Jason Michelson
Operations Lead, Portfolio Operations Central

June 6, 2024

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

APPROVED
By Mike Buchanan at 10:01 am, Jan 14, 2025

Re: Federal 4 Com #001
Incident #nAB189450649
2024 Assessment Activities Work Plan
Eddy County, New Mexico

Dear whom it concerns,

Please find enclosed for your files, copies of the following work plan:

- Federal 4 Com #001 2024 Assessment Activities Work Plan

The submittal was prepared by Arcadis U.S., Inc. (Arcadis) for Chevron Environmental Management Company (CEMC) on behalf of Chevron U.S.A Inc.

Please do not hesitate to call Russell Grant with Arcadis at 432-217-2064 or myself at 832-854-5601, should you have any questions.

Respectfully,

Jason Michelson

Jason Michelson

Encl. Federal 4 Com #001 2024 Assessment Activities Work Plan

C.C. Amy Barnhill, Chevron/MCBU

Review of the 2024 Assessment Activities Work Plan for Federal 4 Com #001: Content is satisfactory is hereby approved with the following condition:
1 As groundwater has been confirmed to be impacted at this site, please collect soil samples at every foot to a depth of 14 feet; depth to groundwater is approximately 14 feet from surface.
2. Install eight (8) soil borings as proposed at locations, with the additional four feet to groundwater.
3 Submit soil samples for BTEX, TPH and chloride analyses.
4. Please submit the work plan results to OCD within sixty (60) days from the receipt of this approval.

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Mr. Jason Michelson
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Date: June 6, 2024
2024 Assessment Activities Work Plan
Federal 4 COM #001
Incident #nAB1819450649
Carlsbad, New Mexico

Dear Mr. Michelson,

At the request of Chevron Environmental Management Company (CEMC) on behalf of Chevron U.S.A. Inc., through its division Chevron North America Exploration and Production Company, Arcadis U.S., Inc. (Arcadis) is providing this work plan (WP) to perform additional soil assessment activities for the Federal 4 COM #001 Site located in Carlsbad, New Mexico (Site). This WP are for tasks anticipated to be completed as part of the 2024 scope of work (SOW) from June 1, 2024, through March 31, 2025. The tasks in this WP include:

- Project Management and Coordination
- Utility Locate
- Delineation Soil Borings
- Annual Reporting

Project Information

The Site is located approximately seven miles northeast of Carlsbad, New Mexico. The Bureau of Land Management legal description is the northeast quarter of the southwest quarter of Section 4, Township 21-South, Range 27-East. The property's surface rights are owned by the Bureau of Land Management (BLM) and Chevron Midcontinent, L.P., holds the oil and gas lease.

The Site is located on the western edge of the Permian Basin, a 75,000-square-mile area in Texas and New Mexico that is populated by numerous oil and gas production wells. In New Mexico, the Permian Basin extends to Roosevelt County to the north, Chaves and Eddy County to the west, and to Texas to the south. Additional Site history and previous investigation summaries are provided in **Attachment 1**.

Scope of Work

Arcadis will perform consulting services for the work tasks described below. Key assumptions that may affect the schedule and costs are noted.

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Task 1 – Project Management and Coordination

This task includes professional labor services for project coordination with CEMC, Chevron Mid-Continent Business Unit (MCBU), the New Mexico Oil Conservation Division (NMOCD), Bureau of Land Management (BLM), and New Mexico Office of the State Engineer (NMOSE). Work will include project planning with the CEMC operations lead, including one meeting with the NMOCD.
In addition, the following activities associated with project controls will also be completed:

- Reviewing and processing of vendor invoices,
- Monthly budget tracking, general project communications, correspondence, and coordination,
- Reviewing and updating the site-specific health and safety plan (HASP).

Task 2 – Utility Locate

Prior to initiating any intrusive work, the presence of subsurface and overhead utilities will be investigated in accordance with Arcadis Utility Location and Clearance Standard (Health and Safety Standard No. ARCHSFS019) and CEMC Ground Disturbance Standard and supplemental Subsurface Line Strike Prevention Guidance, requiring a minimum of three lines of evidence consisting of the following:

- Notify New Mexico 811 a minimum of 48 hours in advance of commencing intrusive activities at the Site. The notification will allow its member utilities to review all proposed soil boring locations at the Site and identify potential subsurface utility conflicts,
- Contract a licensed private utility locating service to complete a geophysical survey of the proposed soil boring locations at the Site. The private utility locating service will utilize ground penetrating radar and electromagnetic equipment, among other utility locating techniques, to identify any subsurface utilities near the proposed soil boring locations. Located utilities will be surveyed using Trimble GeoExplorer 6000 series global positioning system equipment, or equivalent,
- Arcadis will prepare and submit a dig plan to the Chevron MCBU Functional Operations Team for approval,
- Attempt to clear all proposed soil boring locations utilizing air knifing equipment (by drilling subcontractor) to at least 5 feet below ground surface (bgs). In the event clearance is not feasible, the subcontractor will follow variance requirements.

The geophysical survey will require oversight by one Arcadis field staff and is assumed to take one (12-hour/day) to complete.

Task 3 – Delineation Soil Borings

Arcadis proposes conducting further soil investigation activities at the Site which include the advancement of eight (8) shallow soil borings (SB-28, SB-29, SB-30, SB-31, SB-32, SB-33, SB-34, and SB-35) utilizing an air rotary drilling rig as depicted on **Figure 1**. Arcadis assumes that soil investigation activities will take two Arcadis staff a total of three days (12-hour/day) to complete. Arcadis assumes Chevron currently holds an active Oil and Gas Lease for the Site and that the Sundry Notice is valid. Additionally, Arcadis assumes that the MCBU Land Group will complete all requirements to secure an easement agreement with the BLM, prior to Arcadis commencing

fieldwork. Arcadis proposes to use White Drilling to complete the soil boring installations. The drilling company will complete the following tasks, with oversight provided by Arcadis field personnel:

- Notify NM811 a minimum of 48 hours in advance of commencing intrusive activities at the Site. The notification will allow its member utilities to review proposed sample locations at the Site and identify potential subsurface utility conflicts.
- Clear all locations utilizing air knifing equipment to at least 5 feet bgs. In the event clearance to 5 feet bgs is not feasible, Arcadis will follow CEMC's variance process.
- Eight soil borings will be advanced to approximately 10 feet bgs. Groundwater in this area is known to be approximately 14 feet bgs. Arcadis will prepare a Well Plugging Plan of Operations and submit to NMOSE for review and approval if groundwater is encountered. Arcadis assume that NMOSE will not require the submittal of the WR-07 to proceed with soil boring activities or approval of the plugging plan.
- Soil cuttings will be stored in 55-gallon drums, properly labeled as Investigative derived waste (IDW), and stored onsite.
- Abandon the 8 shallow soil borings using hydrated bentonite chips. If groundwater is encountered, the boring will be plug as detailed on the approved Well Plugging Plan of Operations.
- Mobilization and demobilization of the drill rig, a field support truck, an operator, and two drilling helpers.

The 8 shallow soil borings will be logged by an Arcadis geologist according to Unifed Soil Classification System (USCS) guidelines. Arcadis will collect grab soil samples from the advancement of each soil boring at:

- surface
    - 0 to 1 feet bgs
- subsurface
    - 1 to 2 feet bgs,
    - 2 to 3 feet bgs,
    - 3 to 4 feet bgs,
    - 4 to 5 feet bgs,
    - 5 to 6 feet bgs,
    - 6 to 7 feet bgs,
    - 7 to 8 feet bgs,
    - 8 to 9 feet bgs, and
    - 9 to 10 feet bgs

The soil samples will be collected in clean, laboratory-supplied sample containers, labeled, placed on ice, cooled to approximately 4 degrees Celsius, and transported via overnight courier to Pace Labs located in Mt. Juliet, Tennessee, a State of New Mexico-certified laboratory, under chain-of-custody protocol for the following analysis:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B,
- Total petroleum hydrocarbons (TPH) gasoline range organics (GRO), diesel range organics (DRO), and oil range organics (ORO) by USEPA Method 8015M, and

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- Chloride by USEPA Method 300.0

Results of the soil assessment activities will be included in the annual monitoring report (see **Task 4**).

Soil cuttings from drilling activities, will be stored in 55-gallon drums, properly labeled, and stored onsite. The drums will be sampled to determine disposal classification of the waste. The IDW is assumed to be classified as non-hazardous. Arcadis will arrange for a disposal company to transfer the drums to a CEMC-approved waste disposal facility. Arcadis assumes that waste pick-up for transport to an approved disposal facility will require oversite by an Arcadis representative, requiring one 12-hour day.

Task 4 – Annual Assessment Reporting

The results of the soil assessment activities will be summarized in a report to be submitted to the NMOCD. The report will include analytical data, figures showing locations and results, boring logs, and laboratory analytical data sheets. Recommendations for Site closure and/or additional work to move the Site towards closure will be provided in a cover letter and discussed with CEMC. The report will be submitted prior to the end of the first quarter of 2025.

Assumptions

- Mobilization fees estimated based on travel costs to / from Midland, TX,
- No additional field efforts will be requested,
- Field activities will be completed in 12-hour days,
- Assumes one annual report,
- Assumes weather conditions will allow access and field tasks to be completed during the scheduled events.

Project Team

The Arcadis Project Manager will be Russell Grant, Associate Project Manager will be Sheila Hernandez, and Ross Brady will be the Task Manager. Scott Foord will provide program management support.

