	CS-31	98	75
890-8736-4	CS-32	97	92
890-8736-4 MS	CS-32	105	99
890-8736-4 MSD	CS-32	107	100
890-8736-5	CS-33	88	87
890-8736-6	CS-34	96	89
LCS 880-118102/2-A	Lab Control Sample	93	90
LCS 880-118103/2-A	Lab Control Sample	107	105
LCSD 880-118102/3-A	Lab Control Sample Dup	96	94
LCSD 880-118103/3-A	Lab Control Sample Dup	106	103
MB 880-118102/1-A	Method Blank	96	83
MB 880-118103/1-A	Method Blank	89	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118122/5-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:47	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 08:47	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/03/25 08:47	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130	09/03/25 08:47	09/04/25 11:41	1

Lab Sample ID: MB 880-118181/5-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118181

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 14:49	09/04/25 22:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 14:49	09/04/25 22:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/03/25 14:49	09/04/25 22:39	1
1,4-Difluorobenzene (Surr)	93		70 - 130	09/03/25 14:49	09/04/25 22:39	1

Lab Sample ID: LCS 880-118181/1-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08867		mg/Kg		89	70 - 130
Toluene	0.100	0.08866		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2033		mg/Kg		102	70 - 130
o-Xylene	0.100	0.1059		mg/Kg		106	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-118181/2-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09133		mg/Kg		91	70 - 130	3	35

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118181/2-A

Matrix: Solid

Analysis Batch: 118208

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09270		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.1069		mg/Kg		107	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2151		mg/Kg		108	70 - 130	6	35
o-Xylene	0.100	0.1128		mg/Kg		113	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

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

Lab Sample ID: MB 880-118102/1-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118102

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		09/02/25 16:27	09/09/25 02:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/09/25 02:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130	09/02/25 16:27	09/09/25 02:12	1
o-Terphenyl	83		70 - 130	09/02/25 16:27	09/09/25 02:12	1

Lab Sample ID: LCS 880-118102/2-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	911.0		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	791.8		mg/Kg		79	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	922.5		mg/Kg		92	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	805.6		mg/Kg		81	70 - 130	2	20

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118102/3-A

Matrix: Solid

Analysis Batch: 118481

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118102

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: MB 880-118103/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118103

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	89		70 - 130				09/02/25 16:27	09/08/25 09:21	1	
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/08/25 09:21	1	

Lab Sample ID: LCS 880-118103/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118103

	Spike	LCS	LCS					%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics (GRO)-C6-C10	1000	857.9		mg/Kg		86	70 - 130			
Diesel Range Organics (Over C10-C28)	1000	931.4		mg/Kg		93	70 - 130			
Surrogate		%Recovery	Qualifier	Limits						
1-Chlorooctane		107		70 - 130						
o-Terphenyl		105		70 - 130						

Lab Sample ID: LCSD 880-118103/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118103

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	858.8		mg/Kg		86	70 - 130	0	20	
Diesel Range Organics (Over C10-C28)	1000	887.1		mg/Kg		89	70 - 130	5	20	
Surrogate		%Recovery	Qualifier	Limits						
1-Chlorooctane		106		70 - 130						
o-Terphenyl		103		70 - 130						

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8736-4 MS

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: CS-32

Prep Type: Total/NA

Prep Batch: 118103

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	740.7		mg/Kg		74	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	884.0		mg/Kg		87	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	105		70 - 130						
o-Terphenyl	99		70 - 130						

Lab Sample ID: 890-8736-4 MSD

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: CS-32

Prep Type: Total/NA

Prep Batch: 118103

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	<50.0	U	997	788.5		mg/Kg		79	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	903.0		mg/Kg		89	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	107		70 - 130								
o-Terphenyl	100		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118093/1-A

Matrix: Solid

Analysis Batch: 118175

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			09/04/25 20:14	1

Lab Sample ID: LCS 880-118093/2-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-118093/3-A

Matrix: Solid

Analysis Batch: 118175

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	256.8		mg/Kg		103	90 - 110	0	20

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-118122/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 118181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	5035	
890-8736-2	CS-30	Total/NA	Solid	5035	
890-8736-3	CS-31	Total/NA	Solid	5035	
890-8736-4	CS-32	Total/NA	Solid	5035	
890-8736-5	CS-33	Total/NA	Solid	5035	
890-8736-6	CS-34	Total/NA	Solid	5035	
MB 880-118181/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118181/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118181/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	8021B	118181
890-8736-2	CS-30	Total/NA	Solid	8021B	118181
890-8736-3	CS-31	Total/NA	Solid	8021B	118181
890-8736-4	CS-32	Total/NA	Solid	8021B	118181
890-8736-5	CS-33	Total/NA	Solid	8021B	118181
890-8736-6	CS-34	Total/NA	Solid	8021B	118181
MB 880-118122/5-A	Method Blank	Total/NA	Solid	8021B	118122
MB 880-118181/5-A	Method Blank	Total/NA	Solid	8021B	118181
LCS 880-118181/1-A	Lab Control Sample	Total/NA	Solid	8021B	118181
LCSD 880-118181/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118181

Analysis Batch: 118320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	Total BTEX	
890-8736-2	CS-30	Total/NA	Solid	Total BTEX	
890-8736-3	CS-31	Total/NA	Solid	Total BTEX	
890-8736-4	CS-32	Total/NA	Solid	Total BTEX	
890-8736-5	CS-33	Total/NA	Solid	Total BTEX	
890-8736-6	CS-34	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	8015NM Prep	
890-8736-2	CS-30	Total/NA	Solid	8015NM Prep	
890-8736-3	CS-31	Total/NA	Solid	8015NM Prep	
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 118103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-4	CS-32	Total/NA	Solid	8015NM Prep	
890-8736-5	CS-33	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Prep Batch: 118103 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-6	CS-34	Total/NA	Solid	8015NM Prep	
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8736-4 MS	CS-32	Total/NA	Solid	8015NM Prep	
890-8736-4 MSD	CS-32	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-4	CS-32	Total/NA	Solid	8015B NM	118103
890-8736-5	CS-33	Total/NA	Solid	8015B NM	118103
890-8736-6	CS-34	Total/NA	Solid	8015B NM	118103
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015B NM	118103
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118103
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118103
890-8736-4 MS	CS-32	Total/NA	Solid	8015B NM	118103
890-8736-4 MSD	CS-32	Total/NA	Solid	8015B NM	118103

Analysis Batch: 118473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	8015 NM	
890-8736-2	CS-30	Total/NA	Solid	8015 NM	
890-8736-3	CS-31	Total/NA	Solid	8015 NM	
890-8736-4	CS-32	Total/NA	Solid	8015 NM	
890-8736-5	CS-33	Total/NA	Solid	8015 NM	
890-8736-6	CS-34	Total/NA	Solid	8015 NM	

Analysis Batch: 118481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Total/NA	Solid	8015B NM	118102
890-8736-2	CS-30	Total/NA	Solid	8015B NM	118102
890-8736-3	CS-31	Total/NA	Solid	8015B NM	118102
MB 880-118102/1-A	Method Blank	Total/NA	Solid	8015B NM	118102
LCS 880-118102/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118102
LCSD 880-118102/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118102

HPLC/IC

Leach Batch: 118093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Soluble	Solid	DI Leach	
890-8736-2	CS-30	Soluble	Solid	DI Leach	
890-8736-3	CS-31	Soluble	Solid	DI Leach	
890-8736-4	CS-32	Soluble	Solid	DI Leach	
890-8736-5	CS-33	Soluble	Solid	DI Leach	
890-8736-6	CS-34	Soluble	Solid	DI Leach	
MB 880-118093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

HPLC/IC

Analysis Batch: 118175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8736-1	CS-29	Soluble	Solid	300.0	118093
890-8736-2	CS-30	Soluble	Solid	300.0	118093
890-8736-3	CS-31	Soluble	Solid	300.0	118093
890-8736-4	CS-32	Soluble	Solid	300.0	118093
890-8736-5	CS-33	Soluble	Solid	300.0	118093
890-8736-6	CS-34	Soluble	Solid	300.0	118093
MB 880-118093/1-A	Method Blank	Soluble	Solid	300.0	118093
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	300.0	118093
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118093

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-29

Lab Sample ID: 890-8736-1

Date Collected: 08/28/25 09:55

Matrix: Solid

Date Received: 09/02/25 09:31

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 04:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 04:41	SA	EET MID
Total/NA	Analysis	8015 NM		1			118473	09/09/25 08:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 08:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:17	SMC	EET MID

Client Sample ID: CS-30

Lab Sample ID: 890-8736-2

Date Collected: 08/28/25 10:00

Matrix: Solid

Date Received: 09/02/25 09:31

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 05:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 05:01	SA	EET MID
Total/NA	Analysis	8015 NM		1			118473	09/09/25 08:31	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 08:31	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:35	SMC	EET MID

Client Sample ID: CS-31

Lab Sample ID: 890-8736-3

Date Collected: 08/28/25 10:05

Matrix: Solid

Date Received: 09/02/25 09:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 05:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 05:21	SA	EET MID
Total/NA	Analysis	8015 NM		1			118473	09/09/25 08:45	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	118102	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118481	09/09/25 08:45	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:41	SMC	EET MID

Client Sample ID: CS-32

Lab Sample ID: 890-8736-4

Date Collected: 08/28/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:31

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 05:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 05:42	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Client Sample ID: CS-32

Lab Sample ID: 890-8736-4

Date Collected: 08/28/25 10:10

Matrix: Solid

Date Received: 09/02/25 09:31

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			118473	09/08/25 11:21	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 11:21	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:47	SMC	EET MID

Client Sample ID: CS-33

Lab Sample ID: 890-8736-5

Date Collected: 08/28/25 10:15

Matrix: Solid

Date Received: 09/02/25 09:31

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 06:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 06:02	SA	EET MID
Total/NA	Analysis	8015 NM		1			118473	09/08/25 12:05	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 12:05	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:52	SMC	EET MID

Client Sample ID: CS-34

Lab Sample ID: 890-8736-6

Date Collected: 08/28/25 10:20

Matrix: Solid

Date Received: 09/02/25 09:31

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	118181	09/03/25 14:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118208	09/05/25 06:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118320	09/05/25 06:23	SA	EET MID
Total/NA	Analysis	8015 NM		1			118473	09/08/25 12:19	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 12:19	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 22:58	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8736-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8736-1	CS-29	Solid	08/28/25 09:55	09/02/25 09:31	4
890-8736-2	CS-30	Solid	08/28/25 10:00	09/02/25 09:31	4
890-8736-3	CS-31	Solid	08/28/25 10:05	09/02/25 09:31	4
890-8736-4	CS-32	Solid	08/28/25 10:10	09/02/25 09:31	4
890-8736-5	CS-33	Solid	08/28/25 10:15	09/02/25 09:31	4
890-8736-6	CS-34	Solid	08/28/25 10:20	09/02/25 09:31	4

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Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 502-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1295
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Wol

890-8736 Chain of Custody



www.xenco.com Page 1 of 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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: ☐ PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Hognose Viper Federal Com #602H	Turn Around	Pres. Code	ANALYSIS REQUEST																Preservative Codes		
Project Number:	2783	☒ Routine ☐ Rush																	None: NO	DI Water: H ₂ O		
Project Location:	Lea County, NM	Due Date:	Routine TAT																Cool: Cool	MeOH: Me		
Sampler's Name:	Santiago Giron	TAT starts the day received by the lab, if received by 4:30pm																	HCL: HC	HNO ₃ : HN		
CCWVO #:	1094080601																		H ₂ SO ₄ : H ₂	NaOH: Na		
SAMPLE RECEIPT	Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No																	H ₃ PO ₄ : HP	
Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:																			NaHSO ₄ : NABIS	
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:																			Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:																			Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:																			NaOH+Ascorbic Acid: SAPC	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grab/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush											Sample Comments
CS-29	S	8.28.25	9:55	4	Comp	1	X	X	X													
CS-30	S	8.28.25	10:00	4	Comp	1	X	X	X													
CS-31	S	8.28.25	10:05	4	Comp	1	X	X	X													
CS-32	S	8.28.25	10:10	4	Comp	1	X	X	X													
CS-33	S	8.28.25	10:15	4	Comp	1	X	X	X													
CS-34	S	8.28.25	10:20	4	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 SiO₂ Na Sr Ti Sn U V Zn

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 \$35.00 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
		8/05/12			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8736-1

SDG Number: Lea County, NM

Login Number: 8736

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: 890-8736-1

SDG Number: Lea County, NM

Login Number: 8736

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/8/2025 4:57:58 PM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8737-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



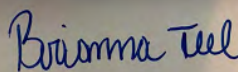
Eurofins Carlsbad

Job Notes

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

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

Authorization



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9/8/2025 4:57:58 PM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8737-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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: Hognose Viper Federal Com #602H

Job ID: 890-8737-1

Job ID: 890-8737-1

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Job Narrative 890-8737-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C.

