From: Hall, Brittany, EMNRD
To: Barnhill, Amy
Subject: RE: [EXTERNAL] Amoco Federal 11 CTB - Post-Excavation Sampling Plan
Date: Thursday, December 19, 2024 8:01:00 AM

Good morning Amy,

The sampling plan is approved. A copy of the sampling plan and this email thread will be uploaded to the incident file. The new due date for a complete and accurate report (either a complete remediation closure report or remediation plan, which ever is applicable), is due by 2/28/2025.

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

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Barnhill, Amy <ABarnhill@chevron.com>
Sent: Wednesday, December 18, 2024 9:12 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Subject: [EXTERNAL] Amoco Federal 11 CTB - Post-Excavation Sampling Plan

Hello Brittany,

Please find attached the finalized *Amoco Federal 11 CTB Post-Excavation Sampling Plan* for approval by the OCD. The final plan addresses the OCDs comments on the draft plan as discussed during our call with the OCD on 12/13/24.

We are hoping to get the drilling permit requests submitted to the State before the holidays pending getting BLM approval back in time.

Let me know if you need anything else.

Thank you,
Amy Barnhill
Environmental Specialist 2
Tel +1 432 687 7108
Mobile +1 432 940 8524
ABarnhill@chevron.com

Mid-Continent Business Unit
Chevron North America Exploration and Production Company

AECOM

Post-Excavation Sampling Plan

Amoco Federal 11 CTB
New Mexico Oil Conservation Division (NMOCD)
Incident ID No. nAPP2216547154

Prepared for:
Chevron Mid-Continent Business Unit (MCBU)

Prepared by:
AECOM Technical Services, Inc.
13355 Noel Road, Suite 400
Dallas, TX 75240

December 18, 2024

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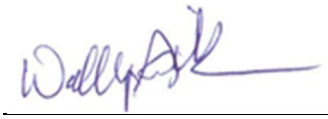
Quality information

Prepared by	Reviewed by	Approved by
		
Brad Wynne, PMP Project Manger	Wally Gilmore, PG Senior Geologist	Marc McConnell, PhD Program Manager

Revision History

Revision	Revision date	Details	Authorized	Name	Position

Distribution List

# Hard Copies	PDF Required	Association / Company Name
-	1	Chevron

Prepared for:

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1. Introduction

On behalf of Chevron Mid-Continent Business Unit (MCBU), AECOM Technical Services, Inc. (AECOM) has prepared this *Post-Excavation Sampling Plan* to present the proposed sampling plan subsequent to the remediation excavation activities conducted from July through September 2024. The remedial activities were conducted to address soil impacts resulting from a produced water release that occurred at the Amoco Federal 11 Central Tank Battery (CTB) spill site in Eddy County, New Mexico (the "Site") in June 2022, as well as other historical impacts that were encountered during delineation of the June 2022 release.

An initial closure report, documenting the remedial excavation activities and confirmation sampling, was submitted to the New Mexico Oil Conservation Division (OCD) on September 30, 2024. The OCD subsequently rejected the *Application for administrative approval of a release notification and corrective action* (C-141) on October 2, 2024, and based on comments received, additional post-excavation sampling is needed to satisfy the requirements of the OCD. A copy of the OCD rejection email is provided in **Appendix A**.

2. Site Setting and Background

The Site is located at Latitude 32.31808478° North, Longitude 104.05284149° West, in Eddy County, New Mexico (**Figure 1**). Site features include a caliche pad, product flow lines, electrical service lines, and an active tank battery and heater-treater battery along the western and southern portions of the pad, respectively. A former oil well with pump jack was located in the central portion of the pad and was plugged and abandoned between late May and mid July 2024. The Site is located on U.S. Bureau of Land Management (BLM) land.

Operations near the Site are for oil and gas exploration, development, production, and storage. The Site is surrounded by other active and inactive well pads to the north, south, east, and west. The Pecos River is located approximately 940 feet west of the western edge of the well pad. New Mexico Salt and Minerals Corporation is located approximately 1.5 miles to the southeast of the Site. No sensitive environmental and/or ecological receptors were identified within the search criteria distances described in 19.15.29.11 and 19.15.29.12.C.(4) New Mexico Administrative Code (NMAC).

2.1 Initial Hydrocarbon Release

On June 3, 2022, a release was discovered at the Site, which included approximately 1.6 barrels (bbls) of crude oil and 4.7 bbls of produced water. The release was reported to have occurred when a two-phase liquid sump became plugged and prevented flow, causing the vessel to overflow. One bbl of crude oil was reported to have been recovered from the release area.