Contact

Arcadis appreciates the opportunity to provide site support services to CEMC. If you have any questions or comments, please contact either Russell Grant by phone at 432.217.2064 or by e-mail at russell.grant@arcadis.com or Scott Foord by phone at 713.953.4853 or by email at William.foord@arcadis.com.
Sincerely,
Arcadis U.S., Inc.

Federal 4 Com#001 2024
Mr. Michelson
June 6, 2024

Scott Foord
Program Manager

CC. Jason Michelson – CEMC Enclosures:

Tables

1. Historical Soil Analytical Data

Figures

1. 2021 Soil Analytical data and 2024 Proposed Soil Boring Locations

Attachments

1. Additional Site History and Previous Investigation Summaries

Table 1
Historical Soil Investigation Analytical Data
CEMC
Federal 4 Com #001
Eddy County, New Mexico

Boring Location ID	Sample Date	Sample Depth (feet bgs)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH-GRO (mg/Kg)	TPH-DRO (mg/Kg)	TPH-ORO (mg/Kg)	Chloride (mg/Kg)	% Moisture
	NMAC Closure Criteria [a]		10	--	--	--	50	--	100	--	600	--
SB-1	11/7/2018	2 to 3	<0.0583	<0.0302	0.374	0.747	1.12	74.4	**1810**	**224 J**	599	23
	11/7/2018	6 to 7	<0.113	<0.0584	3.39	8.36	11.8	**588**	**3920**	**333 J**	12.9 J	30.7
	11/7/2018	9 to 10	<0.224	<0.116	6.29	23.6	29.9	**903**	**4800**	**453**	25.3 J	22.5
SB-2	11/7/2018	0 to 1	<0.0101	<0.00524	<0.00690	<0.00764	<0.00524	<0.303	<8.69	<8.69	**1660**	13.8
	11/7/2018	4 to 5	<0.0106	<0.00548	<0.00721	<0.00799	<0.00548	<0.317	<10.3	<10.3	586	27.1
	11/7/2018	9 to 10	<0.0116	<0.00598	<0.00787	<0.00872	<0.00598	<0.346	<10.1	<10.1	368	26.1
SB-3	11/7/2018	4 to 5	<0.0136	<0.00705	<0.00928	<0.0103	<0.00705	<0.408	<11.4	<11.4	85	34.3
	11/7/2018	9 to 10	<0.0119	<0.00614	<0.00808	<0.00895	<0.00614	<0.355	<10.2	<10.2	30.8 J	26.4
	11/7/2018	14 to 15	<0.0129	<0.00670	<0.00882	<0.00977	<0.00670	<0.388	<12.2	<12.2	**628**	38.4
SB-4	11/7/2018	2 to 3	<0.0115	<0.00593	<0.00781	<0.00864	<0.00593	<0.343	<9.77	<9.77	300	23.8
	11/7/2018	6 to 7	<0.0103	<0.00535	<0.00704	<0.00780	<0.00535	<0.310	<9.55	<9.55	470 X	21.9
	11/7/2018	9 to 10	<0.0108	<0.00558	<0.00734	<0.00813	<0.00558	<0.323	<9.18	<9.18	469 X	17.9
SB-5	11/7/2018	0 to 1	<0.0105	<0.00544	<0.00716	<0.00793	<0.00544	<0.315	<9.25	<9.25	**1840**	19.4
	11/7/2018	6 to 7	<0.0112	<0.00580	<0.00764	<0.00845	<0.00580	<0.336	10.5 J	<9.59	**2710**	21.5
	11/7/2018	9 to 10	<0.0111	<0.00574	<0.00755	<0.00836	<0.00574	<0.332	<9.34	<9.34	**1350 DX**	19.7
SB-6	10/14/2019	0 to 1	0.000635	0.00139	0.00103	0.00114	0.0041950	0.0654	34.1	34.1	75.2 J	17.5
	10/14/2019	1 to 2	0.000629	0.00138	0.00102	0.00113	0.004159	0.0646	33.2	33.2	**2310**	9.9
	10/14/2019	4 to 5	0.0007	0.00153	0.00113	0.00126	0.00462	0.0643	33.6	33.6	478	21.3
	10/14/2019	9 to 10	0.000592	0.0013	0.000959	0.00106	0.003911	0.0635	33.5	33.5	307	26.1
SB-7	10/14/2019	0 to 1	0.000663	0.00145	0.00107	0.00119	0.004373	0.0633	33.8	33.8	**1680**	16.6
	10/14/2019	1 to 2	0.00058	0.00127	0.000939	0.00104	0.003829	0.0651	33	33	**2350**	25.1
	10/14/2019	4 to 5	0.000609	0.00133	0.000986	0.00109	0.004015	0.0636	34.2	34.2	210	33.2
	10/14/2019	9 to 10	0.000633	0.00139	0.00102	0.00113	0.004173	0.065	33.7	33.7	322	32.4
SB-8	10/14/2019	0 to 1	0.000599	0.00131	0.00097	0.00107	0.003949	0.0643	34.7	34.7	419	20.1
	10/14/2019	1 to 2	0.000591	0.00129	0.000957	0.00106	0.003898	0.0641	33.4	33.4	134 J	29.3
	10/14/2019	4 to 5	0.000606	0.00133	0.000981	0.00109	0.004007	0.0636	34.6	34.6	179 J	44.3
	10/14/2019	9 to 10	0.000711	0.00156	0.00115	0.00128	0.004701	0.0631	33.7	33.7	278	30
SB-9	10/14/2019	0 to 1	0.000615	0.00135	0.000996	0.0011	0.004061	0.0638	**224**	171	**1300**	12.9
	10/14/2019	1 to 2	0.000642	0.00141	0.00104	0.00115	0.004242	0.0634	**223**	147	**754**	16.9
	10/14/2019	4 to 5	0.000607	0.00133	0.0248	0.00109	0.027827	0.428	**281**	85.8	329	17.6
	10/14/2019	9 to 10	0.000615	0.00135	0.000996	0.0011	0.004061	0.389	**135**	43.3	320	27.4
SB-9	11/17/2020	0 to 1	<0.000688	<0.00151	<0.00111	<0.00123	<0.004538	<0.617	**26.4**	**79.7**	**1,360**	**10.3**
	11/17/2020	1 to 2	<0.000666	<0.00146	<0.00108	<0.00119	<0.004396	<0.632	<1.91	**26.1**	**4,210**	**10.8**
	11/17/2020	2 to 3	<0.000590	<0.00129	<0.000955	<0.00106	<0.003305	<0.695	<1.89	**26.9**	**2,070**	**10.1**
	11/17/2020	3 to 4	<0.000694	<0.00152	<0.00112	<0.00124	<0.00388	<0.781	<2.18	<6.39	**1,460**	**22.2**
	11/17/2020	5 to 6	<0.000630	<0.00138	<0.00102	<0.00113	<0.00353	<0.791	<2.22	**24**	**2,760**	**23.1**
	11/17/2020	7 to 8	<0.000658	<0.00144	<0.00106	<0.00118	<0.00368	<0.718	**8.02 J**	**20.5**	**1,390**	**22.2**
	11/17/2020	9 to 10	<0.000619	<0.00136	<0.00100	<0.00111	<0.004089	<0.742	**10.2 J**	**90.2**	**1,690**	**19.6**
SB-10	11/17/2020	0 to 1	<0.000669	<0.00146	<0.00108	<0.00120	<0.004409	<0.759	<2.07	<6.05	**146 J**	**17.5**
	11/17/2020	1 to 2	<0.000575	<0.00126	<0.000931	<0.00103	<0.003796	<0.743	<2.22	<6.49	**65.9 J**	**23.2**
	11/17/2020	2 to 3	<0.000638	<0.00140	<0.00103	<0.00114	<0.004208	<0.782	<2.24	<6.54	**90.6 J**	**24.0**
	11/17/2020	3 to 4	<0.000666	<0.00146	<0.00108	<0.00119	<0.004396	<0.855	**4.16 J**	<6.95	**44.2 J**	**28.1**
	11/17/2020	5 to 6	<0.000557	<0.00122	<0.000901	<0.000998	<0.003676	<0.702	**4.91 J**	**6.53 J**	**58.8 J**	**22.2**
	11/17/2020	7 to 8	<0.000586	<0.00128	<0.000948	<0.00105	<0.003864	<0.706	**3.56 J**	**7.88 J**	**49.9 J**	**21.4**
	11/17/2020	9 to 10	<0.000575	**0.00227 J**	<0.000931	<0.00103	0.002536	<0.790	<2.18	<6.39	**34.8 J**	**21.8**
SB-11	11/17/2020	0 to 1	<0.000612	<0.00134	<0.000990	<0.00110	<0.004042	<0.0643	**10.4**	**44.2**	**715 H B**	**13.1**
	11/17/2020	1 to 2	<0.000608	<0.00133	<0.000985	<0.00109	<0.004013	<0.0639	**32.3**	**120**	**789 H B**	**17.3**