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-118184 and analytical batch 880-118209 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.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-35

Lab Sample ID: 890-8737-1

Date Collected: 08/29/25 10:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 17:43	1
Toluene	<0.00199	U *	0.00199		mg/Kg		09/03/25 15:42	09/04/25 17:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 17:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 17:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 17:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/03/25 15:42	09/04/25 17:43	1
1,4-Difluorobenzene (Surr)	94		70 - 130	09/03/25 15:42	09/04/25 17:43	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			09/04/25 17:43	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			09/08/25 12:33	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		09/02/25 16:27	09/08/25 12:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 12:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/02/25 16:27	09/08/25 12:33	1
o-Terphenyl	99		70 - 130	09/02/25 16:27	09/08/25 12:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			09/04/25 23:04	1

Client Sample ID: CS-36

Lab Sample ID: 890-8737-2

Date Collected: 08/28/25 10:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 18:04	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/03/25 15:42	09/04/25 18:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 18:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 15:42	09/04/25 18:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 18:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 15:42	09/04/25 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/03/25 15:42	09/04/25 18:04	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-36

Lab Sample ID: 890-8737-2

Date Collected: 08/28/25 10:25

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	09/03/25 15:42	09/04/25 18:04	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			09/04/25 18:04	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			09/08/25 12:48	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	50.0		mg/Kg		09/02/25 16:27	09/08/25 12:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 12:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130				09/02/25 16:27	09/08/25 12:48	1
o-Terphenyl	89		70 - 130				09/02/25 16:27	09/08/25 12:48	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			09/04/25 23:10	1

Client Sample ID: CS-37

Lab Sample ID: 890-8737-3

Date Collected: 08/29/25 10:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 18:24	1
Toluene	<0.00198	U *	0.00198		mg/Kg		09/03/25 15:42	09/04/25 18:24	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 18:24	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 18:24	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 18:24	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/03/25 15:42	09/04/25 18:24	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/03/25 15:42	09/04/25 18:24	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			09/04/25 18:24	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			09/08/25 13:03	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-37

Lab Sample ID: 890-8737-3

Date Collected: 08/29/25 10:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 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		09/02/25 16:27	09/08/25 13:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 13:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 13:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/02/25 16:27	09/08/25 13:03	1
o-Terphenyl	98		70 - 130				09/02/25 16:27	09/08/25 13:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21.9		9.96		mg/Kg			09/04/25 08:26	1

Client Sample ID: CS-38

Lab Sample ID: 890-8737-4

Date Collected: 08/29/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 18:45	1
Toluene	<0.00201	U *	0.00201		mg/Kg		09/03/25 15:42	09/04/25 18:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 18:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 18:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 18:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				09/03/25 15:42	09/04/25 18:45	1
1,4-Difluorobenzene (Surr)	96		70 - 130				09/03/25 15:42	09/04/25 18:45	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			09/08/25 13:17	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		09/02/25 16:27	09/08/25 13:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 13:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 13:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/02/25 16:27	09/08/25 13:17	1
o-Terphenyl	101		70 - 130				09/02/25 16:27	09/08/25 13:17	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-38

Lab Sample ID: 890-8737-4

Date Collected: 08/29/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.0		9.98		mg/Kg			09/04/25 13:48	1

Client Sample ID: CS-39

Lab Sample ID: 890-8737-5

Date Collected: 08/29/25 10:40

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 19:05	1
Toluene	<0.00198	U *	0.00198		mg/Kg		09/03/25 15:42	09/04/25 19:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 19:05	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 19:05	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 15:42	09/04/25 19:05	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 15:42	09/04/25 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130				09/03/25 15:42	09/04/25 19:05	1
1,4-Difluorobenzene (Surr)	93		70 - 130				09/03/25 15:42	09/04/25 19:05	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			09/04/25 19:05	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			09/08/25 13:31	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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 13:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 13:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 13:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/02/25 16:27	09/08/25 13:31	1
o-Terphenyl	98		70 - 130				09/02/25 16:27	09/08/25 13:31	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.4		9.92		mg/Kg			09/04/25 13:54	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-40

Lab Sample ID: 890-8737-6

Date Collected: 08/29/25 10:45

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 1

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		09/03/25 15:42	09/04/25 19:26	1
Toluene	<0.00199	U *	0.00199		mg/Kg		09/03/25 15:42	09/04/25 19:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 19:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 19:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 19:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				09/03/25 15:42	09/04/25 19:26	1
1,4-Difluorobenzene (Surr)	90		70 - 130				09/03/25 15:42	09/04/25 19:26	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			09/04/25 19:26	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			09/08/25 13:46	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		09/02/25 16:27	09/08/25 13:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 13:46	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:27	09/08/25 13:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/02/25 16:27	09/08/25 13:46	1
o-Terphenyl	92		70 - 130				09/02/25 16:27	09/08/25 13:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.3		9.90		mg/Kg			09/04/25 14:00	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea 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)
890-8737-1	CS-35	113	94
890-8737-2	CS-36	112	95
890-8737-3	CS-37	110	97
890-8737-4	CS-38	108	96
890-8737-5	CS-39	100	93
890-8737-6	CS-40	114	90
LCS 880-118184/1-A	Lab Control Sample	115	94
LCSD 880-118184/2-A	Lab Control Sample Dup	118	96
MB 880-118184/5-A	Method Blank	104	86
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)
890-8737-1	CS-35	101	99
890-8737-2	CS-36	93	89
890-8737-3	CS-37	102	98
890-8737-4	CS-38	102	101
890-8737-5	CS-39	104	98
890-8737-6	CS-40	98	92
LCS 880-118103/2-A	Lab Control Sample	107	105
LCSD 880-118103/3-A	Lab Control Sample Dup	106	103
MB 880-118103/1-A	Method Blank	89	91
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118184/5-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/03/25 15:42	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/03/25 15:42	09/04/25 11:41	1

Lab Sample ID: LCS 880-118184/1-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06476	*-	mg/Kg		65	70 - 130
Toluene	0.100	0.06881	*-	mg/Kg		69	70 - 130
Ethylbenzene	0.100	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08611		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-118184/2-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07712		mg/Kg		77	70 - 130	17	35
Toluene	0.100	0.07666		mg/Kg		77	70 - 130	11	35
Ethylbenzene	0.100	0.09153		mg/Kg		92	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1839		mg/Kg		92	70 - 130	7	35
o-Xylene	0.100	0.09149		mg/Kg		91	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118103/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118103

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		09/02/25 16:27	09/08/25 09:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130				09/02/25 16:27	09/08/25 09:21	1
o-Terphenyl	91		70 - 130				09/02/25 16:27	09/08/25 09:21	1

Lab Sample ID: LCS 880-118103/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	857.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	931.4		mg/Kg		93	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	107		70 - 130				
o-Terphenyl	105		70 - 130				

Lab Sample ID: LCSD 880-118103/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118103

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	858.8		mg/Kg		86	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	887.1		mg/Kg		89	70 - 130	5	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	106		70 - 130						
o-Terphenyl	103		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118094/1-A

Matrix: Solid

Analysis Batch: 118174

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			09/04/25 08:08	1

Eurofins Carlsbad

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-118094/2-A

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	274.0		mg/Kg		110	90 - 110

Lab Sample ID: LCSD 880-118094/3-A

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	255.6		mg/Kg		102	90 - 110	7	20

Lab Sample ID: 890-8737-3 MS

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: CS-37

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	21.9		249	274.7		mg/Kg		102	90 - 110

Lab Sample ID: 890-8737-3 MSD

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: CS-37

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	21.9		249	282.8		mg/Kg		105	90 - 110	3	20

Lab Sample ID: MB 880-118093/1-A

Matrix: Solid

Analysis Batch: 118175

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			09/04/25 20:14	1

Lab Sample ID: LCS 880-118093/2-A

Matrix: Solid

Analysis Batch: 118175

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-118093/3-A

Matrix: Solid

Analysis Batch: 118175

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	256.8		mg/Kg		103	90 - 110	0	20

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	5035	
890-8737-2	CS-36	Total/NA	Solid	5035	
890-8737-3	CS-37	Total/NA	Solid	5035	
890-8737-4	CS-38	Total/NA	Solid	5035	
890-8737-5	CS-39	Total/NA	Solid	5035	
890-8737-6	CS-40	Total/NA	Solid	5035	
MB 880-118184/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	8021B	118184
890-8737-2	CS-36	Total/NA	Solid	8021B	118184
890-8737-3	CS-37	Total/NA	Solid	8021B	118184
890-8737-4	CS-38	Total/NA	Solid	8021B	118184
890-8737-5	CS-39	Total/NA	Solid	8021B	118184
890-8737-6	CS-40	Total/NA	Solid	8021B	118184
MB 880-118184/5-A	Method Blank	Total/NA	Solid	8021B	118184
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	8021B	118184
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118184

Analysis Batch: 118332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	Total BTEX	
890-8737-2	CS-36	Total/NA	Solid	Total BTEX	
890-8737-3	CS-37	Total/NA	Solid	Total BTEX	
890-8737-4	CS-38	Total/NA	Solid	Total BTEX	
890-8737-5	CS-39	Total/NA	Solid	Total BTEX	
890-8737-6	CS-40	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	8015NM Prep	
890-8737-2	CS-36	Total/NA	Solid	8015NM Prep	
890-8737-3	CS-37	Total/NA	Solid	8015NM Prep	
890-8737-4	CS-38	Total/NA	Solid	8015NM Prep	
890-8737-5	CS-39	Total/NA	Solid	8015NM Prep	
890-8737-6	CS-40	Total/NA	Solid	8015NM Prep	
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	8015B NM	118103
890-8737-2	CS-36	Total/NA	Solid	8015B NM	118103
890-8737-3	CS-37	Total/NA	Solid	8015B NM	118103
890-8737-4	CS-38	Total/NA	Solid	8015B NM	118103

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 118424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-5	CS-39	Total/NA	Solid	8015B NM	118103
890-8737-6	CS-40	Total/NA	Solid	8015B NM	118103
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015B NM	118103
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118103
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118103

Analysis Batch: 118474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Total/NA	Solid	8015 NM	
890-8737-2	CS-36	Total/NA	Solid	8015 NM	
890-8737-3	CS-37	Total/NA	Solid	8015 NM	
890-8737-4	CS-38	Total/NA	Solid	8015 NM	
890-8737-5	CS-39	Total/NA	Solid	8015 NM	
890-8737-6	CS-40	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Soluble	Solid	DI Leach	
890-8737-2	CS-36	Soluble	Solid	DI Leach	
MB 880-118093/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 118094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-3	CS-37	Soluble	Solid	DI Leach	
890-8737-4	CS-38	Soluble	Solid	DI Leach	
890-8737-5	CS-39	Soluble	Solid	DI Leach	
890-8737-6	CS-40	Soluble	Solid	DI Leach	
MB 880-118094/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118094/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118094/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8737-3 MS	CS-37	Soluble	Solid	DI Leach	
890-8737-3 MSD	CS-37	Soluble	Solid	DI Leach	

Analysis Batch: 118174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-3	CS-37	Soluble	Solid	300.0	118094
890-8737-4	CS-38	Soluble	Solid	300.0	118094
890-8737-5	CS-39	Soluble	Solid	300.0	118094
890-8737-6	CS-40	Soluble	Solid	300.0	118094
MB 880-118094/1-A	Method Blank	Soluble	Solid	300.0	118094
LCS 880-118094/2-A	Lab Control Sample	Soluble	Solid	300.0	118094
LCSD 880-118094/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118094
890-8737-3 MS	CS-37	Soluble	Solid	300.0	118094
890-8737-3 MSD	CS-37	Soluble	Solid	300.0	118094

Eurofins Carlsbad

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

HPLC/IC

Analysis Batch: 118175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8737-1	CS-35	Soluble	Solid	300.0	118093
890-8737-2	CS-36	Soluble	Solid	300.0	118093
MB 880-118093/1-A	Method Blank	Soluble	Solid	300.0	118093
LCS 880-118093/2-A	Lab Control Sample	Soluble	Solid	300.0	118093
LCSD 880-118093/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118093

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-35

Lab Sample ID: 890-8737-1

Date Collected: 08/29/25 10:25

Matrix: Solid

Date Received: 09/02/25 08:05

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 17:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 17:43	SA	EET MID
Total/NA	Analysis	8015 NM		1			118474	09/08/25 12:33	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 12:33	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 23:04	SMC	EET MID

Client Sample ID: CS-36

Lab Sample ID: 890-8737-2

Date Collected: 08/28/25 10:25

Matrix: Solid

Date Received: 09/02/25 08:05

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 18:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 18:04	SA	EET MID
Total/NA	Analysis	8015 NM		1			118474	09/08/25 12:48	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 12:48	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	118093	09/02/25 16:21	SA	EET MID
Soluble	Analysis	300.0		1			118175	09/04/25 23:10	SMC	EET MID

Client Sample ID: CS-37

Lab Sample ID: 890-8737-3

Date Collected: 08/29/25 10:30

Matrix: Solid

Date Received: 09/02/25 08:05

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 18:24	SA	EET MID
Total/NA	Analysis	8015 NM		1			118474	09/08/25 13:03	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 13:03	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 08:26	SMC	EET MID

Client Sample ID: CS-38

Lab Sample ID: 890-8737-4

Date Collected: 08/29/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 18:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 18:45	SA	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Client Sample ID: CS-38

Lab Sample ID: 890-8737-4

Date Collected: 08/29/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

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			118474	09/08/25 13:17	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 13:17	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 13:48	SMC	EET MID

Client Sample ID: CS-39

Lab Sample ID: 890-8737-5

Date Collected: 08/29/25 10:40

Matrix: Solid

Date Received: 09/02/25 08:05

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 19:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 19:05	SA	EET MID
Total/NA	Analysis	8015 NM		1			118474	09/08/25 13:31	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 13:31	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 13:54	SMC	EET MID

Client Sample ID: CS-40

Lab Sample ID: 890-8737-6

Date Collected: 08/29/25 10:45

Matrix: Solid

Date Received: 09/02/25 08:05

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 19:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118332	09/04/25 19:26	SA	EET MID
Total/NA	Analysis	8015 NM		1			118474	09/08/25 13:46	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 13:46	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 14:00	SMC	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8737-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8737-1	CS-35	Solid	08/29/25 10:25	09/02/25 08:05	1
890-8737-2	CS-36	Solid	08/28/25 10:25	09/02/25 08:05	1
890-8737-3	CS-37	Solid	08/29/25 10:30	09/02/25 08:05	1
890-8737-4	CS-38	Solid	08/29/25 10:35	09/02/25 08:05	1
890-8737-5	CS-39	Solid	08/29/25 10:40	09/02/25 08:05	1
890-8737-6	CS-40	Solid	08/29/25 10:45	09/02/25 08:05	1

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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 569-3333
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Chain of Custody



89U-8/37 Chain of Custody

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Work Order Comments

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

State of Project:

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

Deliverables: EDD ☐ ADAPT ☐ Other: _____

[illegible]

Circle Method(s) and Metal(s) to be analyzed		Total 200.7 / 6010		200.8 / 6020:	
8RCRA	13PPM	Texas 11	Al	Sb	As
			Ba	Be	B
			Cd	Ca	Cr
			Co	Cu	Fe
			Mg	Mn	Mo
			Ni	K	Se
			Ag	SiO ₂	Na
			Sr	Ti	Sn
			U	V	Zn
			Hg: 1631 / 245.1 / 7470 / 747		

Notice: Signature of this document represents 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
		8:05 9/2			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8737-1

SDG Number: Lea County, NM

Login Number: 8737

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: 890-8737-1

SDG Number: Lea County, NM

Login Number: 8737

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 9:38:24 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8741-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



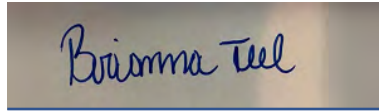
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 9:38:24 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8741-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Hognose Viper Federal Com #602H