A Release Notification C-141 Form, dated June 14, 2022, was submitted to the NMOCD. The C-141 Form documents the responsible party, location of the release source, nature, and volume of the release, and initial response to the release. The NMOCD assigned Incident ID # nAPP2216547154 to the Site release. The original C-141 Form is provided in **Appendix A**.

It is noted that the above reported release was considered a minor release (<25 bbls) with a relatively small footprint. Based on the chloride delineation sampling results and age of the well pad, it is evident that historical impacts, which occurred prior to Chevron's purchase of this asset, were encountered while attempting to delineate the 2022 release.

2.2 Soil Assessment and Delineation History

The following soil assessment and delineation activities have been conducted at the Site:

- On **August 23, 2022**, initial soil assessment activities were conducted at the Site, which included drilling and sampling of ten hand auger borings (B-1 through B-10) to depths of 3 to 4 feet bgs. Soil samples were collected at 1-foot intervals from each of the borings and field-screened using a photoionization detector (PID) to measure volatile organic vapor concentrations. Soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8021B, total petroleum hydrocarbons (TPH) by EPA Method 8015 NM, and chloride by EPA Method 300.0.
- In **November 2022**, soil delineation samples were collected from ten borings (DB-1 through DB-10) that were drilled to depths ranging from 4 to 10 feet bgs using a combination of hand auger and direct-push drilling and sampling equipment. Soil samples from select borings and depth intervals were submitted for laboratory analysis of chloride and TPH using the methods described above.
- In **February 2023**, borings DB-11 through DB-19 were drilled using air rotary drilling equipment and soil samples were collected for additional horizontal and vertical delineation of chloride-impacted soil.
- In **March 2023**, hand auger borings DB-15A through DB-15C and DB-17A through DB-17C were drilled and sampled to depths of 1 to 2 feet bgs for horizontal delineation of elevated chloride concentrations in shallow soil.
- On **April 17, 2024**, six additional horizontal step-out hand auger borings (DB-19A through 19C and DB-20A through 20C) were advanced to 1 to 2 feet bgs, at locations north and northeast of the previous sample locations and estimated footprint of impacted soil.
- On **April 23, 2024**, two additional horizontal step-out sample locations (DB-19D and DB-20D) were sampled off the edge of the Amoco pad to the north and northeast.
- On **May 28-30, 2024**, one additional deeper soil boring (DB-19/MW-1) was advanced to a total depth of 46 feet bgs to confirm the presence/absence of groundwater within the upper 51 feet of soils underlying the Site. Soil samples were collected in DB-19/MW-1 at 2-foot intervals from 10 to 18 feet bgs, and chloride was not reported greater than 600 ppm from at least 16 feet bgs. A temporary monitoring well (MW-1) was installed as a flush-mount well with 2-inch diameter polyvinyl chloride (PVC) casing and factory-slotted screen from 30 to 45 feet bgs. Groundwater was encountered at approximately 33 feet bgs during drilling of the monitoring well borehole. Following installation of the monitoring well, groundwater was observed at approximately 27.5 feet bgs, indicating that the water bearing unit appears to occur under confined conditions. Groundwater samples were not collected from MW-1 as groundwater is separated by at least 15 feet of soil beyond the deepest chloride exceedance, including clay between 22 to 26 and 30 to 33 feet bgs. The monitoring well was subsequently plugged and abandoned on July 17, 2024. The soil boring and well construction log is included in **Appendix B** along with the laboratory analytical report.

The soil assessment and delineation activities were documented in the *Delineation Report and Remediation Plan*, dated August 23, 2023, and the *Revised Delineation Report and Remediation Plan*, dated April 29, 2024. The locations of soil borings advanced at the Site from August 2022 through May 2024 are shown on **Figure 2**, and the analytical results from the delineation sampling events described above are presented on **Figure 3A** (TPH) and **Figure 3B** (Chloride). Benzene and BTEX results were below the regulatory limits for all soil samples analyzed. Soil analytical results were compared to Table I, Closure Criteria for Soils Impacted by a Release provided in 19.15.29.12 NMAC, which includes the following regulatory limits:

Table I Closure Criteria for Soils Impacted by a Release		
Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/L TDS	**Constituent**	**Limit**
≤ 50 feet bgs	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

Based on the presence of groundwater observed in monitoring well MW-1 at approximately 27.5 feet bgs, the applicable closure criteria for the Site are 600 milligrams per kilogram (mg/kg) for chloride and 100 mg/kg for TPH. These limits are also consistent with the requirements specified for the upper four feet of soil under 19.15.29.13.D.(1) NMAC for *RESTORATION, RECLAMATION AND RE-VEGETATION*.