	11/17/2020	2 to 3	<0.000627	<0.00137	<0.00102	<0.00113	<0.004147	<0.0641	**3.80 J**	**26.4**	**461 H B**	**60.0**
	11/17/2020	3 to 4	<0.000631	<0.00138	<0.00102	<0.00113	<0.004161	<0.0632	**4.41 J**	**26.8**	**2,300 H B**	**21.9**
	11/17/2020	5 to 6	<0.000610	<0.00134	<0.000988	<0.00109	<0.004028	<0.0655	**6.16 J**	**33.9**	**2,480 H B**	**24.8**
	11/17/2020	7 to 8	<0.000618	<0.00135	<0.00100	<0.00111	<0.004078	<0.0652	<2.64	<7.71	**1,090 H B**	**35.4**
	11/17/2020	9 to 10	<0.000677	<0.00148	<0.00110	<0.00122	<0.004477	<0.0636	**13.1**	**38**	**917 H B**	**21.6**
SB-12	11/17/2020	0 to 1	<0.000629	<0.00138	<0.00102	<0.00113	<0.004159	<0.732	<2.23	<6.53	**7,660 H B**	**23.6**
	11/17/2020	1 to 2	<0.000602	<0.00132	<0.000975	<0.00108	<0.003977	<0.742	**15.9**	**55.7**	**7,850 H B**	**21.1**
	11/17/2020	2 to 3	<0.000633	<0.00139	<0.00102	<0.00113	<0.004173	<0.782	**15.5**	**71.2**	**2,010 H B**	**19.3**
	11/17/2020	3 to 4	<0.000626	<0.00137	<0.00101	<0.00112	<0.004126	<0.691	**15.6**	**66.2**	**936 H B**	**15.1**
	11/17/2020	5 to 6	<0.000626	<0.00137	<0.00101	<0.00112	<0.004126	<0.812	**9.92 J**	**52.1**	**3,990 H B**	**23.5**
	11/17/2020	7 to 8	<0.000629	<0.00138	<0.00102	<0.00113	<0.004159	**<0.0636**	<2.18 F1	**26.4**	**525 H B**	**21.7**
	11/17/2020	9 to 10	<0.000631	<0.00138	<0.00102	<0.00113	<0.004161	**<0.0645**	**4.48 J**	**23.9**	**521 H B**	**20.2**
SB-13	11/17/2020	0 to 1	<0.000594	<0.00130	<0.000962	<0.00107	<0.003926	<0.793	<2.27	<6.62	**21.7**	**24.6**
	11/17/2020	1 to 2	<0.000635	<0.00139	<0.00103	<0.00114	<0.004195	<0.808	<2.28	<6.68	**33.5**	**25.3**
	11/17/2020	2 to 3	<0.000586	<0.00128	<0.000948	<0.00105	<0.003864	<0.807	<2.32	<6.79	**20**	**26.3**
	11/17/2020	3 to 4	<0.000624	<0.00137	<0.00101	<0.00112	<0.004124	<0.771	<2.29	<6.70	**9.15 J**	**25.7**
	11/17/2020	5 to 6	<0.000599	<0.00131	<0.000970	<0.00107	<0.003949	<0.807	**26.4**	**133**	**7.80 J**	**26.9**
	11/17/2020	7 to 8	<0.000599	<0.00131	<0.000970	<0.00107	<0.003949	<0.691	<2.14	<6.25	**203 H B F1**	**20.3**
	11/17/2020	9 to 10	<0.000605	<0.00132	<0.000979	<0.00108	<0.003984	<0.781	<2.13	<6.22	**65.5 J H B**	**20.1**
SB-14	11/17/2020	0 to 1	<0.000614	<0.00135	**0.00129 J**	**0.00254 J**	0.001964	<0.770	**1,150**	**2,280**	**159**	**23.9**
	11/17/2020	1 to 2	<0.000624	<0.00137	<0.00101	<0.00112	<0.004124	<0.753	**1,330**	**2,390**	**113 B**	**17.4**
	11/17/2020	2 to 3	**0.00190 J**	<0.00136	**0.00995**	<0.00112	0.01243	**20.2**	**1,120**	**1,870**	**216 B**	**16.9**
	11/17/2020	3 to 4	**0.0158**	<0.00153	**1.7**	**0.204**	1.92133	**160**	**2,510**	**3,130**	<4.96	**19.1**
	11/17/2020	5 to 6	--	--	**2.12**	**3.46**	5.58	**410**	**5,110**	**5,710**	**253 B**	**20.2**
	11/17/2020	7 to 8	--	--	**2.38**	**6.33**	8.71	**654**	**5,970**	**10,700**	**46.7 J B**	**19.6**
	11/17/2020	8 to 9	**0.000902 J**	<0.00142	**0.0743**	**0.108**	0.18372	**33.8**	**809**	**943**	**21.3 J B**	**19.8**
SB-15	11/17/2020	0 to 1	<0.000579	<0.00127	<0.000938	<0.00104	<0.003827	<0.837	**190**	**384**	**119 J**	**25.4**
	11/17/2020	1 to 2	<0.000565	<0.00124	<0.000914	<0.00101	<0.003729	<0.873	**117**	**255**	**312**	**29.0**
	11/17/2020	2 to 3	**0.00404 J**	**0.00251 J**	**2.08**	<0.00120	2.0812	**274**	**1,770**	**1,620**	**140 J**	**19.1**
	11/17/2020	3 to 4	**0.00216 J**	**0.00186 J**	**1.03**	<0.00123	1.03123	**208**	**998**	**811**	**404**	**18.8**
	11/17/2020	5 to 6	<0.000660	<0.00145	<0.00107	<0.00118	<0.00436	<0.697	<1.97	<5.76	**464**	**13.3**
	11/17/2020	7 to 8	<0.00573	<0.0125	**0.0238 J**	<0.0103	0.02853	<0.665	**139**	**241**	**414**	**11.6**
	11/17/2020	8 to 9	<0.000692	<0.00152	**0.00116 J**	<0.00124	0.003452	**0.805 J**	**30.7**	**85**	**419**	**12.7**
SB-16	11/17/2020	0 to 1	<0.000658	<0.00144	<0.00106	<0.00118	<0.004338	<0.838	**38.2**	**104**	**1,230 B**	**25.7**
	11/17/2020	1 to 2	<0.000616	<0.00135	<0.000998	<0.00111	<0.004074	<0.829	<2.29	<6.69	**863 B**	**25.4**
	11/17/2020	2 to 3	<0.000635	<0.00139	<0.00103	<0.00114	<0.004195	<0.720	<2.21	<6.45	**803 B**	**22.7**
	11/17/2020	3 to 4	<0.000662	<0.00145	<0.00107	<0.00119	<0.004372	**1.09 J**	<2.28	<6.67	**24.2 J B**	**25.4**
SB-17	11/17/2020	0 to 1	<0.000608	<0.00133	<0.000985	**0.00337 J**	0.002923	<0.588	**5.41 J**	**46.4**	**1,240 B**	**28.0**
	11/17/2020	1 to 2	<0.000642	<0.00141	<0.00104	<0.00115	<0.004242	<0.816	<2.30	<6.72	**602 B**	**25.7**
	11/17/2020	2 to 3	<0.000672	<0.00147	<0.00109	<0.00120	<0.004432	<0.776	<2.28	<6.67	**1,820 B**	**25.4**
	11/17/2020	3 to 4	<0.000658	<0.00144	<0.00106	<0.00118	<0.004332	<0.779	**5.97 J**	**40.5**	**942 B**	**20.6**
SB-18	11/10/2021	0 to 1	<0.000779	<0.00217	<0.00123	<0.00147	<0.000779	<0.0289	<2.15	0.756 B J	385	25
	11/10/2021	1 to 2	<0.000651	<0.00181	<0.00103	<0.00123	<0.000651	<0.0260	<1.93	1.05 B J	341	16.5
	11/10/2021	2 to 3	<0.000837	<0.000837	<0.00233	<0.00448	<0.00158	<0.000837	<2.25	0.701 B J	89.4	28.4
	11/10/2021	3 to 4	<0.000810	<0.00225	<0.00128	<0.00153	<0.000810	<0.0296	<2.20	1.05 B J	42.7	26.8
	11/10/2021	4 to 5	<0.000729	<0.00203	<0.00115	0.00208 J	<0.000729	<0.0278	<2.06	5.02 J	17.9	21.9
	11/10/2021	5 to 6	<0.000740	<0.00206	<0.00117	0.00182 J	<0.000740	<0.0280	<2.08	4.21 B J	14.2 J	22.6
	11/10/2021	6 to 7	<0.000608	<0.00169	<0.000959	0.00156 J	<0.000608	<0.0250	<1.85	3.59 B J	13.3	13.1
	11/10/2021	7 to 8	<0.000734	<0.00174	<0.000987	0.00147 J	<0.000734	<0.0254	<1.88	2.32 B J	12.4	14.5
	11/10/2021	8 to 9	<0.000784	<0.00218	<0.00124	0.00190 J	<0.000784	0.0291	<2.16	2.72 B J	20.9 J	25.3
	11/10/2021	9 to 10	<0.000792	0.00225 J	<0.00125	0.00246 J	<0.000792	<0.0292	<2.17	0.512 B J	13.7	25.7

Table 1
Historical Soil Investigation Analytical Data
CEMC
Federal 4 Com #001
Eddy County, New Mexico