Job ID: 890-8741-1

Job ID: 890-8741-1

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Job Narrative 890-8741-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-118217 and analytical batch 880-118210 was outside the upper control limits.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Client Sample ID: CS-41

Lab Sample ID: 890-8741-1

Date Collected: 08/28/25 10:30

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 6

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		09/03/25 08:28	09/03/25 17:36	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:28	09/03/25 17:36	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:28	09/03/25 17:36	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 08:28	09/03/25 17:36	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:28	09/03/25 17:36	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 08:28	09/03/25 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/03/25 08:28	09/03/25 17:36	1
1,4-Difluorobenzene (Surr)	97		70 - 130	09/03/25 08:28	09/03/25 17:36	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			09/03/25 17:36	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			09/09/25 02:00	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		09/02/25 16:56	09/09/25 02:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 02:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 02:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/02/25 16:56	09/09/25 02:00	1
o-Terphenyl	101		70 - 130	09/02/25 16:56	09/09/25 02:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.2		9.92		mg/Kg			09/04/25 12:45	1

Client Sample ID: CS-42

Lab Sample ID: 890-8741-2

Date Collected: 08/28/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/04/25 09:06	09/04/25 12:23	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/04/25 09:06	09/04/25 12:23	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/04/25 09:06	09/04/25 12:23	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/04/25 09:06	09/04/25 12:23	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/04/25 09:06	09/04/25 12:23	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/04/25 09:06	09/04/25 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/04/25 09:06	09/04/25 12:23	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Client Sample ID: CS-42

Lab Sample ID: 890-8741-2

Date Collected: 08/28/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	120		70 - 130	09/04/25 09:06	09/04/25 12:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/04/25 12:23	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			09/09/25 02:42	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		09/02/25 16:56	09/09/25 02:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 02:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 02:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130				09/02/25 16:56	09/09/25 02:42	1
o-Terphenyl	103		70 - 130				09/02/25 16:56	09/09/25 02:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.6		9.98		mg/Kg			09/04/25 12:51	1

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea 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)
890-8741-1	CS-41	112	97
890-8741-1 MS	CS-41	101	97
890-8741-1 MSD	CS-41	98	98
890-8741-2	CS-42	105	120
LCS 880-118120/1-A	Lab Control Sample	111	97
LCS 880-118217/1-A	Lab Control Sample	101	101
LCSD 880-118120/2-A	Lab Control Sample Dup	109	103
LCSD 880-118217/2-A	Lab Control Sample Dup	101	97
MB 880-118120/5-A	Method Blank	107	94
MB 880-118217/5-A	Method Blank	94	138 S1+
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)
890-8741-1	CS-41	104	101
890-8741-1 MS	CS-41	112	106
890-8741-1 MSD	CS-41	112	105
890-8741-2	CS-42	107	103
LCS 880-118108/2-A	Lab Control Sample	109	106
LCSD 880-118108/3-A	Lab Control Sample Dup	110	107
MB 880-118108/1-A	Method Blank	94	95
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118120/5-A

Matrix: Solid

Analysis Batch: 118115

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118120

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:28	09/03/25 11:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:28	09/03/25 11:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:28	09/03/25 11:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 08:28	09/03/25 11:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:28	09/03/25 11:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 08:28	09/03/25 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/03/25 08:28	09/03/25 11:15	1
1,4-Difluorobenzene (Surr)	94		70 - 130	09/03/25 08:28	09/03/25 11:15	1

Lab Sample ID: LCS 880-118120/1-A

Matrix: Solid

Analysis Batch: 118115

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118120

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09504		mg/Kg		95	70 - 130
Toluene	0.100	0.09510		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.1102		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2217		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1143		mg/Kg		114	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-118120/2-A

Matrix: Solid

Analysis Batch: 118115

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118120

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09383		mg/Kg		94	70 - 130	1	35
Toluene	0.100	0.09261		mg/Kg		93	70 - 130	3	35
Ethylbenzene	0.100	0.1064		mg/Kg		106	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2140		mg/Kg		107	70 - 130	4	35
o-Xylene	0.100	0.1104		mg/Kg		110	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118217/5-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/04/25 09:06	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/04/25 09:06	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130	09/04/25 09:06	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	138	S1+	70 - 130	09/04/25 09:06	09/04/25 11:41	1

Lab Sample ID: LCS 880-118217/1-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08008		mg/Kg		80	70 - 130
Toluene	0.100	0.09116		mg/Kg		91	70 - 130
Ethylbenzene	0.100	0.08559		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1706		mg/Kg		85	70 - 130
o-Xylene	0.100	0.08660		mg/Kg		87	70 - 130

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

Lab Sample ID: LCSD 880-118217/2-A

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08221		mg/Kg		82	70 - 130	3	35
Toluene	0.100	0.09281		mg/Kg		93	70 - 130	2	35
Ethylbenzene	0.100	0.08808		mg/Kg		88	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1732		mg/Kg		87	70 - 130	1	35
o-Xylene	0.100	0.08786		mg/Kg		88	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: 890-8741-1 MS

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 118217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.09386		mg/Kg		94	70 - 130
Toluene	<0.00199	U	0.100	0.1065		mg/Kg		106	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.1029		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2027		mg/Kg		101	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8741-1 MS

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 118217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00199	U	0.100	0.1016		mg/Kg		102	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	101		70 - 130						
1,4-Difluorobenzene (Surr)	97		70 - 130						

Lab Sample ID: 890-8741-1 MSD

Matrix: Solid

Analysis Batch: 118210

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 118217

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	0.1017		mg/Kg		102	70 - 130	8	35
Toluene	<0.00199	U	0.100	0.1148		mg/Kg		115	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.100	0.1106		mg/Kg		111	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2170		mg/Kg		109	70 - 130	7	35
o-Xylene	<0.00199	U	0.100	0.1090		mg/Kg		109	70 - 130	7	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	98		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								

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

Lab Sample ID: MB 880-118108/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118108

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		09/02/25 16:56	09/09/25 01:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits						
1-Chlorooctane	94		70 - 130						
o-Terphenyl	95		70 - 130						

Lab Sample ID: LCS 880-118108/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.8		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.2		mg/Kg		92	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-118108/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118108

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-118108/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118108

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	891.5		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	904.3		mg/Kg		90	70 - 130	2	20
Surrogate		LCSD	LCSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	110		70 - 130								
o-Terphenyl	107		70 - 130								

Lab Sample ID: 890-8741-1 MS

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 118108

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	999	788.8		mg/Kg		79	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	891.8		mg/Kg		89	70 - 130		
Surrogate		MS	MS								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	112		70 - 130								
o-Terphenyl	106		70 - 130								

Lab Sample ID: 890-8741-1 MSD

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: CS-41

Prep Type: Total/NA

Prep Batch: 118108

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	999	788.2		mg/Kg		79	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	938.5		mg/Kg		94	70 - 130	5	20
Surrogate		MSD	MSD								
	%Recovery	Qualifier	Limits								
1-Chlorooctane	112		70 - 130								
o-Terphenyl	105		70 - 130								

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118101/1-A

Matrix: Solid

Analysis Batch: 118187

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			09/04/25 11:06	1

Lab Sample ID: LCS 880-118101/2-A

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	229.9		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-118101/3-A

Matrix: Solid

Analysis Batch: 118187

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	237.8		mg/Kg		95	90 - 110	3	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 118115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	8021B	118120
MB 880-118120/5-A	Method Blank	Total/NA	Solid	8021B	118120
LCS 880-118120/1-A	Lab Control Sample	Total/NA	Solid	8021B	118120
LCSD 880-118120/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118120

Prep Batch: 118120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	5035	
MB 880-118120/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118120/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118120/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-2	CS-42	Total/NA	Solid	8021B	118217
MB 880-118217/5-A	Method Blank	Total/NA	Solid	8021B	118217
LCS 880-118217/1-A	Lab Control Sample	Total/NA	Solid	8021B	118217
LCSD 880-118217/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118217
890-8741-1 MS	CS-41	Total/NA	Solid	8021B	118217
890-8741-1 MSD	CS-41	Total/NA	Solid	8021B	118217

Prep Batch: 118217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-2	CS-42	Total/NA	Solid	5035	
MB 880-118217/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118217/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118217/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8741-1 MS	CS-41	Total/NA	Solid	5035	
890-8741-1 MSD	CS-41	Total/NA	Solid	5035	

Analysis Batch: 118274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	Total BTEX	
890-8741-2	CS-42	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	8015NM Prep	
890-8741-2	CS-42	Total/NA	Solid	8015NM Prep	
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8741-1 MS	CS-41	Total/NA	Solid	8015NM Prep	
890-8741-1 MSD	CS-41	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	8015B NM	118108
890-8741-2	CS-42	Total/NA	Solid	8015B NM	118108

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 118424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015B NM	118108
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118108
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118108
890-8741-1 MS	CS-41	Total/NA	Solid	8015B NM	118108
890-8741-1 MSD	CS-41	Total/NA	Solid	8015B NM	118108

Analysis Batch: 118503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Total/NA	Solid	8015 NM	
890-8741-2	CS-42	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Soluble	Solid	DI Leach	
890-8741-2	CS-42	Soluble	Solid	DI Leach	
MB 880-118101/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 118187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8741-1	CS-41	Soluble	Solid	300.0	118101
890-8741-2	CS-42	Soluble	Solid	300.0	118101
MB 880-118101/1-A	Method Blank	Soluble	Solid	300.0	118101
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	300.0	118101
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118101

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Client Sample ID: CS-41

Lab Sample ID: 890-8741-1

Date Collected: 08/28/25 10:30

Matrix: Solid

Date Received: 09/02/25 08:05

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	118120	09/03/25 08:28	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118115	09/03/25 17:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118274	09/03/25 17:36	SA	EET MID
Total/NA	Analysis	8015 NM		1			118503	09/09/25 02:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 02:00	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 12:45	SMC	EET MID

Client Sample ID: CS-42

Lab Sample ID: 890-8741-2

Date Collected: 08/28/25 10:35

Matrix: Solid

Date Received: 09/02/25 08:05

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	118217	09/04/25 09:06	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118210	09/04/25 12:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118274	09/04/25 12:23	SA	EET MID
Total/NA	Analysis	8015 NM		1			118503	09/09/25 02:42	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 02:42	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 12:51	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8741-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8741-1	CS-41	Solid	08/28/25 10:30	09/02/25 08:05	6
890-8741-2	CS-42	Solid	08/28/25 10:35	09/02/25 08:05	6

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Environment Testing
Xenco

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

Chain of Custody

Wc

890-8741 Chain of Custody



www.xenco.com

Page 1 of 1

Project Manager:	Gilbert Moreno	Bill to: (if different)	Jim Raley
Company Name:	Earth Systems R&R	Company Name:	Devon Energy
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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code		ANALYSIS REQUEST																Preservative Codes				
Project Number:	2783	Due Date:																				None: NO	DI Water: H ₂ O			
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm																				Cool: Cool	MeOH: Me			
Sampler's Name:	Santiago Giron																					HCL: HC	HNO ₃ : HN			
CCWO #:	1094080601																					H ₂ SO ₄ : H ₂	NaOH: Na			
SAMPLE RECEIPT	Temp Blank:	Yes No	Well Ice:	Yes No																		H ₃ PO ₄ : HP				
Samples Received In:	Yes No	Thermometer ID:																				NaHSO ₄ : NABIS				
Coelher Custody Seals:	Yes No	Correction Factor:																				Na ₂ S ₂ O ₃ : NaSO ₃				
Sample Custody Seals:	Yes No	Temperature Reading:																				Zn Acetate+NaOH: Zn				
Total Containers:	Yes No	Corrected Temperature:																				NaOH+Ascorbic Acid: SAPC				
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grav/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush															Sample Comments
CS-41	S	8/28/25	10:30	6	Comp	1	X	X	X																	Incident Number
CS-42	S	8/28/25	10:35	6	Comp	1	X	X	X																	nAP2500721668

Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	SiO ₂	Na	Sr	Ti	Sn	U	V	Zn
Circle Method(s) and Metal(s) to be analyzed		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
		8/25/25			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8741-1

SDG Number: Lea County, NM

Login Number: 8741

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: 890-8741-1

SDG Number: Lea County, NM

Login Number: 8741

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 9:38:23 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8738-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



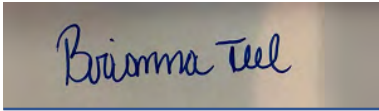
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/9/2025 9:38:23 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8738-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
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
SQL	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: Hognose Viper Federal Com #602H

Job ID: 890-8738-1

Job ID: 890-8738-1

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Job Narrative 890-8738-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 10:07 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

GC VOA

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-118184 and analytical batch 880-118209 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.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-43

Lab Sample ID: 890-8738-1

Date Collected: 08/28/25 10:40

Matrix: Solid

Date Received: 09/02/25 10:07

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		09/03/25 15:42	09/04/25 12:03	1
Toluene	<0.00200	U *	0.00200		mg/Kg		09/03/25 15:42	09/04/25 12:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 12:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/03/25 15:42	09/04/25 12:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 12:03	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/03/25 15:42	09/04/25 12:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	09/03/25 15:42	09/04/25 12:03	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/03/25 15:42	09/04/25 12:03	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			09/04/25 12:03	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			09/08/25 14:00	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	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 14:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 14:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	09/02/25 16:27	09/08/25 14:00	1
o-Terphenyl	93		70 - 130	09/02/25 16:27	09/08/25 14:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.7		9.90		mg/Kg			09/04/25 14:06	1

Client Sample ID: CS-44

Lab Sample ID: 890-8738-2

Date Collected: 08/28/25 10:45

Matrix: Solid

Date Received: 09/02/25 10:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 12:23	1
Toluene	<0.00201	U *	0.00201		mg/Kg		09/03/25 15:42	09/04/25 12:23	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 12:23	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 12:23	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 15:42	09/04/25 12:23	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 15:42	09/04/25 12:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/03/25 15:42	09/04/25 12:23	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-44

Lab Sample ID: 890-8738-2

Date Collected: 08/28/25 10:45

Matrix: Solid

Date Received: 09/02/25 10:07

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	09/03/25 15:42	09/04/25 12:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 12:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	205		49.7		mg/Kg			09/08/25 14:27	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		09/02/25 16:27	09/08/25 14:27	1
Diesel Range Organics (Over C10-C28)	205		49.7		mg/Kg		09/02/25 16:27	09/08/25 14:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/02/25 16:27	09/08/25 14:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130				09/02/25 16:27	09/08/25 14:27	1
o-Terphenyl	98		70 - 130				09/02/25 16:27	09/08/25 14:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	136		9.90		mg/Kg			09/04/25 14:24	1