2.3 Soil Remediation/Reclamation

Soil remediation/reclamation activities were initiated at the Site on July 16, 2024, and continued until September 14, 2024. Remediation/reclamation was performed by excavation and offsite disposal of soil containing concentrations above the closure criteria. The soil was excavated to depths ranging from 2.0 to 20 feet bgs, as shown on **Figure 4**. The excavation was advanced until confirmatory sample results were reported below the closure criteria and/or until the excavation could not be further advanced due to the presence of active production equipment (limited deferral request) and one area where the excavation extended vertically to a competent rock layer at approximately 20 ft bgs.

A total of approximately 10,100 cubic yards of excavated soil was transported offsite for disposal, as oil and gas exploration and production (E&P) exempt waste, at the R360 Halfway Facility (NM1-006) located at 6601 Hobbs Hwy US 62/180, Mile Marker 66, Carlsbad, NM. The remedial excavation activities and sample results were presented in the *Site Closure Report and Limited Deferral Request,* dated September 26, 2024.

Based on the rejection response received from the OCD on October 2, 2024, additional post-excavation sampling is needed to satisfy the requirements of the OCD. A copy of the OCD rejection email is provided in **Appendix A**.

The following section presents the proposed post-excavation sampling plan for the OCDs review and approval.

3. Proposed Post-Excavation Sampling Plan

To further evaluate areas of the Site in question, based on OCD comments, additional drilling and sampling is being proposed. **Figure 4A, 4B** and **4C** present the proposed additional locations, and the following **Table A** provides the sample collection and analysis plan.

Table A – Sampling Plan

Sampling ID	Soil Sample Intervals	Soil Analysis	GW Analysis	Rational/Purpose
Locations 1 to 8	Collect samples at 1 ft intervals from below rock layer (~21 ft) to groundwater. Samples will be analyzed in consecutively deeper intervals if analytes exceed the applicable closure criteria.	Chloride, BTEX and TPH.	Pending – one monitoring well will be installed but not sampled unless soil results indicate a need. If field readings indicate impacts not likely, then the OCD will be contacted while on site to confirm if sampling the well is necessary.	Collection of confirmatory samples below rock layer per OCD request since collection of base samples was not possible during excavation activities.
Location 9	Collect composite samples for each five foot vertical interval below 5 ft (5-10, 10-15 and 15-20 ft) as shown on **Figure 4B**	Chloride, BTEX and TPH	None	Collection of a sample to confirm concentrations for deeper portion of wall at CSW-2 per OCD request. If field titrations appear elevated, a step out boring will also be advanced to the east.
Location 10	Collect samples at 1 ft intervals from 0 ft to groundwater or until field titration results decrease. Analyze at 1 ft intervals from 0 to 10 ft bgs and then subsequently deeper pending results for above intervals.	Chloride, BTEX and TPH	None	To confirm vertical delineation below heater treater/separator battery to assist with subsequent cleanup and/or further discussion of cleanup requirements.
Location 11 & 12	Collect samples at 1 ft intervals from 0 ft to 4 ft.	Chloride, BTEX and TPH	None	To better define horizontal delineation within heater treater/separator battery to assist with subsequent cleanup and/or further discussion of cleanup requirements.
Locations 1B and 2B	None	NA	Install one monitoring well in these areas for evaluation of background chloride concentrations and determining groundwater flow direction.	Assess background chloride and total dissolved solids (TDS) concentrations at upgradient locations relative to the site. Analysis of BTEX and TPH will also be conducted.

Location 3B and 4B	None	NA	Install one monitoring well in these areas for evaluation of background chloride concentrations and determining groundwater flow direction.	Assess background chloride and TDS concentrations at cross/downgradient location relative to the site. Analysis of BTEX and TPH will also be conducted. Note, location 4B is pending landowner approval.