Boring Location ID	Sample Date	Sample Depth (feet bgs)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH-GRO (mg/Kg)	TPH-DRO (mg/Kg)	TPH-ORO (mg/Kg)	Chloride (mg/Kg)	% Moisture
NMAC Closure Criteria [a]			10	--	--	--	50	--	100	--	600	--
SB-19	11/10/2021	0 to 1	<0.000728	<0.00203	<0.00115	0.00254 J	<0.000728	<0.0277	<2.06	2.03 B J	3190	21.8
	11/10/2021	1 to 2	<0.000820	<0.00228	<0.00129	0.00251 J	<0.000820	<0.0299	<2.22	1.14 B J	2020	27.4
	11/10/2021	2 to 3	<0.000668	<0.00186	<0.00105	0.00172 J	<0.000668	<0.0264	<1.96	1.17 B J	1000	17.7
	11/10/2021	3 to 4	<0.000661	<0.00184	<0.00104	0.00224 J	<0.000661	0.0510 J	<1.94	1.27 B J	852	17.2
	11/10/2021	4 to 5	<0.000674	<0.00188	<0.00106	0.00195 J	<0.000674	<0.0265	<1.97	0.454 B J	827	18.1
	11/10/2021	5 to 6	<0.000684	<0.00190	<0.000108	0.00168 J	<0.000684	0.0278 J	<1.98	0.479 B J	865	29.3
	11/10/2021	6 to 7	<0.000766	<0.00213	<0.00121	0.00238 J	<0.000766	0.0286	<2.12	0.723 B J	770	24.2
	11/10/2021	7 to 8	<0.000734	<0.00204	<0.00116	0.00196 J	<0.000734	0.0347 J	<2.07	<0.352	440	22.2
	11/10/2021	8 to 9	<0.000686	<0.00191	<0.00108	0.00181 J	<0.000686	0.0295 J	<1.99	1.83 B J	905	19
	11/10/2021	9 to 10	<0.000787	<0.00219	<0.00124	0.00160 J	<0.000787	<0.0291	<2.16	0.506B J	1580	25.5
SB-20	11/10/2021	0 to 1	<0.000507	<0.00141	<0.000800	0.00134 J	<0.000507	0.0302 J	2.10 J	8.62	1010	4.1
	11/10/2021	1 to 2	<0.000751	<0.00209	<0.00119	0.00225 J	<0.000751	0.0292 J	<2.10	2.22 B J	8480	23.3
	11/10/2021	2 to 3	<0.000793	<0.0021	<0.00125	<0.00149	<0.000793	<0.0293	<2.17	<0.370	2340	25.9
	11/10/2021	3 to 4	0.000989 J	<0.00234	<0.00133	<0.00158	0.000989J	<0.0304	<2.25	0.632 B J	567	28.5
	11/10/2021	4 to 5	<0.000661	<0.00184	<0.00104	<0.00124	<0.000661	0.0293 J	<1.94	0.884 B J	957	17.2
	11/10/2021	5 to 6	<0.000753	<0.00210	<0.00119	<0.00142	<0.000753	0.0364 J	<2.10	0.639 B J	389	23.4
	11/10/2021	6 to 7	<0.000746	<0.00208	<0.00118	<0.00141	<0.000746	<0.0282	<2.09	0.412 B J	649	23
	11/10/2021	7 to 8	<0.000663	<0.00185	<0.00105	<0.00125	<0.000663	<0.0262	<1.95	<0.331	442	17.3
	11/10/2021	8 to 9	<0.000693	<0.00193	<0.00109	<0.00131	<0.000693	<0.0270	<2.03	<0.340	776	19.5
	11/10/2021	9 to 10	<0.000799	<0.00223	<0.00126	<0.00151	<0.000799	<0.0294	<2.18	<0.371	1250	26.2
SB-21	11/10/2021	0 to 1	<0.000499	<0.00139	<0.000788	<0.000940	<0.000499	0.0823 J	1.71 J	10.7	2340	3.3
	11/10/2021	1 to 2	<0.000568	<0.00158	<0.000896	<0.00107	<0.000568	0.0245 J	<1.78	3.40 J	4270	9.7
	11/10/2021	2 to 3	<0.000696	<0.00194	<0.00110	<0.00131	<0.000696	0.0359	<2.00	1.73 J	3220	19.7
	11/10/2021	3 to 4	<0.000836	<0.00233	<0.00132	<0.00157	<0.000836	<0.0302	<2.24	1.17 J	985	28.3
	11/10/2021	4 to 5	<0.000702	<0.00195	<0.00111	<0.00132	<0.000702	<0.272	<2.02	<0.343	1420	20.1
	11/10/2021	5 to 6	<0.000776	<0.00216	<0.00122	<0.00146	<0.000776	<0.0289	<2.14	<0.365	944	24.8
	11/10/2021	6 to 7	<0.000803	<0.00223	<0.00127	<0.00151	<0.000803	<0.0295	<2.19	<0.372	680	26.4
	11/10/2021	7 to 8	<0.000842	<0.00234	<0.00133	<0.00159	<0.000842	0.0315J	<2.26	<0.384	610	28.6
	11/10/2021	8 to 9	<0.000672	<0.00187	<0.00106	<0.00127	<0.000672	<0.0265	<1.96	<0.334	450	18
SB-22	11/10/2021	0 to 1	<0.000490	<0.00136	<0.000773	<0.000923	<0.000490	<0.0222	<1.65	4.91	303	2.4
	11/10/2021	1 to 2	<0.000745	<0.00207	<0.00118	<0.00140	<0.000745	<0.0281	<2.09	<0.355	3850	22.9
	11/10/2021	2 to 3	0.000861 J	<0.00236	<0.00134	<0.00159	0.000861 J	<0.0305	<2.26	<0.385	3930	28.9
	11/10/2021	3 to 4	<0.000798	<0.00222	<0.00126	<0.00150	<0.000798	<0.0294	<2.18	<0.371	1310	26.1
	11/10/2021	4 to 5	<0.000690	<0.00192	<0.00109	<0.00130	<0.000690	<0.0269	<1.99	<0.339	926	19.3
	11/10/2021	5 to 6	<0.000788	<0.00219	<0.00124	<0.00148	<0.000788	<0.0292	<2.16	<0.368	1330	25.6
	11/10/2021	6 to 7	<0.000754	<0.00210	<0.00119	<0.00142	<0.000754	1350	<2.10	<0.358	1350	23.5
	11/10/2021	7 to 8	<0.000707	<0.00197	<0.00112	<0.00133	<0.000707	<0.0273	<2.02	<0.344	827	20.4
	11/10/2021	8 to 9	<0.000740	<0.00206	<0.00117	<0.00139	<0.000740	<0.0280	<2.08	<0.354	1000	22.6
SB-23	11/10/2021	0 to 1	<0.000808	<0.00225	<0.00128	<0.00152	<0.000808	<0.0296	2.40 J	8.21	2290	26.7
	11/10/2021	1 to 2	<0.000841	<0.00234	<0.00133	<0.00158	<0.000841	<0.0304	2.67 J	7.18	2200	28.5
	11/10/2021	2 to 3	<0.000751	<0.00209	<0.00118	<0.00141	<0.000751	<0.0283	<2.10	3.26 J	1710	23.3
	11/10/2021	3 to 4	<0.000756	<0.00211	<0.00119	<0.00143	<0.000756	<0.0284	<2.11	1.31 J	1260	23.6
	11/10/2021	4 to 5	<0.000858	<0.00239	<0.00135	<0.00162	<0.000858	<0.0308	<2.28	0.676 J	811	29.5
	11/10/2021	5 to 6	<0.000909	<0.00253	<0.00143	<0.00171	<0.000909	<0.0320	<2.37	0.511 J	1160	32.1
	11/10/2021	6 to 7	<0.000733	<0.00204	<0.00116	<0.00138	<0.000733	<0.0279	<2.07	0.600 J	926	22.1
	11/10/2021	7 to 8	<0.000769	<0.00214	<0.00121	<0.00145	<0.000769	<0.0287	<2.13	1.15 J	1150	24.4
	11/10/2021	8 to 9	<0.000714	<0.00199	<0.00113	<0.00135	<0.000714	<0.0274	<2.04	1.42 J	1070	20.9
SB-24	11/10/2021	0 to 1	<0.000710	<0.00198	<0.00112	<0.00134	<0.000710	0.0510 J V3	<2.03	7.390	1460	20.7
	11/10/2021	1 to 2	<0.000719	<0.00200	<0.00113	<0.00135	<0.000719	<0.0275	<2.04	1.69 J	1360	21.2
	11/10/2021	2 to 3	<0.000593	<0.00165	<0.000935	<0.00112	<0.000593	<0.0246	<1.83	0.631 J	1190	11.8
	11/10/2021	3 to 4	<0.000604	<0.00168	<0.000954	<0.00114	<0.000604	<0.0249	<1.85	2.45 J	1250	12.8
	11/10/2021	4 to 5	<0.000643	<0.00179	<0.00102	<0.00121	<0.000643	<0.0258	<1.91	0.573 J	1510	15.9
	11/10/2021	5 to 6	<0.000752	<0.00209	<0.00119	<0.00142	<0.000752	<0.0283	<2.10	0.517 J	1640	23.4
	11/10/2021	6 to 7	<0.000667	<0.00186	<0.00105	<0.00126	<0.000667	<0.0263	<1.95	<0.332	370	17.6
	11/10/2021	7 to 8	<0.000562	<0.00156	<0.000886	<0.00106	<0.000562	<0.0239	<1.77	<0.302	603	9.2
	11/10/2021	8 to 9	<0.000678	<0.00189	<0.00107	<0.00128	<0.000678	<0.0266	<1.97	<0.336	615	18.4
SB-25	11/10/2021	0 to 1	<0.000733	<0.00204	<0.00116	<0.00138	<0.000733	<0.0279	<2.07	1.27 J	3880	22.1
	11/10/2021	1 to 2	<0.000782	<0.00218	<0.000123	<0.00147	<0.000782	<0.0290	<2.15	0.425 J	2440	25.2
	11/10/2021	2 to 3	<0.000659	<0.00184	<0.00104	<0.00124	<0.000659	<0.0262	<1.94	1.25 B J	1480	17.1
	11/10/2021	3 to 4	<0.000653	<0.00182	<0.00103	<0.00123	<0.000653	<0.0260	2.00 J	4.60 B J	1760	16.6
	11/10/2021	4 to 5	<0.000687	<0.00191	<0.00108	<0.00129	<0.000687	<0.0268	<1.99	1.75 B J	1340	19
	11/10/2021	5 to 6	0.000867	<0.00241	<0.00137	<0.00163	<0.000867	<0.0310	<2.30	1.09 B J	2060	29.9
	11/10/2021	6 to 7	<0.000907	<0.00253	<0.00143	<0.00171	<0.000907	<0.0319	<2.37	0.744 B J	2540	32
	11/10/2021	7 to 8	<0.000685	<0.00191	<0.00108	<0.00129	<0.000685	<0.0268	<1.98	1.12 B J	448	18.9
	11/10/2021	8 to 9	<0.000741	<0.00206	<0.00117	<0.00140	<0.000742	<0.0281	<2.08	4.79 B J	1310	22.7
	11/10/2021	9 to 10	<0.000677	<0.00189	<0.00107	<0.00128	<0.000677	<0.0266	<1.97	1.46 B J	358	18.4