Client Sample ID: CS-45

Lab Sample ID: 890-8738-3

Date Collected: 08/28/25 10:50

Matrix: Solid

Date Received: 09/02/25 10:07

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *	0.00202		mg/Kg		09/03/25 15:42	09/04/25 12:44	1
Toluene	<0.00202	U *	0.00202		mg/Kg		09/03/25 15:42	09/04/25 12:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/03/25 15:42	09/04/25 12:44	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/03/25 15:42	09/04/25 12:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/03/25 15:42	09/04/25 12:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/03/25 15:42	09/04/25 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	09/03/25 15:42	09/04/25 12:44	1
1,4-Difluorobenzene (Surr)	94		70 - 130	09/03/25 15:42	09/04/25 12:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			09/04/25 12:44	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			09/08/25 14:41	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-45

Lab Sample ID: 890-8738-3

Date Collected: 08/28/25 10:50

Matrix: Solid

Date Received: 09/02/25 10:07

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	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 14:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 14:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:27	09/08/25 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130				09/02/25 16:27	09/08/25 14:41	1
o-Terphenyl	95		70 - 130				09/02/25 16:27	09/08/25 14:41	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			09/04/25 14:29	1

Client Sample ID: CS-46

Lab Sample ID: 890-8738-4

Date Collected: 08/28/25 10:55

Matrix: Solid

Date Received: 09/02/25 10:07

Sample Depth: 2

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		09/03/25 15:42	09/04/25 13:04	1
Toluene	<0.00199	U *	0.00199		mg/Kg		09/03/25 15:42	09/04/25 13:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 13:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 13:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 15:42	09/04/25 13:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 15:42	09/04/25 13:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130				09/03/25 15:42	09/04/25 13:04	1
1,4-Difluorobenzene (Surr)	94		70 - 130				09/03/25 15:42	09/04/25 13:04	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			09/04/25 13:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	61.7		49.8		mg/Kg			09/09/25 07:00	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	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 07:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 07:00	1
Oil Range Organics (Over C28-C36)	61.7		49.8		mg/Kg		09/02/25 16:56	09/09/25 07:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/02/25 16:56	09/09/25 07:00	1
o-Terphenyl	98		70 - 130				09/02/25 16:56	09/09/25 07:00	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-46
Date Collected: 08/28/25 10:55
Date Received: 09/02/25 10:07
Sample Depth: 2

Lab Sample ID: 890-8738-4
Matrix: Solid

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			09/04/25 14:35	1

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

Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea 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)
890-8738-1	CS-43	102	89
890-8738-1 MS	CS-43	118	99
890-8738-1 MSD	CS-43	126	98
890-8738-2	CS-44	101	96
890-8738-3	CS-45	110	94
890-8738-4	CS-46	101	94
LCS 880-118184/1-A	Lab Control Sample	115	94
LCSD 880-118184/2-A	Lab Control Sample Dup	118	96
MB 880-118184/5-A	Method Blank	104	86
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)
890-8738-1	CS-43	98	93
890-8738-2	CS-44	98	98
890-8738-3	CS-45	99	95
890-8738-4	CS-46	102	98
LCS 880-118103/2-A	Lab Control Sample	107	105
LCS 880-118108/2-A	Lab Control Sample	109	106
LCSD 880-118103/3-A	Lab Control Sample Dup	106	103
LCSD 880-118108/3-A	Lab Control Sample Dup	110	107
MB 880-118103/1-A	Method Blank	89	91
MB 880-118108/1-A	Method Blank	94	95
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-118184/5-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 15:42	09/04/25 11:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/03/25 15:42	09/04/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	09/03/25 15:42	09/04/25 11:41	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/03/25 15:42	09/04/25 11:41	1

Lab Sample ID: LCS 880-118184/1-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.06476	*-	mg/Kg		65	70 - 130
Toluene	0.100	0.06881	*-	mg/Kg		69	70 - 130
Ethylbenzene	0.100	0.08402		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130
o-Xylene	0.100	0.08611		mg/Kg		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-118184/2-A

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.07712		mg/Kg		77	70 - 130	17	35
Toluene	0.100	0.07666		mg/Kg		77	70 - 130	11	35
Ethylbenzene	0.100	0.09153		mg/Kg		92	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1839		mg/Kg		92	70 - 130	7	35
o-Xylene	0.100	0.09149		mg/Kg		91	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-8738-1 MS

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: CS-43

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *-	0.100	0.08411		mg/Kg		84	70 - 130
Toluene	<0.00200	U *-	0.100	0.07710		mg/Kg		77	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

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

Lab Sample ID: 890-8738-1 MS

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: CS-43

Prep Type: Total/NA

Prep Batch: 118184

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.08841		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1731		mg/Kg		87	70 - 130
o-Xylene	<0.00200	U	0.100	0.08612		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 890-8738-1 MSD

Matrix: Solid

Analysis Batch: 118209

Client Sample ID: CS-43

Prep Type: Total/NA

Prep Batch: 118184

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	0.08335		mg/Kg		83	70 - 130	1	35
Toluene	<0.00200	U *	0.100	0.08735		mg/Kg		87	70 - 130	12	35
Ethylbenzene	<0.00200	U	0.100	0.1071		mg/Kg		107	70 - 130	19	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2152		mg/Kg		108	70 - 130	22	35
o-Xylene	<0.00200	U	0.100	0.1084		mg/Kg		108	70 - 130	23	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-118103/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118103

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		09/02/25 16:27	09/08/25 09:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:27	09/08/25 09:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/02/25 16:27	09/08/25 09:21	1
o-Terphenyl	91		70 - 130	09/02/25 16:27	09/08/25 09:21	1

Lab Sample ID: LCS 880-118103/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	857.9		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	931.4		mg/Kg		93	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-118103/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118103

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-118103/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118103

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	858.8		mg/Kg		86	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	887.1		mg/Kg		89	70 - 130	5	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: MB 880-118108/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118108

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		09/02/25 16:56	09/09/25 01:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	94		70 - 130	09/02/25 16:56	09/09/25 01:16	1
o-Terphenyl	95		70 - 130	09/02/25 16:56	09/09/25 01:16	1

Lab Sample ID: LCS 880-118108/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118108

	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.8		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.2		mg/Kg		92	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	106		70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

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

Lab Sample ID: LCSD 880-118108/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118108

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	891.5		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	904.3		mg/Kg		90	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	107		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118094/1-A

Matrix: Solid

Analysis Batch: 118174

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			09/04/25 08:08	1

Lab Sample ID: LCS 880-118094/2-A

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	274.0		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-118094/3-A

Matrix: Solid

Analysis Batch: 118174

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	255.6		mg/Kg		102	90 - 110	7	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

GC VOA

Prep Batch: 118184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	5035	
890-8738-2	CS-44	Total/NA	Solid	5035	
890-8738-3	CS-45	Total/NA	Solid	5035	
890-8738-4	CS-46	Total/NA	Solid	5035	
MB 880-118184/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8738-1 MS	CS-43	Total/NA	Solid	5035	
890-8738-1 MSD	CS-43	Total/NA	Solid	5035	

Analysis Batch: 118209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	8021B	118184
890-8738-2	CS-44	Total/NA	Solid	8021B	118184
890-8738-3	CS-45	Total/NA	Solid	8021B	118184
890-8738-4	CS-46	Total/NA	Solid	8021B	118184
MB 880-118184/5-A	Method Blank	Total/NA	Solid	8021B	118184
LCS 880-118184/1-A	Lab Control Sample	Total/NA	Solid	8021B	118184
LCSD 880-118184/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	118184
890-8738-1 MS	CS-43	Total/NA	Solid	8021B	118184
890-8738-1 MSD	CS-43	Total/NA	Solid	8021B	118184

Analysis Batch: 118291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	Total BTEX	
890-8738-2	CS-44	Total/NA	Solid	Total BTEX	
890-8738-3	CS-45	Total/NA	Solid	Total BTEX	
890-8738-4	CS-46	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	8015NM Prep	
890-8738-2	CS-44	Total/NA	Solid	8015NM Prep	
890-8738-3	CS-45	Total/NA	Solid	8015NM Prep	
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 118108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-4	CS-46	Total/NA	Solid	8015NM Prep	
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	8015B NM	118103
890-8738-2	CS-44	Total/NA	Solid	8015B NM	118103

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 118424 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-3	CS-45	Total/NA	Solid	8015B NM	118103
890-8738-4	CS-46	Total/NA	Solid	8015B NM	118108
MB 880-118103/1-A	Method Blank	Total/NA	Solid	8015B NM	118103
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015B NM	118108
LCS 880-118103/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118103
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118108
LCSD 880-118103/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118103
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118108

Analysis Batch: 118475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Total/NA	Solid	8015 NM	
890-8738-2	CS-44	Total/NA	Solid	8015 NM	
890-8738-3	CS-45	Total/NA	Solid	8015 NM	
890-8738-4	CS-46	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Soluble	Solid	DI Leach	
890-8738-2	CS-44	Soluble	Solid	DI Leach	
890-8738-3	CS-45	Soluble	Solid	DI Leach	
890-8738-4	CS-46	Soluble	Solid	DI Leach	
MB 880-118094/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118094/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118094/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 118174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8738-1	CS-43	Soluble	Solid	300.0	118094
890-8738-2	CS-44	Soluble	Solid	300.0	118094
890-8738-3	CS-45	Soluble	Solid	300.0	118094
890-8738-4	CS-46	Soluble	Solid	300.0	118094
MB 880-118094/1-A	Method Blank	Soluble	Solid	300.0	118094
LCS 880-118094/2-A	Lab Control Sample	Soluble	Solid	300.0	118094
LCSD 880-118094/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118094

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-43

Lab Sample ID: 890-8738-1

Date Collected: 08/28/25 10:40

Matrix: Solid

Date Received: 09/02/25 10:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 12:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118291	09/04/25 12:03	SA	EET MID
Total/NA	Analysis	8015 NM		1			118475	09/08/25 14:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 14:00	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 14:06	SMC	EET MID

Client Sample ID: CS-44

Lab Sample ID: 890-8738-2

Date Collected: 08/28/25 10:45

Matrix: Solid

Date Received: 09/02/25 10:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 12:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118291	09/04/25 12:23	SA	EET MID
Total/NA	Analysis	8015 NM		1			118475	09/08/25 14:27	SA	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 14:27	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 14:24	SMC	EET MID

Client Sample ID: CS-45

Lab Sample ID: 890-8738-3

Date Collected: 08/28/25 10:50

Matrix: Solid

Date Received: 09/02/25 10:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 12:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118291	09/04/25 12:44	SA	EET MID
Total/NA	Analysis	8015 NM		1			118475	09/08/25 14:41	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118103	09/02/25 16:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/08/25 14:41	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 14:29	SMC	EET MID

Client Sample ID: CS-46

Lab Sample ID: 890-8738-4

Date Collected: 08/28/25 10:55

Matrix: Solid

Date Received: 09/02/25 10:07

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	118184	09/03/25 15:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118209	09/04/25 13:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118291	09/04/25 13:04	SA	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Client Sample ID: CS-46
Date Collected: 08/28/25 10:55
Date Received: 09/02/25 10:07

Lab Sample ID: 890-8738-4
Matrix: Solid

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			118475	09/09/25 07:00	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 07:00	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	118094	09/02/25 16:24	SA	EET MID
Soluble	Analysis	300.0		1			118174	09/04/25 14:35	SMC	EET MID

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

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Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8738-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8738-1	CS-43	Solid	08/28/25 10:40	09/02/25 10:07	2
890-8738-2	CS-44	Solid	08/28/25 10:45	09/02/25 10:07	2
890-8738-3	CS-45	Solid	08/28/25 10:50	09/02/25 10:07	2
890-8738-4	CS-46	Solid	08/28/25 10:55	09/02/25 10:07	2

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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3343
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody



89U-8/38 Chain of Custody

Page 1 of 1

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:	

[illegible]

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 SiO₂ Na Sr Ti Sn U V Zn
Hg: 1631/245.1/7470 174

Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document a relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xencro 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 Xencro. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xencro, 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
		8:55 AM			

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8738-1

SDG Number: Lea County, NM

Login Number: 8738

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: 890-8738-1

SDG Number: Lea County, NM

Login Number: 8738

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/9/2025 9:38:30 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8742-1

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1089 N Canal St.
Carlsbad NM 88220



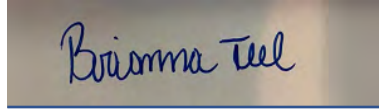
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Job Notes

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



Generated
9/9/2025 9:38:30 AM

Authorized for release by
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Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8742-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Hognose Viper Federal Com #602H

Job ID: 890-8742-1

Job ID: 890-8742-1**Eurofins Carlsbad****Job Narrative
890-8742-1**

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/2/2025 8:05 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -3.2°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-117995 and analytical batch 880-118182 was outside the upper control limits.