In addition to the above proposed sampling table, the following is also provided to further address the OCDs comments:

- **Sample Depth Discrepancies (Eastern Area):** The OCD noted that there were discrepancies between the sample depths listed in the closure report table compared to the total depth excavated within the Eastern Area where the excavation extended down to a rock layer at approximately 20 feet. Following multiple sample depth intervals which continued to exceed the closure criteria for chloride by laboratory analysis for this area (as presented in the closure report table), several deeper samples were collected for field titration testing and which still appeared elevated. As such, rather than collecting additional lab samples and the associated delays awaiting results, this section was excavated down to the rock layer with the intention of removing any remaining impacted soil above the rock layer. The field titration data that was recorded for this area during the excavation activities are presented in **Appendix C**.
- **Facility Deferral Request Review – Heater Treater/Separator Battery:** Further to the discussion related to the deferral request for the active separator/heater treater battery, and regarding the question of potential decommissioning of this pad, it has since been confirmed with Chevron operations that the Amoco pad and related infrastructure will not be decommissioned in the foreseeable future. As such, the above proposed **Locations 10, 11 and 12** will be advanced to further confirm vertical and horizontal delineation below/within the battery and for use in further discussion and for determining the planned approach to address remaining impacts within/under the battery. In additional, **while on site for the drilling/sampling, a vacuum truck will be utilized to remove approximately the upper six inches impacted soil within the battery** (i.e. stained areas and/or based on field screening).
- **Facility Deferral Request Review – Enterprise Assets and Electrical Line:** Enterprise will be contacted to determine their desired approach to addressing the remaining impacts below their meters and lines to the east of the battery. A further update will be provided to the OCD upon communications with Enterprise. It is noted that a vacuum truck was utilized along the electrical line and southern (underground) portion of the Enterprise line to daylight and remove impacted soil above these line locations. It is anticipated that only a small amount of soil remains below these lines.

3.1.1 Drilling and Sampling Methodology

Soil borings will be advanced through underlying caliche and rock layers using a sonic drill rig in order to obtain continuous samples that can be used to prepare detailed logs of the geological strata underlying the Site. Prior to drilling, a utility clearance request will be submitted through the New Mexico One-Call service for the proposed drilling locations, and a Chevron Dig Plan Permit will be completed and signed by a Chevron representative. In addition, the soil boring locations will be cleared by a third-party utility/pipeline locate company using ground penetrating radar. A hand auger will be used to advance the boring location to depths of 5 ft bgs or to the depth of hand auger refusal (anticipated to be 3 to 5 ft bgs) to clear each boring for subsurface obstructions. Below the depth of hand auger refusal, sonic drilling equipment will

then be used for to advance the borings and produce a continuous soil core for logging the lithology present beneath the Site.

Soil samples will be collected at the intervals described above and will be field screened with a PID for each sample interval. Soil sample intervals will be logged and recorded by an AECOM Geologist to identify soil type, depth to groundwater and any visual signs of impacts. A chloride field titration kit will also be used to field screen a portion of each sample to assist with evaluating relative chloride concentrations.

Selected soil samples (as per the above **Table A**) from the borings will be transferred into clean, laboratory-provided sample containers, which will be labeled and placed on ice in laboratory-provided coolers. Chain of Custody forms will be completed, and the samples will be transported to Eurofins Laboratories (Eurofins) in Midland, TX, a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory. Eurofins will analyze the samples for chloride by U.S. Environmental Protection Agency (EPA) Method 300; BTEX by EPA Method 8021B and TPH by Method 8015 NM.

Prior to initiation of field activities, an *Application for Permit to Drill a Well with No Consumptive Use* (Form WR-07) will be submitted to the New Mexico Office of the State Engineer (NMOSE) for each boring location (since extending >29 ft and to groundwater) and for groundwater monitoring wells.

In addition, and prior to the OSE permit requests, a notification of intent will be submitted to the BLM for sundry approval to include with the OSE permit requests.

Background monitoring wells will be installed to the bottom of the borehole and constructed of two-inch diameter, flush-joint, Schedule 40, polyvinyl chloride (PVC) riser and 0.010-inch factory-slotted PVC well screen. Borings will be drilled until the first groundwater bearing unit (GWBU) is encountered and then extended into the groundwater for installation of monitoring wells. Based on previous drilling at the site, it is anticipated that groundwater will be encountered between 30 to 40 feet bgs, therefore the borings will be advanced to between 40 and 50 ft bgs. Well screens will be installed across the groundwater table and well screens will be at least 10 to 15 feet in length. Each monitoring well will then be completed by installing a sand filter pack within the borehole annulus, from the bottom of the borehole to two feet above the screened interval, followed by a bentonite chip seal to within two feet the ground surface, and completed with concrete to ground surface and a concreate pad. The monitoring wells will be completed as either flush-mount or stick-up casing wells depending on the location.