Table 1
Historical Soil Investigation Analytical Data
CEMC
Federal 4 Com #001
Eddy County, New Mexico

Boring Location ID	Sample Date	Sample Depth (feet bgs)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)	Total BTEX (mg/Kg)	TPH-GRO (mg/Kg)	TPH-DRO (mg/Kg)	TPH-ORO (mg/Kg)	Chloride (mg/Kg)	% Moisture
NMAC Closure Criteria [a]			10	--	--	--	50	--	100	--	600	--
SB-26	11/10/2021	0 to 1	<0.00320	<0.00889	<0.00504	<0.00602	<0.00320	0.142	**1590**	199	**1350**	26.2
	11/10/2021	1 to 2	<0.000715	<0.00199	<0.00113	<0.00135	<0.000715	0.0483 J	**740**	170	**985**	20.9
	11/10/2021	2 to 3	<0.000502	<0.00140	<0.000793	<0.000946	<0.000502	0.0259 J	**230**	79.1	486	3.6
	11/10/2021	3 to 4	<0.00286	<0.00796	<0.00451	<0.00539	<0.00286	59.5	**2960 J3 V**	215	**1430**	21
	11/10/2021	4 to 5	<0.000710	<0.00198	<0.0012	<0.00134	<0.000710	58.8	**3000**	189	**1100**	20.6
	11/10/2021	5 to 6	<0.000902	<0.00251	<0.00142	<0.00170	<0.000902	5.73	**2330**	112	479	31.7
	11/10/2021	6 to 7	<0.000934	<0.00260	<0.00147	<0.00176	<0.000934	73.2	**1250**	116	**1260**	33.3
	11/10/2021	7 to 8	<0.000718	0.00341 J	<0.00113	<0.00135	<0.000718	358	**5050**	327	**1460**	21.2
	11/10/2021	8 to 9	<0.000636	0.00238 J	<0.00100	<0.00120	<0.000636	376	**3670**	211	**691**	15.3
	11/10/2021	9 to 10	<0.000646	0.00267 J	0.00218 J	0.0640	<0.000646	300	**1750**	123	484	16
SB-27	11/10/2021	0 to 1	<0.000821	<0.00229	<0.00130	<0.00155	<0.000821	0.0321 J	<2.22	3.93 B J	240	27.5
	11/10/2021	1 to 2	<0.000871	<0.00242	<0.00137	<0.00164	<0.000871	<0.0311	<2.31	3.14 B J	374	30.2
	11/10/2021	2 to 3	<0.000946	<0.00263	<0.00149	<0.00178	<0.000946	0.0333 J	<2.44	1.12 B J	377	33.9
	11/10/2021	3 to 4	<0.000730	<0.00203	<0.00115	<0.00138	<0.000730	<0.0278	<2.06	1.67 B J	594	22
	11/10/2021	4 to 5	<0.000736	<0.00205	<0.00116	<0.00139	<0.000736	0.0290 J	<2.07	1.61 B J	**730**	22.4
	11/10/2021	5 to 6	<0.000848	<0.00236	<0.00134	<0.00160	<0.000848	<0.0306	<2.27	1.06 B J	**626**	29
	11/10/2021	6 to 7	<0.000804	<0.00224	<0.00127	<0.00152	<0.000804	<0.0295	<2.19	1.33 B J	139	26.5
	11/10/2021	7 to 8	<0.000676	<0.00188	<0.00107	<0.00127	<0.00676	<0.0266	<1.97	1.49 B J	402	18.3
	11/10/2021	8 to 9	<0.000707	<0.00197	<0.00111	<0.00133	<0.000707	<0.0273	4.46 J	7.83	**637**	20.4
	11/10/2021	9 to 10	<0.000685	<0.00191	<0.00108	<0.00129	<0.000685	0.0339 J	<1.99	1.15 B J	57.8	18.9
MW-1	10/14/2019	0 to 1	0.000633	0.00139	0.00102	0.00113	0.004173	0.0648	**229**	153	178	20.2
	10/14/2019	1 to 2	0.000548	0.0012	0.000887	0.000983	0.003618	0.0637	**604**	300	233	25.4
	10/14/2019	4 to 5	0.000625	0.00137	0.00101	0.00112	0.004125	0.179	**1600**	806	114 J	20.3
	10/14/2019	9 to 10	0.000669	0.00146	0.00108	0.0012	0.004409	0.0642	34.7	34.7	97.3 J	32.2
	10/14/2019	14 to 15	0.000601	0.00132	0.000973	0.00108	0.003974	0.0887 J	**394**	175	127 J	29.6

Legend:

Value	Analytical value is greater than or equal to NMAC closure criteria
%	Percent
mg/Kg	Milligram(s) per kilogram
<	Analyte was not detected above the specified method reporting limit
ft bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
TPH-GRO	Total Petroleum Hydrocarbons as Gasoline Range Organics
TPH-DRO	Total Petroleum Hydrocarbons as Diesel Range Organics
TPH-ORO	Total Petroleum Hydrocarbons as Oil Range Organics
NMAC	New Mexico Administrative Code
MS/MSD	Matrix spike/matrix spike duplicate

Lab Qualifiers:

B	Compound was found in the blank and sample
D	The sample(s) were duplicated due to targets detected over the highest point of the calibration curve, or due to matrix interference
H	Sample was prepped or analyzed beyond the specified holding time
J	The target analyte was positively identified below the quantitation limit and above the detection limit
F1	MS/MSD recoveries were found to be outsite of the laboratory control limits due to possible matrix/chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration

Notes:

(a) Title 19, Chapter 15 of the NMAC for Natural Resources and Wildlife, Oil and Gas, and Releases, 19.15.29 NMAC. August

104°11'24"W 104°11'22"W 104°11'21"W 104°11'19"W 104°11'18"W 104°11'16"W 104°11'15"W 104°11'13"W 104°11'12"W

32°30'57"N 32°30'56"N 32°30'54"N 32°30'52"N 32°30'51"N 32°30'49"N

SB-27
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.000821	<0.000871	<0.000946	<0.000730	<0.000736	<0.000848	<0.000804	<0.00676	<0.000707	<0.000685
TPH-GRO	0.0321 J	<0.0311	0.0333 J	<0.0278	0.0290 J	<0.0306	<0.0295	<0.0266	<0.0273	0.0339 J
TPH-DRO	<2.22	<2.31	<2.44	<2.06	<2.07	<2.27	<2.19	<1.97	4.46 J	<1.99
TPH-ORO	3.93 B J	3.14 B J	1.12 B J	1.67 B J	1.61 B J	1.06 B J	1.33 B J	1.49 B J	7.83	1.15 B J
CHLORIDE	240	374	377	594	730	626	139	402	637	57.8

SB-26
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.00320	<0.000715	<0.000502	<0.00286	<0.000710	<0.000902	<0.000934	<0.000718	<0.000636	<0.000646
TPH-GRO	0.142	0.0483 J	0.0259 J	59.5	58.8	5.73	73.2	358	376	300
TPH-DRO	1590	740	230	2960 J3 V	3000	2330	1250	5050	3670	1750
TPH-ORO	199	170	79.1	215	189	112	116	327	211	123
CHLORIDE	1350	985	486	1430	1100	479	1260	1460	691	484

SB-25
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.000733	<0.000782	<0.000659	<0.000653	<0.000687	<0.000867	<0.000907	<0.000685	<0.000742	<0.000677
TPH-GRO	<0.0279	<0.0290	<0.0262	<0.0260	<0.0268	<0.0310	<0.0319	<0.0268	<0.0281	<0.0266
TPH-DRO	<2.07	<2.15	<1.94	2.00 J	<1.99	<2.30	<2.37	<1.98	<2.08	<1.97
TPH-ORO	1.27 J	0.425 J	1.25 B J	4.60 B J	1.75 B J	1.09 B J	0.744 B J	1.12 B J	4.79 B J	1.46 B J
CHLORIDE	3880	2440	1480	1760	1340	2060	2540	448	1310	358