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

Diesel Range Organics

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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8742-1

Date Collected: 08/29/25 10:50

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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		09/03/25 08:00	09/04/25 00:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/03/25 08:00	09/04/25 00:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/03/25 08:00	09/04/25 00:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/03/25 08:00	09/04/25 00:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/03/25 08:00	09/04/25 00:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/03/25 08:00	09/04/25 00:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130	09/03/25 08:00	09/04/25 00:24	1
1,4-Difluorobenzene (Surr)	126		70 - 130	09/03/25 08:00	09/04/25 00:24	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/04/25 00:24	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			09/09/25 02:58	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		09/02/25 16:56	09/09/25 02:58	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 02:58	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 02:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/02/25 16:56	09/09/25 02:58	1
o-Terphenyl	104		70 - 130	09/02/25 16:56	09/09/25 02:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		9.96		mg/Kg			09/04/25 12:58	1

Client Sample ID: SW-2

Lab Sample ID: 890-8742-2

Date Collected: 08/28/25 11:00

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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		09/03/25 08:00	09/04/25 00:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 00:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 00:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 08:00	09/04/25 00:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 00:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 08:00	09/04/25 00:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	09/03/25 08:00	09/04/25 00:44	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-2

Lab Sample ID: 890-8742-2

Date Collected: 08/28/25 11:00

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	122		70 - 130	09/03/25 08:00	09/04/25 00:44	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			09/04/25 00:44	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			09/09/25 03:11	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	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 03:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 03:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/02/25 16:56	09/09/25 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130				09/02/25 16:56	09/09/25 03:11	1
o-Terphenyl	106		70 - 130				09/02/25 16:56	09/09/25 03:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	191		9.94		mg/Kg			09/04/25 13:18	1

Client Sample ID: SW-3

Lab Sample ID: 890-8742-3

Date Collected: 08/28/25 11:05

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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		09/03/25 08:00	09/04/25 01:05	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:00	09/04/25 01:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:00	09/04/25 01:05	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/03/25 08:00	09/04/25 01:05	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/03/25 08:00	09/04/25 01:05	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/03/25 08:00	09/04/25 01:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	09/03/25 08:00	09/04/25 01:05	1
1,4-Difluorobenzene (Surr)	128		70 - 130	09/03/25 08:00	09/04/25 01:05	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			09/04/25 01:05	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			09/09/25 03:26	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-3

Lab Sample ID: 890-8742-3

Date Collected: 08/28/25 11:05

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 03:26	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 03:26	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 03:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130				09/02/25 16:56	09/09/25 03:26	1
o-Terphenyl	100		70 - 130				09/02/25 16:56	09/09/25 03:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			09/04/25 13:24	1

Client Sample ID: SW-4

Lab Sample ID: 890-8742-4

Date Collected: 08/28/25 11:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

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		09/03/25 08:00	09/04/25 01:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 01:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 01:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/03/25 08:00	09/04/25 01:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/03/25 08:00	09/04/25 01:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/03/25 08:00	09/04/25 01:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		70 - 130				09/03/25 08:00	09/04/25 01:25	1
1,4-Difluorobenzene (Surr)	128		70 - 130				09/03/25 08:00	09/04/25 01:25	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			09/04/25 01:25	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			09/09/25 03:40	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		09/02/25 16:56	09/09/25 03:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 03:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/02/25 16:56	09/09/25 03:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130				09/02/25 16:56	09/09/25 03:40	1
o-Terphenyl	101		70 - 130				09/02/25 16:56	09/09/25 03:40	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-4

Lab Sample ID: 890-8742-4

Date Collected: 08/28/25 11:10

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.1		9.96		mg/Kg			09/04/25 13:44	1

Client Sample ID: SW-5

Lab Sample ID: 890-8742-5

Date Collected: 08/28/25 11:15

Matrix: Solid

Date Received: 09/02/25 08:05

Sample Depth: 0-4

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		09/03/25 08:00	09/04/25 01:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:00	09/04/25 01:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:00	09/04/25 01:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/03/25 08:00	09/04/25 01:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/03/25 08:00	09/04/25 01:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/03/25 08:00	09/04/25 01:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130				09/03/25 08:00	09/04/25 01:46	1
1,4-Difluorobenzene (Surr)	122		70 - 130				09/03/25 08:00	09/04/25 01:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			09/04/25 01:46	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			09/09/25 03:55	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	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 03:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 03:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 03:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/02/25 16:56	09/09/25 03:55	1
o-Terphenyl	102		70 - 130				09/02/25 16:56	09/09/25 03:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	238		9.92		mg/Kg			09/04/25 13:51	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea 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)
890-8742-1	SW-1	114	126
890-8742-2	SW-2	109	122
890-8742-3	SW-3	111	128
890-8742-4	SW-4	114	128
890-8742-5	SW-5	104	122
LCS 880-117995/1-A	Lab Control Sample	89	101
LCSD 880-117995/2-A	Lab Control Sample Dup	92	102
MB 880-117995/5-A	Method Blank	96	140 S1+
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)
890-8742-1	SW-1	107	104
890-8742-2	SW-2	110	106
890-8742-3	SW-3	101	100
890-8742-4	SW-4	104	101
890-8742-5	SW-5	103	102
LCS 880-118108/2-A	Lab Control Sample	109	106
LCSD 880-118108/3-A	Lab Control Sample Dup	110	107
MB 880-118108/1-A	Method Blank	94	95
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-117995/5-A

Matrix: Solid

Analysis Batch: 118182

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 117995

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/02/25 08:00	09/03/25 18:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/02/25 08:00	09/03/25 18:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/02/25 08:00	09/03/25 18:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/02/25 08:00	09/03/25 18:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/02/25 08:00	09/03/25 18:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/02/25 08:00	09/03/25 18:01	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/02/25 08:00	09/03/25 18:01	1
1,4-Difluorobenzene (Surr)	140	S1+	70 - 130	09/02/25 08:00	09/03/25 18:01	1

Lab Sample ID: LCS 880-117995/1-A

Matrix: Solid

Analysis Batch: 118182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 117995

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1017		mg/Kg		102	70 - 130
Toluene	0.100	0.1114		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1022		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.1974		mg/Kg		99	70 - 130
o-Xylene	0.100	0.09890		mg/Kg		99	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-117995/2-A

Matrix: Solid

Analysis Batch: 118182

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 117995

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1008		mg/Kg		101	70 - 130	1	35
Toluene	0.100	0.1080		mg/Kg		108	70 - 130	3	35
Ethylbenzene	0.100	0.09901		mg/Kg		99	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1931		mg/Kg		97	70 - 130	2	35
o-Xylene	0.100	0.09707		mg/Kg		97	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

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

Lab Sample ID: MB 880-118108/1-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 118108

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		09/02/25 16:56	09/09/25 01:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/02/25 16:56	09/09/25 01:16	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				09/02/25 16:56	09/09/25 01:16	1
o-Terphenyl	95		70 - 130				09/02/25 16:56	09/09/25 01:16	1

Lab Sample ID: LCS 880-118108/2-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 118108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.8		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.2		mg/Kg		92	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	109		70 - 130				
o-Terphenyl	106		70 - 130				

Lab Sample ID: LCSD 880-118108/3-A

Matrix: Solid

Analysis Batch: 118424

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 118108

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	891.5		mg/Kg		89	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	904.3		mg/Kg		90	70 - 130	2	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	110		70 - 130						
o-Terphenyl	107		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-118101/1-A

Matrix: Solid

Analysis Batch: 118187

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			09/04/25 11:06	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-118101/2-A

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	229.9		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-118101/3-A

Matrix: Solid

Analysis Batch: 118187

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	237.8		mg/Kg		95	90 - 110	3	20

Lab Sample ID: 890-8742-1 MS

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: SW-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	270		249	517.0		mg/Kg		99	90 - 110

Lab Sample ID: 890-8742-1 MSD

Matrix: Solid

Analysis Batch: 118187

Client Sample ID: SW-1

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	270		249	535.4		mg/Kg		107	90 - 110	3	20

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

GC VOA

Prep Batch: 117995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	5035	
890-8742-2	SW-2	Total/NA	Solid	5035	
890-8742-3	SW-3	Total/NA	Solid	5035	
890-8742-4	SW-4	Total/NA	Solid	5035	
890-8742-5	SW-5	Total/NA	Solid	5035	
MB 880-117995/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-117995/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-117995/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 118182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	8021B	117995
890-8742-2	SW-2	Total/NA	Solid	8021B	117995
890-8742-3	SW-3	Total/NA	Solid	8021B	117995
890-8742-4	SW-4	Total/NA	Solid	8021B	117995
890-8742-5	SW-5	Total/NA	Solid	8021B	117995
MB 880-117995/5-A	Method Blank	Total/NA	Solid	8021B	117995
LCS 880-117995/1-A	Lab Control Sample	Total/NA	Solid	8021B	117995
LCSD 880-117995/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	117995

Analysis Batch: 118276

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	Total BTEX	
890-8742-2	SW-2	Total/NA	Solid	Total BTEX	
890-8742-3	SW-3	Total/NA	Solid	Total BTEX	
890-8742-4	SW-4	Total/NA	Solid	Total BTEX	
890-8742-5	SW-5	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 118108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	8015NM Prep	
890-8742-2	SW-2	Total/NA	Solid	8015NM Prep	
890-8742-3	SW-3	Total/NA	Solid	8015NM Prep	
890-8742-4	SW-4	Total/NA	Solid	8015NM Prep	
890-8742-5	SW-5	Total/NA	Solid	8015NM Prep	
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 118424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	8015B NM	118108
890-8742-2	SW-2	Total/NA	Solid	8015B NM	118108
890-8742-3	SW-3	Total/NA	Solid	8015B NM	118108
890-8742-4	SW-4	Total/NA	Solid	8015B NM	118108
890-8742-5	SW-5	Total/NA	Solid	8015B NM	118108
MB 880-118108/1-A	Method Blank	Total/NA	Solid	8015B NM	118108
LCS 880-118108/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	118108
LCSD 880-118108/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	118108

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

GC Semi VOA

Analysis Batch: 118504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Total/NA	Solid	8015 NM	
890-8742-2	SW-2	Total/NA	Solid	8015 NM	
890-8742-3	SW-3	Total/NA	Solid	8015 NM	
890-8742-4	SW-4	Total/NA	Solid	8015 NM	
890-8742-5	SW-5	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 118101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Soluble	Solid	DI Leach	
890-8742-2	SW-2	Soluble	Solid	DI Leach	
890-8742-3	SW-3	Soluble	Solid	DI Leach	
890-8742-4	SW-4	Soluble	Solid	DI Leach	
890-8742-5	SW-5	Soluble	Solid	DI Leach	
MB 880-118101/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8742-1 MS	SW-1	Soluble	Solid	DI Leach	
890-8742-1 MSD	SW-1	Soluble	Solid	DI Leach	

Analysis Batch: 118187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8742-1	SW-1	Soluble	Solid	300.0	118101
890-8742-2	SW-2	Soluble	Solid	300.0	118101
890-8742-3	SW-3	Soluble	Solid	300.0	118101
890-8742-4	SW-4	Soluble	Solid	300.0	118101
890-8742-5	SW-5	Soluble	Solid	300.0	118101
MB 880-118101/1-A	Method Blank	Soluble	Solid	300.0	118101
LCS 880-118101/2-A	Lab Control Sample	Soluble	Solid	300.0	118101
LCSD 880-118101/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	118101
890-8742-1 MS	SW-1	Soluble	Solid	300.0	118101
890-8742-1 MSD	SW-1	Soluble	Solid	300.0	118101

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-1

Lab Sample ID: 890-8742-1

Date Collected: 08/29/25 10:50

Matrix: Solid

Date Received: 09/02/25 08:05

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	117995	09/03/25 08:00	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118182	09/04/25 00:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118276	09/04/25 00:24	SA	EET MID
Total/NA	Analysis	8015 NM		1			118504	09/09/25 02:58	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 02:58	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 12:58	SMC	EET MID

Client Sample ID: SW-2

Lab Sample ID: 890-8742-2

Date Collected: 08/28/25 11:00

Matrix: Solid

Date Received: 09/02/25 08:05

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	117995	09/03/25 08:00	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118182	09/04/25 00:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118276	09/04/25 00:44	SA	EET MID
Total/NA	Analysis	8015 NM		1			118504	09/09/25 03:11	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 03:11	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 13:18	SMC	EET MID

Client Sample ID: SW-3

Lab Sample ID: 890-8742-3

Date Collected: 08/28/25 11:05

Matrix: Solid

Date Received: 09/02/25 08:05

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	117995	09/03/25 08:00	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118182	09/04/25 01:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118276	09/04/25 01:05	SA	EET MID
Total/NA	Analysis	8015 NM		1			118504	09/09/25 03:26	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 03:26	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 13:24	SMC	EET MID

Client Sample ID: SW-4

Lab Sample ID: 890-8742-4

Date Collected: 08/28/25 11:10

Matrix: Solid

Date Received: 09/02/25 08:05

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	117995	09/03/25 08:00	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118182	09/04/25 01:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118276	09/04/25 01:25	SA	EET MID

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Client Sample ID: SW-4

Lab Sample ID: 890-8742-4

Date Collected: 08/28/25 11:10

Matrix: Solid

Date Received: 09/02/25 08:05

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			118504	09/09/25 03:40	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 03:40	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 13:44	SMC	EET MID

Client Sample ID: SW-5

Lab Sample ID: 890-8742-5

Date Collected: 08/28/25 11:15

Matrix: Solid

Date Received: 09/02/25 08:05

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	117995	09/03/25 08:00	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118182	09/04/25 01:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			118276	09/04/25 01:46	SA	EET MID
Total/NA	Analysis	8015 NM		1			118504	09/09/25 03:55	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	118108	09/02/25 16:56	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	118424	09/09/25 03:55	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	118101	09/02/25 16:27	SA	EET MID
Soluble	Analysis	300.0		1			118187	09/04/25 13:51	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
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8742-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8742-1	SW-1	Solid	08/29/25 10:50	09/02/25 08:05	0-2
890-8742-2	SW-2	Solid	08/28/25 11:00	09/02/25 08:05	0-2
890-8742-3	SW-3	Solid	08/28/25 11:05	09/02/25 08:05	0-2
890-8742-4	SW-4	Solid	08/28/25 11:10	09/02/25 08:05	0-2
890-8742-5	SW-5	Solid	08/28/25 11:15	09/02/25 08:05	0-4

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



Environment Testing
Xenco

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3343
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Chain of Custody



890-8742 Chain of Custody

of _____

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

[illegible]

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 SiO₂ Na Sr Ti Sn U V Zn

Hg: 1631 / 245.1 / 7470 / 7471

Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$3 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated with Eurofins Xenco.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		8:05 9/22			

DA-104 (Rev. 10-20-2006) Rev. 10/20/06

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8742-1

SDG Number: Lea County, NM

Login Number: 8742

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: 890-8742-1

SDG Number: Lea County, NM

Login Number: 8742

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/03/25 08:17 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	



Environment Testing

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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 9/22/2025 9:48:13 AM

JOB DESCRIPTION

Hognose Viper Federal Com #602H
Lea County, NM

JOB NUMBER

890-8807-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



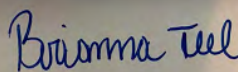
Eurofins Carlsbad

Job Notes

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

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

Authorization



Generated
9/22/2025 9:48:13 AM

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

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Laboratory Job ID: 890-8807-1
SDG: Lea County, NM

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Definitions/Glossary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	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: Hognose Viper Federal Com #602H

Job ID: 890-8807-1

Job ID: 890-8807-1

Eurofins Carlsbad

Job Narrative 890-8807-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt

The samples were received on 9/16/2025 2:09 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 3.4°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: CS - 1 (890-8807-1), CS - 2 (890-8807-2), CS - 3 (890-8807-3), CS - 4 (890-8807-4), CS - 12 (890-8807-5), CS - 18 (890-8807-6), CS - 20 (890-8807-7), CS - 30 (890-8807-8), CS - 33 (890-8807-9) and CS - 44 (890-8807-10).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-119107 and 880-119111 and analytical batch 880-119098 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: CS - 18 (890-8807-6) and (880-62684-A-1-D). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-119098 recovered under the lower control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported.