Following installation (and at least 24 hours after installation), each of the wells will be developed by a combination of surging and pumping using a down-hole pump, to remove suspended sediments and enhance communication with the water-bearing zone. The pump will be decontaminated between each well using distilled water and Aloconox© soap. At least three well volumes will be removed from each well and/or until groundwater clarity improves. Water levels and total well depths will be gauged with an electronic water level meter to the nearest 0.01 foot. The location, ground surface elevation, and top of PVC casing elevation of each well will be surveyed by a professional surveyor licensed in NM, in order to obtain groundwater elevations and confirm groundwater flow direction.

Following adequate well development, each monitoring well will be sampled using low-flow sampling techniques. The total well depth and water level will be gauged in each well prior to sampling and recorded. After gauging, each monitoring well will be purged using low-flow sampling techniques (pumping rate between 0.1 to 0.25 gallon per minute) and at a rate which minimizes drawdown to confirm hydraulic connection to the formation groundwater. A downhole pump (i.e., monsoon or bladder pump) and dedicated tubing will be utilized for purging and sampling each monitoring well, with the water intake positioned at approximately the mid-point of the well screen and/or water column. The pump will be decontaminated between each well using distilled water and Aloconox© soap. Groundwater samples will be collected after the field parameters (temperature, pH, conductivity, dissolved oxygen [DO], and oxidation-reduction potential [ORP]) have stabilized. The field parameters will be measured with a flow-through cell and a calibrated YSI™ multi-parameter meter and recorded. Once purging is completed, the tubing will be disconnected from the flow-through cell, and the groundwater samples will be collected directly into laboratory-supplied containers.

The samples will be immediately placed on ice in laboratory-supplied coolers and transported by AECOM personnel directly to the laboratory under chain of custody procedures. Samples will be collected for analysis of chloride, TDS, BTEX and TPH by NM Methods.

Soil cuttings/cores from drilling, decontamination water and development/purge water from monitoring wells, will be placed in 55-gallon drums, labelled and staged on site for later disposal at an approved disposal facility.

4. Variance Requests

As per the variance requirements of 19.15.29.14A NMAC, Chevron is requesting a variance for additional sampling of BTEX and TPH based on the following.

As per the approved remediation plan, it is noted that all initial confirmation samples were to be analyzed for chlorides as well TPH and BTEX. During confirmation sampling, all initial confirmation sample location were analyzed for all three analytes. If any of the three analytes exceeded the closure criteria, then additional soil was removed and another confirmation sample was collected but only for the analyte(s) which exceeded, since the other analyte(s) were/was ruled out based on the initial confirmation sample results. The only exceptions to this were a number of locations where BTEX and TPH were missed on the initial sample. A total of **135** initial confirmation sample locations were collected and analyzed for chloride and of which **126** were also analyzed for BTEX and TPH.

Throughout the excavation, there were no obvious indications of hydrocarbon impacts (no odors or staining) and PID readings were low, with a maximum of **2.4 ppm** out of **139** recorded readings. As such, the field crew inadvertently missed marking BTEX and TPH on the laboratory sample chain of custody forms for **16 samples**, as the primarily constituent of concern (COC) for the site is chloride and again since there were no indications of hydrocarbon impacts. The PID readings recorded during collection of samples have been added next to the associated sample on the attached confirmation sample analytical results table (**Table 1**).

The absence of BTEX in soil is further evidenced based on the sample data collected during both the assessment stage and the excavation activities. **BTEX**, with the exception of one very low detection of xylenes in a single sample, has not been reported above the detection limit in any other sample collected and analyzed to date (total of **137** samples). For **TPH**, only two samples out of **126** confirmation samples, were reported with relatively low concentrations, but above the closure criteria of 100 mg/kg at 118 and 244 mg/kg. Both of these locations were further excavated and resampled for TPH until reported concentrations were below the closure criteria. These sample locations were also located at the southern area of the excavation, closer to the separator battery. During the assessment stage, TPH was also limited to immediately adjacent or within the battery and with an overall maximum reported concentration of 1,060 mg/kg.

Based on the field observations and analytical data, chloride is considered the primarily COC associated with the site. As such, Chevron is respectively asking for a variance for the requirement to resample previously sampled locations which were missed for BTEX and TPH during the excavation activities.