SB-24
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
TOTAL BTEX	<0.000710	<0.000719	<0.000593	<0.000604	<0.000643	<0.000752	<0.000667	<0.000562	<0.000678
TPH-GRO	0.0510 J V3	<0.0275	<0.0246	<0.0249	<0.0258	<0.0283	<0.0263	<0.0239	<0.0266
TPH-DRO	<2.03	<2.04	<1.83	<1.85	<1.91	<2.10	<1.95	<1.77	<1.97
TPH-ORO	7.390	1.69 J	0.631 J	2.45 J	0.573 J	0.517 J	<0.332	<0.302	<0.336
CHLORIDE	1460	1360	1190	1250	1510	1640	370	603	615

SB-23
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
TOTAL BTEX	<0.000808	<0.000841	<0.000751	<0.000756	<0.000858	<0.000909	<0.000733	<0.000769	<0.000714
TPH-GRO	<0.0296	<0.0304	<0.0283	<0.0284	<0.0308	<0.0320	<0.0279	<0.0287	<0.0274
TPH-DRO	2.40 J	2.67 J	<2.10	<2.11	<2.28	<2.37	<2.07	<2.13	<2.04
TPH-ORO	8.21	7.18	3.26 J	1.31 J	0.676 J	0.511 J	0.600 J	1.15 J	1.42 J
CHLORIDE	2290	2200	1710	1260	811	1160	926	1150	1070

SB-18
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.000779	<0.000651	<0.00158	<0.000810	<0.000729	<0.000740	<0.000608	<0.000734	<0.000784	<0.000792
TPH-GRO	<0.0289	<0.0260	<0.000837	<0.0296	<0.0278	<0.0280	<0.0250	<0.0254	0.0291	<0.0292
TPH-DRO	<2.15	<1.93	<2.25	<2.20	<2.06	<2.08	<1.85	<1.88	<2.16	<2.17
TPH-ORO	0.756 B J	1.05 B J	0.701 B J	1.05 B J	5.02 J	4.21 B J	3.59 B J	2.32 B J	2.72 B J	0.512 B J
CHLORIDE	385	341	89.4	42.7	17.9	14.2 J	13.3	12.4	20.9 J	13.7

SB-19
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.000728	<0.000820	<0.000668	<0.000661	<0.000674	<0.000684	<0.000766	<0.000734	<0.000686	<0.000787
TPH-GRO	<0.0277	<0.0299	<0.0264	0.0510 J	<0.0265	0.0278 J	0.0286	0.0347 J	0.0295 J	<0.0291
TPH-DRO	<2.06	<2.22	<1.96	<1.94	<1.97	<1.98	<2.12	<2.07	<1.99	<2.16
TPH-ORO	2.03 B J	1.14 B J	1.17 B J	1.27 B J	0.454 B J	0.479 B J	0.723 B J	<0.352	1.83 B J	0.506B J
CHLORIDE	3190	202	1000	852	827	865	770	440	905	1580

SB-20
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10
TOTAL BTEX	<0.000507	<0.000751	<0.000793	0.000989J	<0.000661	<0.000753	<0.000746	<0.000663	<0.000693	<0.000799
TPH-GRO	0.0302 J	0.0292 J	<0.0293	<0.0304	0.0293 J	0.0364 J	<0.0282	<0.0262	<0.0270	<0.0294
TPH-DRO	2.10 J	<2.10	<2.17	<2.25	<1.94	<2.10	<2.09	<1.95	<2.0J3	<2.18
TPH-ORO	8.62	2.22 B J	<0.370	0.632 B J	0.884 B J	0.639 B J	0.412 B J	<0.331	<0.340	<0.371
CHLORIDE	1010	8480	2340	567	957	389	649	442	776	1250

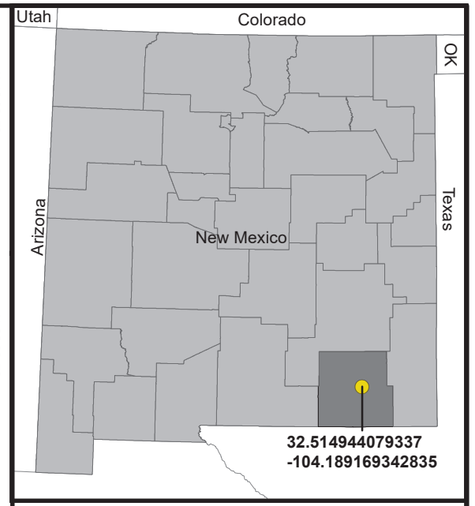
SB-21
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
TOTAL BTEX	<0.000499	<0.000568	<0.000696	<0.000836	<0.000702	<0.000776	<0.000803	<0.000842	<0.000672
TPH-GRO	0.0823 J	0.0245 J	0.0359	<0.0302	<0.272	<0.0289	<0.0295	0.0315J	<0.0265
TPH-DRO	1.71 J	<1.78	<2.00	<2.24	<2.02	<2.14	<2.19	<2.26	<1.96
TPH-ORO	10.7	3.40 J	1.73 J	1.17 J	<0.343	<0.365	<0.372	<0.384	<0.334
CHLORIDE	2340	4270	3220	985	1420	944	680	610	450

SB-22
SAMPLE DATE: November 10, 2021

DEPTH	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9
TOTAL BTEX	<0.000490	<0.000745	0.000861 J	<0.000798	<0.000690	<0.000788	<0.000754	<0.000707	<0.000740
TPH-GRO	<0.0222	<0.0281	<0.0305	<0.0294	<0.0269	<0.0292	1350	<0.0273	<0.0280
TPH-DRO	<1.65	<2.09	<2.26	<2.18	<1.99	<2.16	<2.10	<2.02	<2.08
TPH-ORO	4.91	<0.355	<0.385	<0.371	<0.339	<0.368	<0.358	<0.344	<0.354
CHLORIDE	303	3850	3930	1310	926	1330	1350	827	1000

SB-8 SB-3 SB-18 SB-1 SB-27 SB-9 SB-7 SB-2 SB-4 SB-28 SB-26 SB-25 SB-35 SB-19 SB-5 SB-29 SB-20 SB-34 SB-24 SB-6 SB-21 SB-30 SB-22 SB-33 SB-23 SB-31 SB-32



Legend

- 2024 PROPOSED SOIL BORING LOCATION
- 2021 SOIL BORINGS
- HISTORICAL SOIL BORINGS
- TEMPORARY MONITORING WELL
- GAS, PETROLEUM OR PROPANE LINE
- 7' WIDE AND 5' DEEP TEST PIT - JUNE 2018

NOTES:
1. BTEX = BENZENE, TOLUENE, ETHYLBENZENE AND TOTAL XYLENES.
2. TPH-GRO = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS.
3. TPH-DRO = TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS.
4. TPH-ORO = TOTAL PETROLEUM HYDROCARBONS AS OIL RANGE ORGANICS.
5. TPH ANALYSIS BY EPA 8015 MODIFIED.
6. EPA = ENVIRONMENTAL PROTECTION AGENCY.
7. CHLORIDE ANALYSIS BY EPA METHOD E300 MODIFIED.
8. RESULTS SHOWN IN MILLIGRAMS PER LITER (mg/L) UNLESS OTHERWISE NOTED.
9. J = RESULT IS LESS THAN THE RL BUT GREATER THAN OR EQUAL TO THE MDL AND THE CONCENTRATION IS AN APPROXIMATE VALUE.
10. < = ANALYTE WAS NOT DETECTED AT OR ABOVE THE METHOD DETECTION LIMIT (MDL)
11. F1 = MS AND/OR MSD RECOVERY EXCEEDS CONTROL LIMITS.
12. VALUE = ANALYTICAL VALUE IS GREATER THAN OR EQUAL TO NMAC CLSOURE CRITERIA
13. AERIAL IMAGE FROM GOOGLE EARTH, 2019.

0 15 30
FEET
1 inch = 94 feet

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
FEDERAL 4 COM #001
EDDY COUNTY, NEW MEXICO

2021 SOIL ANALYTICAL DATA and 2024 PROPOSED SOIL BORING LOCATIONS

ARCADIS

FIGURE 1

User Name: JPlacencia DATE: 6/21/2022 10:33:44 AM
PATH: C:\Users\JPlacencia\OneDrive - ARCADIS\El Paso\Sergio\Chevron_Fed4\Fig3_Soil_Analytical_2022_Proposal.mxd

ARCADIS Design & Consultancy for natural and built assets

SITE DESCRIPTION AND BACKGROUND

The following site description and background section provides an overview of the site location and regional setting including geology, hydrogeology, nearby drinking water wells, surface water, and climate.

Site Location and Description

The site is located approximately seven miles northeast of Carlsbad, New Mexico along the northeast quarter of the southwest quarter of Section 4, Township 21- South, Range 27-East. The properties surface ownership is owned by Bureau of Land Management and Chevron Midcontinent, L.P. holds the oil and gas lease. The site is located on the western edge of the Permian Basin, a 75,000-square-mile area in Texas and New Mexico that is populated by numerous oil and gas production wells. In New Mexico, the Permian Basin extends to Roosevelt County to the north, Chaves and Eddy County to the west, and to Texas to the south.

Nearby Water Wells and Surface Water

Based on review of satellite imagery, Lake Avalon is located approximately 3 miles southwest of the site (GoogleEarth 2019). In January 2019, Arcadis reviewed information obtained from the New Mexico Office of the State Engineer (NMOSE) online database (NMOSE 2019), which indicated that there is one water supply well located approximately 760 ft (ft) to the east southeast from the Federal 4 COM #001 oil well. The primary use for this water well is for domestic and livestock watering. The NMOSE online database identified one water-supply well within a 1,000-meter radius of the site (NMOSE 2019). In addition, results of the database review indicate average depth to groundwater in the area is approximately 14 ft below ground surface (bgs).