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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-119089 and analytical batch 880-119360 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

HPLC/IC

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-119100 and analytical batch 880-119252 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.

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 1

Lab Sample ID: 890-8807-1

Date Collected: 09/16/25 08:00

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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		09/17/25 09:06	09/18/25 06:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:06	09/18/25 06:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:06	09/18/25 06:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:06	09/18/25 06:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:06	09/18/25 06:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:06	09/18/25 06:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/17/25 09:06	09/18/25 06:07	1
1,4-Difluorobenzene (Surr)	101		70 - 130	09/17/25 09:06	09/18/25 06:07	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			09/18/25 06:07	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			09/20/25 02:56	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	<49.8	U	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:56	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:05	09/20/25 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130	09/17/25 08:05	09/20/25 02:56	1
o-Terphenyl	105		70 - 130	09/17/25 08:05	09/20/25 02:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	110		10.0		mg/Kg			09/18/25 19:47	1

Client Sample ID: CS - 2

Lab Sample ID: 890-8807-2

Date Collected: 09/16/25 08:05

Matrix: Solid

Date Received: 09/16/25 14:09

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		09/17/25 09:06	09/18/25 06:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 06:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 06:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:06	09/18/25 06:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 06:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:06	09/18/25 06:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/17/25 09:06	09/18/25 06:27	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 2

Lab Sample ID: 890-8807-2

Date Collected: 09/16/25 08:05

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	09/17/25 09:06	09/18/25 06:27	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			09/18/25 06:27	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			09/20/25 03:11	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		09/17/25 08:05	09/20/25 03:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 03:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 03:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130				09/17/25 08:05	09/20/25 03:11	1
o-Terphenyl	104		70 - 130				09/17/25 08:05	09/20/25 03:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	100		10.1		mg/Kg			09/18/25 19:52	1

Client Sample ID: CS - 3

Lab Sample ID: 890-8807-3

Date Collected: 09/16/25 08:10

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:06	09/18/25 06:48	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:06	09/18/25 06:48	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:06	09/18/25 06:48	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		09/17/25 09:06	09/18/25 06:48	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/17/25 09:06	09/18/25 06:48	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		09/17/25 09:06	09/18/25 06:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	09/17/25 09:06	09/18/25 06:48	1
1,4-Difluorobenzene (Surr)	107		70 - 130	09/17/25 09:06	09/18/25 06:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			09/18/25 06:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			09/20/25 03:27	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 3

Lab Sample ID: 890-8807-3

Date Collected: 09/16/25 08:10

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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	<50.3	U	50.3		mg/Kg		09/17/25 08:05	09/20/25 03:27	1
Diesel Range Organics (Over C10-C28)	<50.3	U *1	50.3		mg/Kg		09/17/25 08:05	09/20/25 03:27	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		09/17/25 08:05	09/20/25 03:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/17/25 08:05	09/20/25 03:27	1
o-Terphenyl	101		70 - 130				09/17/25 08:05	09/20/25 03:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		9.94		mg/Kg			09/18/25 19:58	1

Client Sample ID: CS - 4

Lab Sample ID: 890-8807-4

Date Collected: 09/16/25 08:15

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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		09/17/25 09:06	09/18/25 07:09	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:06	09/18/25 07:09	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:06	09/18/25 07:09	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/17/25 09:06	09/18/25 07:09	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:06	09/18/25 07:09	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/17/25 09:06	09/18/25 07:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				09/17/25 09:06	09/18/25 07:09	1
1,4-Difluorobenzene (Surr)	106		70 - 130				09/17/25 09:06	09/18/25 07:09	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			09/18/25 07:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			09/20/25 03:41	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	<49.6	U	49.6		mg/Kg		09/17/25 08:05	09/20/25 03:41	1
Diesel Range Organics (Over C10-C28)	<49.6	U *1	49.6		mg/Kg		09/17/25 08:05	09/20/25 03:41	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/17/25 08:05	09/20/25 03:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/17/25 08:05	09/20/25 03:41	1
o-Terphenyl	106		70 - 130				09/17/25 08:05	09/20/25 03:41	1

Eurofins Carlsbad

Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 4

Lab Sample ID: 890-8807-4

Date Collected: 09/16/25 08:15

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.6		9.92		mg/Kg			09/18/25 20:04	1

Client Sample ID: CS - 12

Lab Sample ID: 890-8807-5

Date Collected: 09/16/25 08:20

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 2

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		09/17/25 09:07	09/18/25 06:56	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:07	09/18/25 06:56	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:07	09/18/25 06:56	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		09/17/25 09:07	09/18/25 06:56	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/17/25 09:07	09/18/25 06:56	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		09/17/25 09:07	09/18/25 06:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130				09/17/25 09:07	09/18/25 06:56	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/17/25 09:07	09/18/25 06:56	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			09/18/25 06:56	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			09/20/25 03:57	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		09/17/25 08:05	09/20/25 03:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 03:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 03:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/17/25 08:05	09/20/25 03:57	1
o-Terphenyl	101		70 - 130				09/17/25 08:05	09/20/25 03:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	94.9	F1	9.96		mg/Kg			09/18/25 20:09	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 18

Lab Sample ID: 890-8807-6

Date Collected: 09/16/25 08:25

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 3

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		09/17/25 09:07	09/18/25 07:16	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:07	09/18/25 07:16	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:07	09/18/25 07:16	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/17/25 09:07	09/18/25 07:16	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/17/25 09:07	09/18/25 07:16	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/17/25 09:07	09/18/25 07:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130	09/17/25 09:07	09/18/25 07:16	1
1,4-Difluorobenzene (Surr)	117		70 - 130	09/17/25 09:07	09/18/25 07:16	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			09/18/25 07:16	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			09/20/25 04:12	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		09/17/25 08:05	09/20/25 04:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/17/25 08:05	09/20/25 04:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/17/25 08:05	09/20/25 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	09/17/25 08:05	09/20/25 04:12	1
o-Terphenyl	100		70 - 130	09/17/25 08:05	09/20/25 04:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		9.98		mg/Kg			09/18/25 20:26	1

Client Sample ID: CS - 20

Lab Sample ID: 890-8807-7

Date Collected: 09/16/25 08:30

Matrix: Solid

Date Received: 09/16/25 14:09

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		09/17/25 09:07	09/18/25 07:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/18/25 07:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/18/25 07:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:07	09/18/25 07:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/18/25 07:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:07	09/18/25 07:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	09/17/25 09:07	09/18/25 07:37	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 20

Lab Sample ID: 890-8807-7

Date Collected: 09/16/25 08:30

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	09/17/25 09:07	09/18/25 07:37	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			09/18/25 07:37	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			09/20/25 04:42	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		09/17/25 08:05	09/20/25 04:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 04:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 04:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/17/25 08:05	09/20/25 04:42	1
o-Terphenyl	99		70 - 130				09/17/25 08:05	09/20/25 04:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	109		10.1		mg/Kg			09/18/25 20:32	1

Client Sample ID: CS - 30

Lab Sample ID: 890-8807-8

Date Collected: 09/16/25 08:35

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 6

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		09/17/25 09:07	09/18/25 07:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:07	09/18/25 07:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:07	09/18/25 07:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/17/25 09:07	09/18/25 07:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:07	09/18/25 07:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/17/25 09:07	09/18/25 07:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	09/17/25 09:07	09/18/25 07:57	1
1,4-Difluorobenzene (Surr)	110		70 - 130	09/17/25 09:07	09/18/25 07:57	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/18/25 07:57	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			09/20/25 04:57	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 30

Lab Sample ID: 890-8807-8

Date Collected: 09/16/25 08:35

Matrix: Solid

Date Received: 09/16/25 14:09

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		09/17/25 08:05	09/20/25 04:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		09/17/25 08:05	09/20/25 04:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/17/25 08:05	09/20/25 04:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/17/25 08:05	09/20/25 04:57	1
o-Terphenyl	101		70 - 130				09/17/25 08:05	09/20/25 04:57	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.8		10.0		mg/Kg			09/18/25 20:49	1

Client Sample ID: CS - 33

Lab Sample ID: 890-8807-9

Date Collected: 09/16/25 08:40

Matrix: Solid

Date Received: 09/16/25 14:09

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		09/17/25 09:06	09/18/25 05:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 05:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 05:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/17/25 09:06	09/18/25 05:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/18/25 05:26	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/17/25 09:06	09/18/25 05:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				09/17/25 09:06	09/18/25 05:26	1
1,4-Difluorobenzene (Surr)	108		70 - 130				09/17/25 09:06	09/18/25 05:26	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			09/18/25 05:26	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			09/20/25 05:12	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		09/17/25 08:05	09/20/25 05:12	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		09/17/25 08:05	09/20/25 05:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:05	09/20/25 05:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/17/25 08:05	09/20/25 05:12	1
o-Terphenyl	108		70 - 130				09/17/25 08:05	09/20/25 05:12	1

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Client Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 33

Lab Sample ID: 890-8807-9

Date Collected: 09/16/25 08:40

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 6

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	224		10.1		mg/Kg			09/18/25 20:54	1

Client Sample ID: CS - 44

Lab Sample ID: 890-8807-10

Date Collected: 09/16/25 08:45

Matrix: Solid

Date Received: 09/16/25 14:09

Sample Depth: 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		09/17/25 09:06	09/18/25 05:46	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:06	09/18/25 05:46	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:06	09/18/25 05:46	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/17/25 09:06	09/18/25 05:46	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/17/25 09:06	09/18/25 05:46	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/17/25 09:06	09/18/25 05:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130				09/17/25 09:06	09/18/25 05:46	1
1,4-Difluorobenzene (Surr)	105		70 - 130				09/17/25 09:06	09/18/25 05:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			09/18/25 05:46	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			09/20/25 05:27	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		09/17/25 08:05	09/20/25 05:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		09/17/25 08:05	09/20/25 05:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/17/25 08:05	09/20/25 05:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		70 - 130				09/17/25 08:05	09/20/25 05:27	1
o-Terphenyl	106		70 - 130				09/17/25 08:05	09/20/25 05:27	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		9.94		mg/Kg			09/18/25 21:00	1

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Surrogate Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea 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	DFBZ1				
		(70-130)	(70-130)				
890-8807-1	CS - 1	106	101				
890-8807-2	CS - 2	103	100				
890-8807-3	CS - 3	105	107				
890-8807-4	CS - 4	107	106				
890-8807-5	CS - 12	111	103				
890-8807-6	CS - 18	134 S1+	117				
890-8807-7	CS - 20	121	104				
890-8807-8	CS - 30	129	110				
890-8807-9	CS - 33	106	108				
890-8807-10	CS - 44	103	105				
LCS 880-119110/1-A	Lab Control Sample	103	104				
LCS 880-119111/1-A	Lab Control Sample	104	92				
LCSD 880-119110/2-A	Lab Control Sample Dup	110	101				
LCSD 880-119111/2-A	Lab Control Sample Dup	101	101				
MB 880-119107/5-A	Method Blank	147 S1+	84				
MB 880-119108/5-A	Method Blank	88	112				
MB 880-119110/5-A	Method Blank	91	115				
MB 880-119111/5-A	Method Blank	144 S1+	80				
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	OTPH1				
		(70-130)	(70-130)				
890-8807-1	CS - 1	104	105				
890-8807-2	CS - 2	103	104				
890-8807-3	CS - 3	102	101				
890-8807-4	CS - 4	106	106				
890-8807-5	CS - 12	102	101				
890-8807-6	CS - 18	101	100				
890-8807-7	CS - 20	102	99				
890-8807-8	CS - 30	100	101				
890-8807-9	CS - 33	106	108				
890-8807-10	CS - 44	106	106				
LCS 880-119089/2-A	Lab Control Sample	113	103				
LCSD 880-119089/3-A	Lab Control Sample Dup	108	121				
MB 880-119089/1-A	Method Blank	108	112				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-119107/5-A

Matrix: Solid

Analysis Batch: 119098

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119107

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 08:56	09/17/25 11:52	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 08:56	09/17/25 11:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	147	S1+	70 - 130	09/17/25 08:56	09/17/25 11:52	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09/17/25 08:56	09/17/25 11:52	1

Lab Sample ID: MB 880-119108/5-A

Matrix: Solid

Analysis Batch: 119097

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:04	09/17/25 12:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 09:04	09/17/25 12:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	09/17/25 09:04	09/17/25 12:44	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/17/25 09:04	09/17/25 12:44	1

Lab Sample ID: MB 880-119110/5-A

Matrix: Solid

Analysis Batch: 119097

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119110

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/17/25 23:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/17/25 23:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/17/25 23:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 09:06	09/17/25 23:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:06	09/17/25 23:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 09:06	09/17/25 23:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	09/17/25 09:06	09/17/25 23:44	1
1,4-Difluorobenzene (Surr)	115		70 - 130	09/17/25 09:06	09/17/25 23:44	1

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-119110/1-A

Matrix: Solid

Analysis Batch: 119097

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119110

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1151		mg/Kg		115	70 - 130
Toluene	0.100	0.1094		mg/Kg		109	70 - 130
Ethylbenzene	0.100	0.1071		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2121		mg/Kg		106	70 - 130
o-Xylene	0.100	0.1082		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-119110/2-A

Matrix: Solid

Analysis Batch: 119097

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119110

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1091		mg/Kg		109	70 - 130	5	35
Toluene	0.100	0.1037		mg/Kg		104	70 - 130	5	35
Ethylbenzene	0.100	0.1039		mg/Kg		104	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2057		mg/Kg		103	70 - 130	3	35
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-119111/5-A

Matrix: Solid

Analysis Batch: 119098

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119111

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/17/25 23:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/17/25 23:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/17/25 23:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/17/25 09:07	09/17/25 23:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/17/25 09:07	09/17/25 23:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/17/25 09:07	09/17/25 23:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130	09/17/25 09:07	09/17/25 23:30	1
1,4-Difluorobenzene (Surr)	80		70 - 130	09/17/25 09:07	09/17/25 23:30	1

Lab Sample ID: LCS 880-119111/1-A

Matrix: Solid

Analysis Batch: 119098

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08761		mg/Kg		88	70 - 130
Toluene	0.100	0.08627		mg/Kg		86	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-119111/1-A