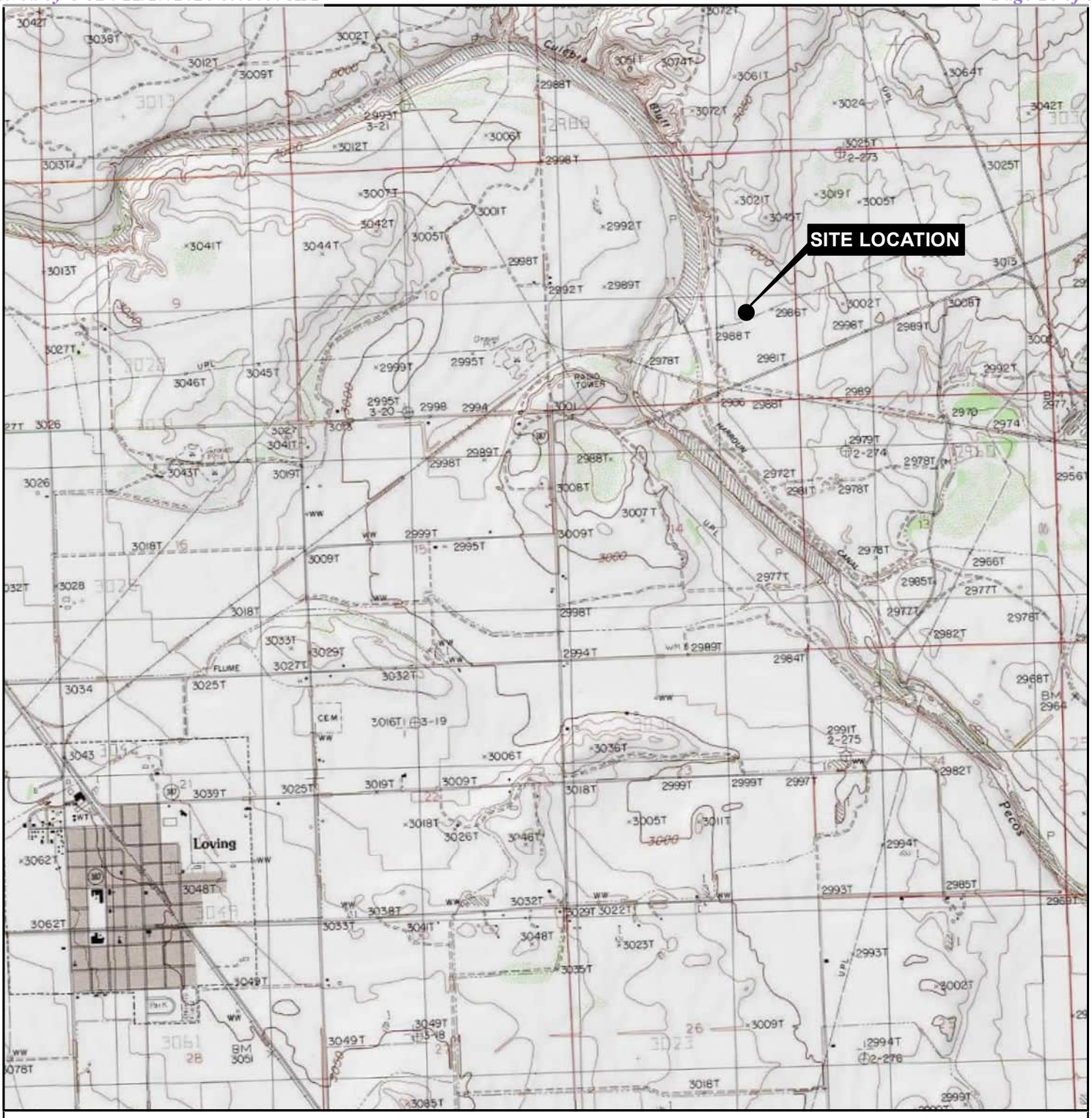
5. Schedule and Path Forward

Following approval by the OCD of the proposed sampling plan, the drilling will be scheduled ASAP following receipt of the approved drilling permits from the NMOSE and pending drilling contractor availability. Assuming receipt of drilling permits by the second or third week of January, it is anticipated that drilling can commence the week of **January 20, 2025**. Following receipt of analytical results, an

update with a summary of findings and recommended next steps will be provided to the OCD by the **last week in February 2025**.

Pending the results of the sampling, an additional sampling and/or work plan will be provided to the OCD for approval and additional excavation activities will be scheduled as needed.