Climate

Monthly average temperatures near the site vary from a minimum of 27.8 degrees Fahrenheit (°F) in January to a maximum of 95.6°F in July (Western Regional Climate Center [WRCC] Carlsbad, New Mexico [291469] weather station). Average annual precipitation recorded for the area of the site from the available WRCC period of record between 1900 and 2016 was approximately 12.84 inches per year (WRCC 2019a). Due to the arid climate, the site experiences low precipitation and high evaporation rates. Average annual evaporation from the available WRCC period of record between 1914 and 2005 was approximately 87.68 inches per year (WRCC 2019b).

Regional Geology and Hydrogeology

The site elevation is approximately 3,190 ft above mean sea level and is located above the Capitan Reef (Limestone) bed along the northern edge of the Paleozoic Era Delaware Basin with the Pecos River to the east and the Guadalupe Mountains to the west (Bachman 1980). In the early Permian, the Delaware Basin was a shallow marine environment supplied with seawater through the Hovey Channel and

resulted in limestone and shale deposits. Throughout the Permian, the basin underwent subsidence.

Patch reefs, built primarily from calcareous sponges, encrusting algae, and limy mud, began forming along the shoreline edges, eventually resulting in the formation of the Capitan Reef. The Capitan Limestone is characterized as a massive white to gray, fossiliferous limestone bed. In the vicinity of the site, the limestone is further described as the fore-reef facies and is defined by evaporites and thin bedded limestone, shale, and sandstone units (Standen 2009). Sediment deposition continued as sea level dropped and continued to fill the basin area. The Delaware Basin is overlain with evaporites, primarily gypsum and halite, from the Castile and Salado Formations, followed by the carbonate, evaporite, and clastic sediments of the Rustler Formation, and lastly, by the red beds of the Dewey Lake Formation. The Delaware Basin and Capitan Reef area underwent extensive erosion and dissolution throughout the Mesozoic and Cenozoic eras and resulted in an ancient karst plain that was subsequently filled in by alluvial deposits known as the Pecos Valley Alluvium (TWBD 2019). The Pecos Valley Alluvium is predominantly composed of surficial deposits of transmissive sands and gravels mixed with low-permeability clays, primarily from the Pecos River (Barrol 2004).

The main source of fresh groundwater in the area comes from the subterranean karstic carbonate Permian Capitan Reef Aquifer which, in the vicinity of the site, is approximately 10 to 14 miles wide and has an average thickness of approximately 1,600 ft. The aquifer is confined by the Rustler, Salado, and Castile formations beneath it (Barrol 2004). Average depth to water based on the current wells in the vicinity of the site is approximately 32 bgs (NMOSE 2019). The primary natural aquifer recharge source is from the west by the precipitation over and area to of approximately 800 square miles in and west of the Guadalupe Mountains. Percolation, direct infiltration, and surface water are secondary natural recharge sources. Leakage from Lake Avalon to the west is the main source of artificial aquifer recharge (Barrol 2004).

INITIAL RELEASE RESPONSE

On June 2018, four above ground storage tanks (ASTs) were removed and reclamation of the site was initiated. During reclamation activities, potential hydrocarbon impacts were identified beneath the former location of the ASTs and within test pits located east and south of the former ASTs. Based on field observations, CEMC excavated soils beneath the former AST battery. The soil beneath AST 1 and 3 exhibited higher hydrocarbon impacts than the soil beneath AST 2 and 4. CEMC personnel indicated potential hydrocarbon impacts appeared to be consistently observed between 45 and 60-degree angles from the ASTs. Four test trenches approximately 6 to 7 ft by 5 ft were excavated on the east and south sides of the former AST battery as depicted on Figure 2. Field observations indicated potential hydrocarbon impacts at a minimum of 5 ft below ground surface. A total of 225 yards of investigative derived material was removed and transported to R360 Environmental Solutions for proper disposal. Additionally, associated production equipment was decommissioned and removed from the site. Pursuant to New Mexico Oil Conservation Division (NMOCD) requirements (NMOCD 1993), Chevron MCBU submitted a Notification of Release and Correction (Form C-141) to the NMOCD, detailing the location, volume of release, and initial and planned cleanup efforts for the site.

2018 SOIL INVESTIGATION

In November 2018, Arcadis conducted site assessment activities to facilitate the subsurface geology characterization, evaluation of hydrocarbons, and soil sample collection. Soil boring locations were

selected based on the locations of observed staining during the AST removal and trenching as well as proximity of pipelines and other equipment at the site.

On November 7, 2018, to evaluate the potential extent of impact to soil at the site, Arcadis advanced five shallow soil borings to approximately 10 to 15 ft bgs. B-1 was installed beneath former AST 1and B-2 through B-5 were advanced around the perimeter of the former tank battery berms to support delineation (Figure 2). Although B-1 was initially proposed as a deep soil boring, targeting 50 ft bgs, wet soil was encountered at approximately 12 ft bgs indicating a shallow groundwater table exists at the site.
Prior to conducting drilling activities, each boring location was cleared for subsurface utilities with an air knife. Once cleared, air rotary technology was used to advance the soil borings and collect grab samples. Soil was continuously logged for stratigraphic characteristics according to the United Soil Classification System (USCS). Field personnel recorded soil types and other pertinent geologic data on boring logs. Elevated photo ionization detection (PID) readings (1,341 to 15,000 parts per million [ppm]) were recorded at soil boring location B-1 while locations B-2 through B-5 exhibited lower PID readings (15.9 to 52.8 ppm). Lithologic data indicated the subsurface material consisted primarily of gypsiferous caliche and sand layers from approximately 0 to 10 ft bgs. Three soil samples were collected from each boring location at varying upper, middle, and lower depths, which were determined based on field and PID observations. A total of 15 samples were collected in clean, laboratory-supplied glass jars, labeled, in an ice-chilled cooler, and submitted under appropriate chain of custody protocols to Xenco Laboratories in Lubbock, TX. Soil samples collected from
each boring were analyzed for:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8021B
- Total petroleum hydrocarbons (TPH) gasoline range organics (GRO, diesel range organics (DRO), oil range organics (ORO) by EPA Method 8015B
- Chloride by EPA Method 300.0
- Percent moisture by SM 2540B

Following sampling, the boreholes were filled with soil cuttings from total depth to ground surface. The ground surface was restored to match the surrounding conditions.

Soil Sample Results

The analytical data from the soil samples collected in November 2018 are compared to the closure criteria (CC) outlined in Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) concerning natural resources and wildlife, oil and gas, and releases which became effective on

August 14, 2018. The analytical results for the 15 soil assessment samples are summarized below:

- Benzene was not detected above the laboratory reporting limit in any of the 15 samples
- Toluene was not detected above the laboratory reporting limit in any of the 15 samples
- Ethylbenzene was detected in each of the three samples collected at B-1 with concentrations ranging from 0.374 milligrams per kilogram (mg/kg) (2 to 3 ft bgs) to 6.29 mg/kg (9 to 10 ft bgs)
- Total Xylenes were detected in each of the three samples collected at B-1 with concentrations ranging from 0.747 mg/kg (2 to 3 ft bgs) to 23.6 mg/kg (9 to 10 ft bgs)
- Total BTEX compounds were detected in each of the three samples collected at B-1 with concentrations ranging from 1.12 mg/kg (2 to 3 ft bgs) to 29.9 mg/kg (9 to 10 ft bgs). Total BTEX concentrations do not the exceed the 2018 NMAC CC of 50 mg/kg.

- Chloride was detected in each of the 15 samples collected at the site with concentrations ranging from an estimated 12.9 mg/kg at B-1 (6 to 7 ft bgs) to 2,710 mg/kg at B-5 (6 to 7 ft bgs). Chloride concentrations exceed the 2018 NMAC CC of 600 mg/kg in each of the samples collected from B-5 as well as one sample collected at B-2 (0 to 1 ft bgs) and one sample collected from B-3 (14to 15 ft bgs)
- TPH-GRO was detected in each of the three samples collected at B-1 with concentrations ranging from 74.4 mg/kg (2 to 3 ft bgs) to 903 mg/kg (9 to 10 ft bgs)
- TPH-DRO was detected in each of the three samples collected at B-1 with concentrations ranging from 1,810 mg/kg (2 to 3 ft bgs) to 4,800 mg/kg (9 to 10 ft bgs). TPH-DRO was also detected in one soil sample collected from B-5 (6 to 7 ft bgs) with an estimated concentration of 10.5 mg/kg
- TPH-ORO was detected in each of the three samples collected at B-1 with estimated concentrations ranging from 224 mg/kg (2 to 3 ft bgs) to 453 mg/kg (9 to 10 ft bgs)
  The 2018 NMAC CC for total TPH compounds (summation of ORO, GRO, and DRO) concentrations is 100 mg/kg. Total TPH concentrations exceed the CC in each of the three samples collected from B-1.

2019 SOIL INVESTIGATION

In October 2019, Arcadis conducted site assessment activities to characterize the lateral and vertical extents of potential soil impacts at the Site. Soil boring locations were selected based on the locations of observed staining during the AST removal and trenching, proximity of pipelines and other equipment at the site, as well as results of previous soil sampling activities completed at the Site in November 2018.