Matrix: Solid

Analysis Batch: 119098

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119111

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.100	0.09418		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1606		mg/Kg		80	70 - 130
o-Xylene	0.100	0.07581		mg/Kg		76	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: LCSD 880-119111/2-A

Matrix: Solid

Analysis Batch: 119098

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119111

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08820		mg/Kg		88	70 - 130	1	35
Toluene	0.100	0.08489		mg/Kg		85	70 - 130	2	35
Ethylbenzene	0.100	0.09506		mg/Kg		95	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130	1	35
o-Xylene	0.100	0.07752		mg/Kg		78	70 - 130	2	35

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

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

Lab Sample ID: MB 880-119089/1-A

Matrix: Solid

Analysis Batch: 119360

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119089

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		09/17/25 08:04	09/20/25 00:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/17/25 08:04	09/20/25 00:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/17/25 08:04	09/20/25 00:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/17/25 08:04	09/20/25 00:37	1
o-Terphenyl	112		70 - 130	09/17/25 08:04	09/20/25 00:37	1

Lab Sample ID: LCS 880-119089/2-A

Matrix: Solid

Analysis Batch: 119360

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119089

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1022		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	1000	937.5		mg/Kg		94	70 - 130

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

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

Lab Sample ID: LCS 880-119089/2-A

Matrix: Solid

Analysis Batch: 119360

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119089

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-119089/3-A

Matrix: Solid

Analysis Batch: 119360

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119089

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	1139		mg/Kg		114	70 - 130	11	20	
Diesel Range Organics (Over C10-C28)			1000	1169	*1	mg/Kg		117	70 - 130	22	20	
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	108		70 - 130									
o-Terphenyl	121		70 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119100/1-A

Matrix: Solid

Analysis Batch: 119252

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	<10.0	U	10.0		mg/Kg			09/18/25 18:33	1		

Lab Sample ID: LCS 880-119100/2-A

Matrix: Solid

Analysis Batch: 119252

Client Sample ID: Lab Control Sample

Prep Type: Soluble

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250	256.5		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-119100/3-A

Matrix: Solid

Analysis Batch: 119252

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride			250	256.8		mg/Kg		103	90 - 110	0	20	

Lab Sample ID: 890-8807-5 MS

Matrix: Solid

Analysis Batch: 119252

Client Sample ID: CS - 12

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	94.9	F1	249	302.6	F1	mg/Kg		83	90 - 110		

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QC Sample Results

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-8807-5 MSD					Client Sample ID: CS - 12							
Matrix: Solid					Prep Type: Soluble							
Analysis Batch: 119252												
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Chloride	94.9	F1	249	302.2	F1	mg/Kg		83	90 - 110	0	20	

QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 119097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	8021B	119110
890-8807-2	CS - 2	Total/NA	Solid	8021B	119110
890-8807-3	CS - 3	Total/NA	Solid	8021B	119110
890-8807-4	CS - 4	Total/NA	Solid	8021B	119110
890-8807-9	CS - 33	Total/NA	Solid	8021B	119110
890-8807-10	CS - 44	Total/NA	Solid	8021B	119110
MB 880-119108/5-A	Method Blank	Total/NA	Solid	8021B	119108
MB 880-119110/5-A	Method Blank	Total/NA	Solid	8021B	119110
LCS 880-119110/1-A	Lab Control Sample	Total/NA	Solid	8021B	119110
LCSD 880-119110/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119110

Analysis Batch: 119098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-5	CS - 12	Total/NA	Solid	8021B	119111
890-8807-6	CS - 18	Total/NA	Solid	8021B	119111
890-8807-7	CS - 20	Total/NA	Solid	8021B	119111
890-8807-8	CS - 30	Total/NA	Solid	8021B	119111
MB 880-119107/5-A	Method Blank	Total/NA	Solid	8021B	119107
MB 880-119111/5-A	Method Blank	Total/NA	Solid	8021B	119111
LCS 880-119111/1-A	Lab Control Sample	Total/NA	Solid	8021B	119111
LCSD 880-119111/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119111

Prep Batch: 119107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-119107/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 119108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-119108/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 119110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	5035	
890-8807-2	CS - 2	Total/NA	Solid	5035	
890-8807-3	CS - 3	Total/NA	Solid	5035	
890-8807-4	CS - 4	Total/NA	Solid	5035	
890-8807-9	CS - 33	Total/NA	Solid	5035	
890-8807-10	CS - 44	Total/NA	Solid	5035	
MB 880-119110/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119110/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119110/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 119111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-5	CS - 12	Total/NA	Solid	5035	
890-8807-6	CS - 18	Total/NA	Solid	5035	
890-8807-7	CS - 20	Total/NA	Solid	5035	
890-8807-8	CS - 30	Total/NA	Solid	5035	
MB 880-119111/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119111/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119111/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

GC VOA

Analysis Batch: 119231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	Total BTEX	
890-8807-2	CS - 2	Total/NA	Solid	Total BTEX	
890-8807-3	CS - 3	Total/NA	Solid	Total BTEX	
890-8807-4	CS - 4	Total/NA	Solid	Total BTEX	
890-8807-5	CS - 12	Total/NA	Solid	Total BTEX	
890-8807-6	CS - 18	Total/NA	Solid	Total BTEX	
890-8807-7	CS - 20	Total/NA	Solid	Total BTEX	
890-8807-8	CS - 30	Total/NA	Solid	Total BTEX	
890-8807-9	CS - 33	Total/NA	Solid	Total BTEX	
890-8807-10	CS - 44	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 119089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	8015NM Prep	
890-8807-2	CS - 2	Total/NA	Solid	8015NM Prep	
890-8807-3	CS - 3	Total/NA	Solid	8015NM Prep	
890-8807-4	CS - 4	Total/NA	Solid	8015NM Prep	
890-8807-5	CS - 12	Total/NA	Solid	8015NM Prep	
890-8807-6	CS - 18	Total/NA	Solid	8015NM Prep	
890-8807-7	CS - 20	Total/NA	Solid	8015NM Prep	
890-8807-8	CS - 30	Total/NA	Solid	8015NM Prep	
890-8807-9	CS - 33	Total/NA	Solid	8015NM Prep	
890-8807-10	CS - 44	Total/NA	Solid	8015NM Prep	
MB 880-119089/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119089/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 119360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	8015B NM	119089
890-8807-2	CS - 2	Total/NA	Solid	8015B NM	119089
890-8807-3	CS - 3	Total/NA	Solid	8015B NM	119089
890-8807-4	CS - 4	Total/NA	Solid	8015B NM	119089
890-8807-5	CS - 12	Total/NA	Solid	8015B NM	119089
890-8807-6	CS - 18	Total/NA	Solid	8015B NM	119089
890-8807-7	CS - 20	Total/NA	Solid	8015B NM	119089
890-8807-8	CS - 30	Total/NA	Solid	8015B NM	119089
890-8807-9	CS - 33	Total/NA	Solid	8015B NM	119089
890-8807-10	CS - 44	Total/NA	Solid	8015B NM	119089
MB 880-119089/1-A	Method Blank	Total/NA	Solid	8015B NM	119089
LCS 880-119089/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119089
LCSD 880-119089/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119089

Analysis Batch: 119410

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Total/NA	Solid	8015 NM	
890-8807-2	CS - 2	Total/NA	Solid	8015 NM	
890-8807-3	CS - 3	Total/NA	Solid	8015 NM	
890-8807-4	CS - 4	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

GC Semi VOA (Continued)

Analysis Batch: 119410 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-5	CS - 12	Total/NA	Solid	8015 NM	
890-8807-6	CS - 18	Total/NA	Solid	8015 NM	
890-8807-7	CS - 20	Total/NA	Solid	8015 NM	
890-8807-8	CS - 30	Total/NA	Solid	8015 NM	
890-8807-9	CS - 33	Total/NA	Solid	8015 NM	
890-8807-10	CS - 44	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 119100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Soluble	Solid	DI Leach	
890-8807-2	CS - 2	Soluble	Solid	DI Leach	
890-8807-3	CS - 3	Soluble	Solid	DI Leach	
890-8807-4	CS - 4	Soluble	Solid	DI Leach	
890-8807-5	CS - 12	Soluble	Solid	DI Leach	
890-8807-6	CS - 18	Soluble	Solid	DI Leach	
890-8807-7	CS - 20	Soluble	Solid	DI Leach	
890-8807-8	CS - 30	Soluble	Solid	DI Leach	
890-8807-9	CS - 33	Soluble	Solid	DI Leach	
890-8807-10	CS - 44	Soluble	Solid	DI Leach	
MB 880-119100/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119100/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119100/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-8807-5 MS	CS - 12	Soluble	Solid	DI Leach	
890-8807-5 MSD	CS - 12	Soluble	Solid	DI Leach	

Analysis Batch: 119252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8807-1	CS - 1	Soluble	Solid	300.0	119100
890-8807-2	CS - 2	Soluble	Solid	300.0	119100
890-8807-3	CS - 3	Soluble	Solid	300.0	119100
890-8807-4	CS - 4	Soluble	Solid	300.0	119100
890-8807-5	CS - 12	Soluble	Solid	300.0	119100
890-8807-6	CS - 18	Soluble	Solid	300.0	119100
890-8807-7	CS - 20	Soluble	Solid	300.0	119100
890-8807-8	CS - 30	Soluble	Solid	300.0	119100
890-8807-9	CS - 33	Soluble	Solid	300.0	119100
890-8807-10	CS - 44	Soluble	Solid	300.0	119100
MB 880-119100/1-A	Method Blank	Soluble	Solid	300.0	119100
LCS 880-119100/2-A	Lab Control Sample	Soluble	Solid	300.0	119100
LCSD 880-119100/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119100
890-8807-5 MS	CS - 12	Soluble	Solid	300.0	119100
890-8807-5 MSD	CS - 12	Soluble	Solid	300.0	119100

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Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 1**Lab Sample ID: 890-8807-1****Date Collected: 09/16/25 08:00****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 06:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 06:07	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 02:56	SA	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 02:56	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 19:47	CS	EET MID

Client Sample ID: CS - 2**Lab Sample ID: 890-8807-2****Date Collected: 09/16/25 08:05****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 06:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 06:27	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 03:11	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 03:11	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 19:52	CS	EET MID

Client Sample ID: CS - 3**Lab Sample ID: 890-8807-3****Date Collected: 09/16/25 08:10****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 06:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 06:48	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 03:27	SA	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 03:27	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 19:58	CS	EET MID

Client Sample ID: CS - 4**Lab Sample ID: 890-8807-4****Date Collected: 09/16/25 08:15****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 07:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 07:09	SA	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 4**Lab Sample ID: 890-8807-4****Date Collected: 09/16/25 08:15****Matrix: Solid****Date Received: 09/16/25 14:09**

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			119410	09/20/25 03:41	SA	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 03:41	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:04	CS	EET MID

Client Sample ID: CS - 12**Lab Sample ID: 890-8807-5****Date Collected: 09/16/25 08:20****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119111	09/17/25 09:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/18/25 06:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 06:56	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 03:57	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 03:57	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:09	CS	EET MID

Client Sample ID: CS - 18**Lab Sample ID: 890-8807-6****Date Collected: 09/16/25 08:25****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119111	09/17/25 09:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/18/25 07:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 07:16	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 04:12	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 04:12	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:26	CS	EET MID

Client Sample ID: CS - 20**Lab Sample ID: 890-8807-7****Date Collected: 09/16/25 08:30****Matrix: Solid****Date Received: 09/16/25 14:09**

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	119111	09/17/25 09:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/18/25 07:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 07:37	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 04:42	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 04:42	TKC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Client Sample ID: CS - 20

Lab Sample ID: 890-8807-7

Date Collected: 09/16/25 08:30

Matrix: Solid

Date Received: 09/16/25 14:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.96 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:32	CS	EET MID

Client Sample ID: CS - 30

Lab Sample ID: 890-8807-8

Date Collected: 09/16/25 08:35

Matrix: Solid

Date Received: 09/16/25 14:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	119111	09/17/25 09:07	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119098	09/18/25 07:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 07:57	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 04:57	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 04:57	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:49	CS	EET MID

Client Sample ID: CS - 33

Lab Sample ID: 890-8807-9

Date Collected: 09/16/25 08:40

Matrix: Solid

Date Received: 09/16/25 14:09

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	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 05:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 05:26	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 05:12	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 05:12	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 20:54	CS	EET MID

Client Sample ID: CS - 44

Lab Sample ID: 890-8807-10

Date Collected: 09/16/25 08:45

Matrix: Solid

Date Received: 09/16/25 14:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	119110	09/17/25 09:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119097	09/18/25 05:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119231	09/18/25 05:46	SA	EET MID
Total/NA	Analysis	8015 NM		1			119410	09/20/25 05:27	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	119089	09/17/25 08:05	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119360	09/20/25 05:27	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119100	09/17/25 08:31	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119252	09/18/25 21:00	CS	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

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

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Accreditation/Certification Summary

Client: Earth Systems Response and Restoration
Project/Site: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea 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	06-30-26
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: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea 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: Hognose Viper Federal Com #602H

Job ID: 890-8807-1
SDG: Lea County, NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8807-1	CS - 1	Solid	09/16/25 08:00	09/16/25 14:09	3
890-8807-2	CS - 2	Solid	09/16/25 08:05	09/16/25 14:09	3
890-8807-3	CS - 3	Solid	09/16/25 08:10	09/16/25 14:09	3
890-8807-4	CS - 4	Solid	09/16/25 08:15	09/16/25 14:09	3
890-8807-5	CS - 12	Solid	09/16/25 08:20	09/16/25 14:09	2
890-8807-6	CS - 18	Solid	09/16/25 08:25	09/16/25 14:09	3
890-8807-7	CS - 20	Solid	09/16/25 08:30	09/16/25 14:09	4
890-8807-8	CS - 30	Solid	09/16/25 08:35	09/16/25 14:09	6
890-8807-9	CS - 33	Solid	09/16/25 08:40	09/16/25 14:09	6
890-8807-10	CS - 44	Solid	09/16/25 08:45	09/16/25 14:09	3





Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 2

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

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:	Hognose Viper Federal Com #602H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	2783	Due Date:			
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Santiago Giron				
CC/WO #:	1094080601				

SAMPLE RECEIPT	Temp Blank: ☒ Yes ☒ No	Wet Ice: ☒ Yes ☒ No	Parameters		
Samples Received Intact:	☒ Yes ☒ No	Thermometer ID:			
Cooler Custody Seals:	☒ Yes ☒ No	Correction Factor:			
Sample Custody Seals:	☒ Yes ☒ No	Temperature Reading:			
Total Containers:		Corrected Temperature:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth (feet)	Grav/Comp	# of Cont	TPH -NM	Chloride-NM	BTEX-NM	Hold	24 Hr Rush	Sample Comments
CS-1	S	9.16.25	8:00	3	Comp	1	X	X	X			
CS-2	S	9.16.25	8:05	3	Comp	1	X	X	X			
CS-3	S	9.16.25	8:10	3	Comp	1	X	X	X			
CS-4	S	9.16.25	8:15	3	Comp	1	X	X	X			
CS-12	S	9.16.25	8:20	2	Comp	1	X	X	X			
CS-18	S	9.16.25	8:25	3	Comp	1	X	X	X			
CS-20	S	9.16.25	8:30	4	Comp	1	X	X	X			
CS-30	S	9.16.25	8:35	6	Comp	1	X	X	X			
CS-33	S	9.16.25	8:40	6	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	Ti	Sn	U	V	Zn
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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 \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		9/16/14 09			



Environment Testing
Xenco

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) 565-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 986-3199

Chain of Custody

Work Order No:

www.xenco.com Page 2 of 2

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

Work Order Comments										
Program:	UST/PST	☐ PRP	☐ Brownfields	☐ RRC	☐ Superfund	☐				
State of Project:										
Reporting:	Level I	☐	Level III	☐	PST/UST	☐	TRRP	☐	Level IV	☐
Deliverables:	EDD	☐	ADAPT	☐	Other:					

[illegible]

Total 200.7 / 6010 200.8 / 6020:

8RCRA 13PPM Texas 1 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

Hg: 1631 / 245.1 / 7470 / 7471

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 with Eurofins Xenco. The 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 (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 with Eurofins Xenco.)