Figures



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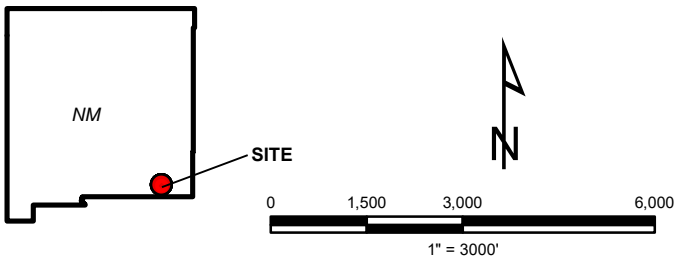

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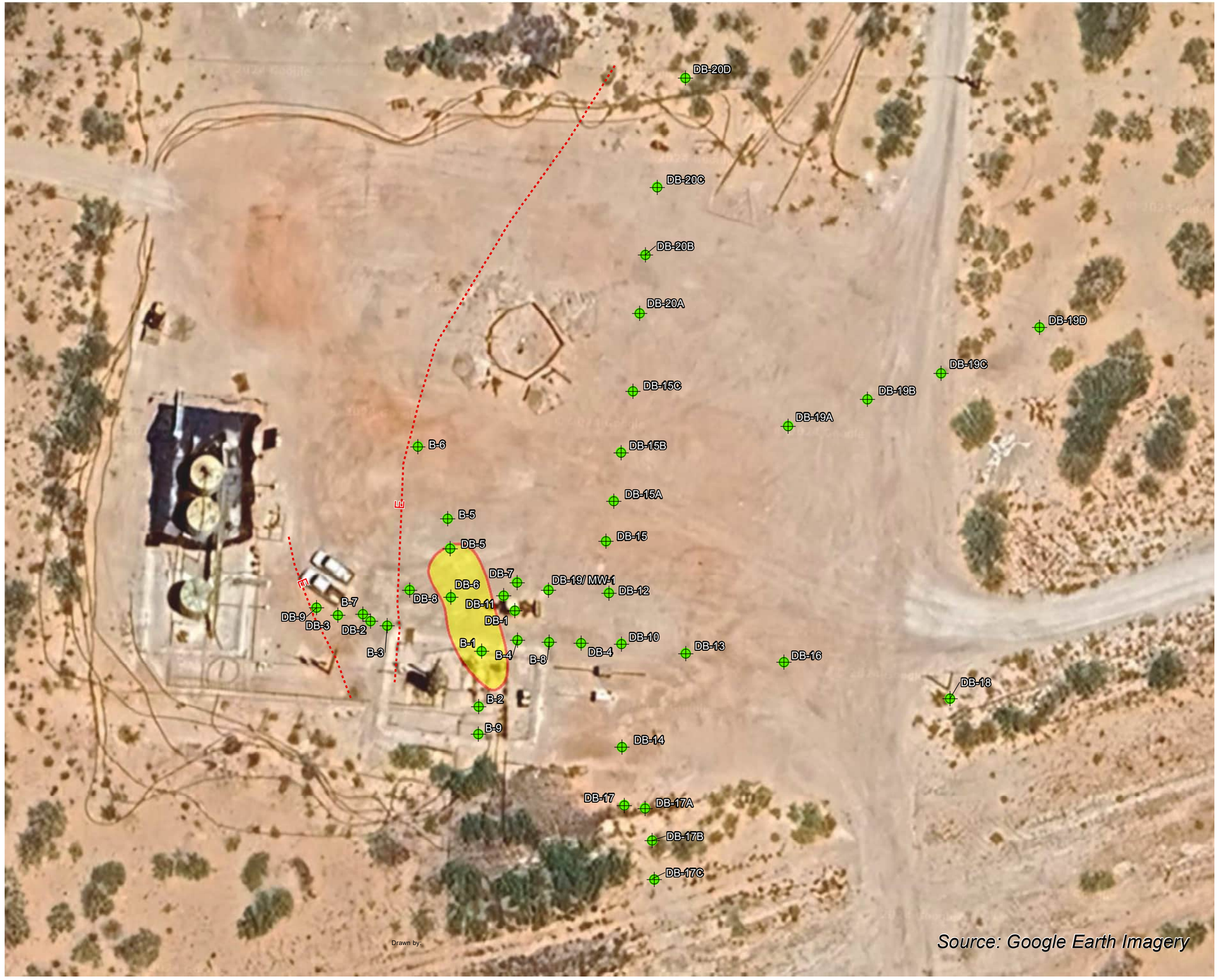
AMOCO FED 11 CTB