In October 2019, to evaluate the potential extent of impacts to soil at the Site, Arcadis advanced four shallow soil borings (B-6 through B-9) and one temporary monitoring well (MW-1). Prior to conducting drilling activities, each boring location was cleared for subsurface utilities with an air knife. Soil was continuously logged for stratigraphic characteristics according to the Unified Soil Classification System (USCS). Slightly elevated (>3.0 PPM) photo ionization detection (PID) readings (6.1 to 192 parts ppm) were recorded at soil boring/temporary monitoring well location MW-1, as well as at soil boring location B-9 (9.5 to 379 ppm). Lower PID readings (0.0 to 4.1 ppm) were recorded at soil boring locations B-6, B-7, and B-8.

Four soil samples were collected from each boring location, and five soil samples were collected from temporary monitoring well MW-1. A total of 21 samples were collected in clean, laboratory-supplied glass jars, labeled, placed in an ice-chilled cooler, and were shipped by Fed-Ex priority overnight to Eurofins TestAmerica analytical laboratory under chain-of-custody protocol. Soil samples collected from each boring were analyzed for the following:

- Chloride by USEPA Method 300
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by USEPA Method 8260B
- Total petroleum hydrocarbons (TPH) – diesel range organics (DRO), oil range organics (ORO), and gasoline range organics (GRO) by Method SW8015B

Soil Sample Results

The analytical data from the soil samples collected in October 2019 were compared to the closure criteria (CC) outlined in Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) concerning natural resources and wildlife, oil and gas, and releases which became effective on August 14, 2018. The analytical results for the soil assessment samples are summarized below:

- BTEX concentrations were reported below the NMAC standard of 50 milligrams per kilogram (mg/Kg) at all sample locations
- The 2019 NMAC CC for total TPH compound (summation of ORO, GRO, and DRO) concentrations is 100 mg/kg for a site with groundwater less than 50 feet bgs. TPH concentrations exceeded the NMAC standard of 100 mg/kg in:
    - All sample depths collected at B-9:
        - 0 – 1 ft bgs: 224 mg/kg
        - 1 – 2 ft bgs: 223 mg/kg
        - 4 – 5 ft bgs: 281 mg/kg
        - 9 – 10 ft bgs: 135 mg/kg
    - Four sample intervals collected at MW-1
        - 0 – 1 ft bgs: 229 mg/kg
        - 1 – 2 ft bgs: 604 mg/kg
        - 4 – 5 ft bgs: 1,600 mg/kg
        - 14 – 15 ft bgs: 394 mg/kg
- Chloride concentrations exceeded the NMAC standard of 600 mg/Kg in;
    - One sample interval collected at B-6:
        - 1 – 2 ft bgs: 2,310 mg/kg
    - Two sample intervals collected at B-7:
        - 0 – 1 ft bgs: 1,680 mg/kg
        - 1 – 2 ft bgs: 2,350 mg/kg
    - Two samples collected from B-9:
        - 0 – 1 ft bgs: 1,300 mg/kg
        - 1 – 2 ft bgs: 754 mg/kg

2019 GROUNDWATER ASSESSMENT

Monitoring Well Installation and Groundwater Sampling

Groundwater was gauged and samples were collected at the Site in 2019 from temporary monitoring well MW-1. The sample collected from MW-1 was analyzed for BTEX, TPH, and TDS (total dissolved solids). Temporary monitoring well MW-1 was plugged and abandoned after sampling.

Groundwater Sample Results

Groundwater analytical results were compared to the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards. The analytical results for the groundwater sample collected from MW-1 in October 2019 are summarized below.

- Chloride was detected at a concentration of 387 milligrams per liter (mg/L) in the groundwater sample collected from MW-1 which exceeded the NMWQCC standard of 250 mg/L.

- Benzene, toluene, ethylbenzene, and total xylenes reported below the NMWQCC standards of 0.01, 0.75, 0.75, and 0.62 mg/L, respectively, in MW-1 in October 2019.
- TDS exceeded the NMWQCC standard of 1,000 mg/L in monitoring well MW-1 at a concentration of 4,790 mg/L in October 2019

2020 SOIL INVESTIGATION

In November 2020, Arcadis conducted site assessment activities to characterize the lateral and vertical extents of potential soil impacts at the Site. Soil boring locations were selected based on the locations of observed staining during the AST removal and trenching, proximity of pipelines and other equipment at the site, as well as results of previous soil sampling activities completed at the Site in November 2018 and October 2019.

In November 2020, to evaluate the potential extent of impacts to soil at the Site, Arcadis advanced nine shallow soil borings (SB-9 through SB-17). Prior to conducting drilling activities, each boring location was cleared for subsurface utilities with an air knife. Soil was continuously logged for stratigraphic characteristics according to the Unified Soil Classification System (USCS). Elevated (>3.0 parts per million (ppm)) photo ionizing device (PID) readings were observed at SB-14 and SB-15 at depths of 1 to 9 ft bgs ranging from 6.9 to 238 ppm, and at depths of 2 to 8 ft bgs ranging from 6.0 to 187 ppm, respectively.

Soil samples were collected from each boring location at surface (0-1 ft bgs) and every foot to a total depth of 10 ft bgs for SB-9 through SB-13, 9 ft bgs for SB-14 and 15, and 4 ft bgs for SB-16 and 17. A total of 49 samples were collected in clean, laboratory-supplied glass jars, labeled, placed in an ice-chilled cooler, and were shipped by Fed-Ex priority overnight to Eurofins TestAmerica analytical laboratory under chain-of-custody protocol. Soil samples collected from each boring were analyzed for the following:

- Chloride by USEPA Method 300
- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by USEPA Method 8260
- Total petroleum hydrocarbons (TPH) – diesel range organics (DRO), oil range organics (ORO), and gasoline range organics (GRO) by Method SW8015B

Soil Sample Results

The analytical data from the soil samples collected in November 2020 were compared to the closure criteria (CC) outlined in Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC) concerning natural resources and wildlife, oil and gas, and releases which became effective on August 14, 2018. The analytical results for the soil assessment samples are summarized below:

- BTEX concentrations were reported below the NMAC standard of 50 milligrams per kilogram (mg/Kg) at all sample locations
- The 2019 NMAC CC for total TPH compound (summation of ORO, GRO, and DRO) concentrations is 100 mg/kg for a site with groundwater less than 50 feet bgs. TPH concentrations exceeded the NMAC standard of 100 mg/kg in:
    - All seven (7) sample locations at SB-14
        - 0 – 1 ft bgs: 1,150 mg/kg
        - 1 – 2 ft bgs: 1,330 mg/kg
        - 2 – 3 ft bgs: 1,120 mg/kg
        - 3 – 4 ft bgs: 2,510 mg/kg

        - 5 – 6 ft bgs: 5,110 mg/kg
        - 7 – 8 ft bgs: 5,970 mg/kg
        - 8 – 9 ft bgs: 809 mg/kg
    - Five (5) locations at SB-15
        - 0 – 1 ft bgs: 190 mg/kg
        - 1 – 2 ft bgs: 117 mg/kg
        - 2 – 3 ft bgs: 1,770 mg/kg
        - 3 – 4 ft bgs: 998 mg/kg
        - 7 – 8 ft bgs: 139 mg/kg
- Chloride concentrations exceeded the NMAC standard of 600 mg/Kg in;
    - All seven (7) sample locations at SB-9
        - 0 – 1 ft bgs: 1,360 mg/kg
        - 1 – 2 ft bgs: 4,210 mg/kg
        - 2 – 3 ft bgs: 2,070 mg/kg
        - 3 – 4 ft bgs: 1,460 mg/kg
        - 5 – 6 ft bgs: 2,760 mg/kg
        - 7 – 8 ft bgs: 1,390 mg/kg
        - 9 – 10 ft bgs: 1,690 mg/kg
    - Six (6) sample locations in SB-11
        - 0 – 1 ft bgs: 715 mg/kg
        - 1 – 2 ft bgs: 789 mg/kg
        - 3 – 4 ft bgs: 2,300 mg/kg
        - 5 – 6 ft bgs: 2,480 mg/kg
        - 7 – 8 ft bgs: 1,090 mg/kg
        - 9 – 10 ft bgs: 917 mg/kg
    - Five (5) sample locations in SB-12
        - 0 – 1 ft bgs: 7,660 mg/kg
        - 1 – 2 ft bgs: 7,850 mg/kg
        - 2 – 3 ft bgs: 2,010 mg/kg
        - 3 – 4 ft bgs: 936 mg/kg
        - 5 – 6 ft bgs: 3,990 mg/kg
    - Three (3) sample locations in SB-16
        - 0 – 1 ft bgs: 1,230 mg/kg
        - 1 – 2 ft bgs: 863 mg/kg
        - 2 – 3 ft bgs: 803 mg/kg
    - All four (4) sample locations in SB-17
        - 0 – 1 ft bgs: 1,240 mg/kg
        - 1 – 2 ft bgs: 602 mg/kg
        - 2 – 3 ft bgs: 1,820 mg/kg
        - 3 – 4 ft bgs: 942 mg/kg

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General Information
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https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 395106
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2024 Assessment Activities Work Plan for Federal 4 Com #001: Content is satisfactory is hereby approved with the following condition: 1 As groundwater has been confirmed to be impacted at this site, please collect soil samples at every foot to a depth of 14 feet; depth to groundwater is approximately 14 feet from surface. 2. Install eight (8) soil borings as proposed at locations, with the additional four feet to groundwater. 3 Submit soil samples for BTEX, TPH and chloride analyses. 4. Please submit the work plan results to OCD within sixty (60) days from the receipt of this approval.	1/14/2025