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9/16/10	<i>[Signature]</i>		

Eurofins Carlsbad

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

Chain of Custody Record



eurofins

Environment Testing

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:		N/A	Teel, Brianna	N/A	890-5880.1
Shipping/Receiving		Phone:	E-Mail:	State of Origin:	Page:
		N/A	Brianna.Teel@eurofins.com	New Mexico	Page 1 of 2
Company:		Accreditations Required (See note):			
Eurofins Environment Testing South Cent		NELAP - Texas			
Address:		Due Date Requested:		Preservation Codes:	
1211 W. Florida Ave.		9/22/2025		890-8807-1	
City:		TAT Requested (days):			
Midland		N/A			
State, Zip:					
TX, 79701					
Phone:		PO #:			
432-704-5440(Tel)		N/A			
Email:		WO #:			
N/A		N/A			
Project Name		Project #:			
HOGNOSE VIPER FEDERAL COM #602H		88001228			
Site:		SSOW#:			
N/A		N/A			

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, etc.)	Analysis Requested					Total Number of Containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total_BTEX_GCV	8021B/5035FP_CalcBTEX	8015MOD_Calc		
CS - 1 (890-8807-1)	9/16/25	08:00 Mountain	G	Solid	X	X	X	X	X	1	
CS - 2 (890-8807-2)	9/16/25	08:05 Mountain	G	Solid	X	X	X	X	X	1	
CS - 3 (890-8807-3)	9/16/25	08:10 Mountain	G	Solid	X	X	X	X	X	1	
CS - 4 (890-8807-4)	9/16/25	08:15 Mountain	G	Solid	X	X	X	X	X	1	
CS - 12 (890-8807-5)	9/16/25	08:20 Mountain	G	Solid	X	X	X	X	X	1	
CS - 18 (890-8807-6)	9/16/25	08:25 Mountain	G	Solid	X	X	X	X	X	1	
CS - 20 (890-8807-7)	9/16/25	08:30 Mountain	G	Solid	X	X	X	X	X	1	
CS - 30 (890-8807-8)	9/16/25	08:35 Mountain	G	Solid	X	X	X	X	X	1	
CS - 33 (890-8807-9)	9/16/25	08:40 Mountain	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/test/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		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed	Deliverable Requested: I, II, III, IV, Other (specify)	Return To Client	Disposal By Lab
Primary Deliverable Rank: 2		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Time:	
Relinquished by: <i>Sum</i>		Date: 9/16/25 16:30	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact:		Cooler Temperature(s) °C and Other Remarks:	
Δ Yes Δ No		1.601.5 -1 <i>DK</i>	

Login Sample Receipt Checklist

Client: Earth Systems Response and Restoration

Job Number: 890-8807-1

SDG Number: Lea County, NM

Login Number: 8807

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: 890-8807-1

SDG Number: Lea County, NM

Login Number: 8807

List Number: 2

Creator: Laing, Edmundo

List Source: Eurofins Midland

List Creation: 09/17/25 07:32 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

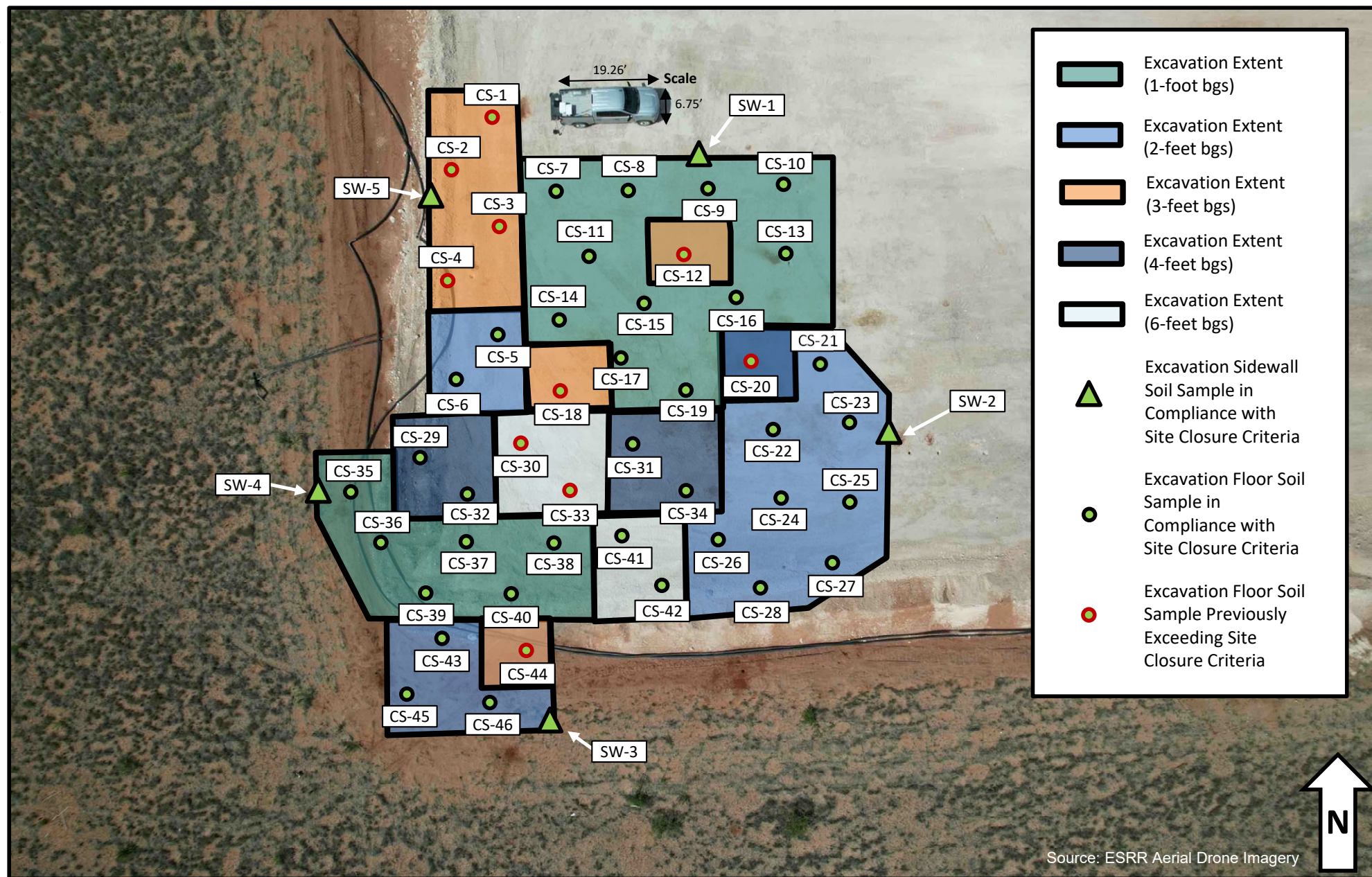


Figure 3A – Excavation Soil Sample Locations

Devon Energy Permian – Hognose Viper Federal Com #602H
GPS: 32.29595, -103.547701
Lea County, New Mexico

From: [Gilbert Moreno](#)
To: [Wells, Shelly, EMNRD](#)
Subject: Re: [EXTERNAL] Re: nAPP2500721668 HOGNOSE VIPER FEDERAL COM
Date: Monday, November 10, 2025 2:17:15 PM
Attachments: [image001.png](#)
[Outlook-jgg4tk4m.png](#)
[Outlook-p5t2zoj0.png](#)
[nAPP2500721668 Figure 3A-revised.pdf](#)

Hi Shelly,

See attached revised Figure 3A.

Let me know if this works.

Gilbert Moreno

Carlsbad Operations Manager- Project Geologist
O: (575) 323-9034 C: (832) 541-7719
gmoreno@earthsys.net
earthsys.net



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From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, November 10, 2025 1:20 PM
To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Subject: Re: [EXTERNAL] Re: nAPP2500721668 HOGNOSE VIPER FEDERAL COM

Yes ma'am. I'll get it fixed and resent shortly.

Gilbert Moreno

Carlsbad Operations Manager- Project Geologist
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gmoreno@earthsys.net
earthsys.net



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From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Monday, November 10, 2025 1:13 PM
To: Gilbert Moreno <gmoreno@earthsys.net>
Subject: RE: [EXTERNAL] Re: nAPP2500721668 HOGNOSE VIPER FEDERAL COM

Hi Gilbert,

Thanks for getting back so quickly. I guess I was not specific enough when I asked for an updated Figure. I wanted a Figure showing the final depths of the excavations. For instance wasn't CS-30 and CS-33 excavated to 6'? And wasn't CS1-4 excavated to 3'? That is, if I am reading Table I correctly. If you can, please provide a Figure showing the final excavation depths and email to me.

Kind regards,

Shelly

Shelly Wells * Senior Environmental Scientist
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1220 S. St. Francis Drive|Santa Fe, NM 87505
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<http://www.emnrd.state.nm.us/OCD/>

From: Gilbert Moreno <gmoreno@earthsys.net>
Sent: Monday, November 10, 2025 11:52 AM
To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Subject: [EXTERNAL] Re: nAPP2500721668 HOGNOSE VIPER FEDERAL COM

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

Hi Shelly!

Thanks for reaching out.

See attached Figure 3A. Please note the depths listed in the legend are prior to any additional excavation near previously failing samples.

For your question regarding sidewall sampling, we typically include the bottom edge of any sidewall that may be nearby when collecting confirmation samples. For Example, CS-3 would have included the bottom edge of the sidewall for the 1-foot excavation directly east and likewise for CS-5.

Incident nAPP2434144241 is a recent approval with similarity of different excavation depths within a larger excavation extent.

Please let me know if I can be of any further assistance!

Regards,

Gilbert Moreno

Carlsbad Operations Manager- Project Geologist

O: (575) 323-9034 C: (832) 541-7719

gmoreno@earthsys.net

earthsys.net



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From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Monday, November 10, 2025 11:20 AM

To: Gilbert Moreno <gmoreno@earthsys.net>

Subject: nAPP2500721668 HOGNOSE VIPER FEDERAL COM

Hi Gilbert,

I am reviewing the submitted remediation closure report for nAPP2500721668 HOGNOSE VIPER FEDERAL COM and have a few questions for you. Were sidewall samples collected between the varying depths of the excavations? Would it be possible to update the Figure 3 with a map showing the various levels of excavation to make it easier to understand?

I appreciate any assistance you can provide,

Shelly

Shelly Wells * Senior Environmental Scientist
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State of New Mexico
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Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS

Action 514657

QUESTIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2500721668
Incident Name	NAPP2500721668 HOGNOSE VIPER FEDERAL COM #602H @ 30-025-52762
Incident Type	Release Other
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-52762] HOGNOSE VIPER FEDERAL COM #602H

Location of Release Source

Please answer all the questions in this group.

Site Name	HOGNOSE VIPER FEDERAL COM #602H
Date Release Discovered	01/06/2025
Surface Owner	Federal

Incident Details

Please answer all the questions in this group.

Incident Type	Release Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Human Error Tank (Any) Drilling Mud/Fluid Released: 22 BBL Recovered: 18 BBL Lost: 4 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Human error allowed mud tanks to overflow. This allowed the release of approx. 22 bbls oil based drilling mud to pad surface and stormwater basin. Approx 18 bbls recovered.

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QUESTIONS, Page 2

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	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: James Raley Title: EHS Professional Email: jim.raley@dvni.com Date: 10/13/2025
--	---

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QUESTIONS, Page 3

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	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 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	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	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	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
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	3220
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	24000
GRO+DRO (EPA SW-846 Method 8015M)	24000
BTEX (EPA SW-846 Method 8021B or 8260B)	7
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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	08/21/2025
On what date will (or did) the final sampling or liner inspection occur	09/16/2025
On what date will (or was) the remediation complete(d)	10/07/2025
What is the estimated surface area (in square feet) that will be reclaimed	9200
What is the estimated volume (in cubic yards) that will be reclaimed	1160
What is the estimated surface area (in square feet) that will be remediated	9200
What is the estimated volume (in cubic yards) that will be remediated	1160

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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QUESTIONS, Page 4

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
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.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dv.com Date: 10/13/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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Santa Fe, NM 87505

QUESTIONS, Page 5

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	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, Page 6

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	505237
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	09/16/2025
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	1800

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	9200
What was the total volume (cubic yards) remediated	1160
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	9200
What was the total volume (in cubic yards) reclaimed	1160
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: James Raley Title: EHS Professional Email: jim.raley@dmv.com Date: 10/13/2025
--	--

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QUESTIONS, Page 7

Action 514657

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	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

Action 514657

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 514657
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	11/10/2025