SITE LOCATION MAP

EDDY COUNTY, NEW MEXICO
PROJECT NO.: 60689116 DATE: 09/20/2022

AECOM

Figure: 1



N

Legend

- Aproximate Extent of Release Area
- Electric Line
- Soil Boring

Note:
All utility locations are approximate

0 45 90

Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

Project Number : 60689116

Sample Locations Map

GIS File: Figure 2.mxd

Drawn by:	Date:	Figure:
POC	9/16/2024	2

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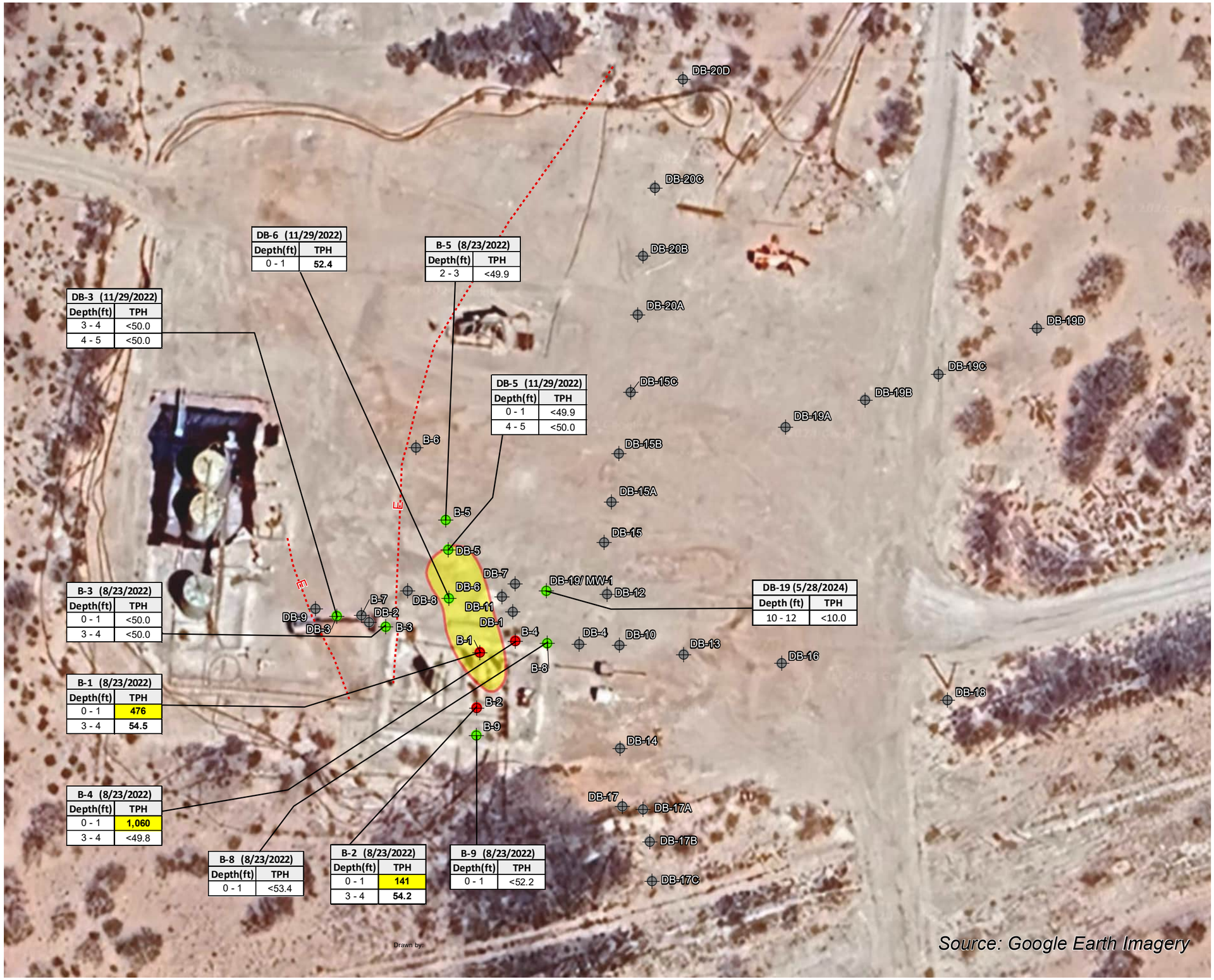

Legend

- Aproximate Extent of Release Area
- Electric Line
- Soil Boring with no exceedances
- Soil Boring with exceedance
- Soil Boring not sampled/analyzed

N

Notes

1. Units for all analytical data provided are mg/Kg (milligrams per kilogram).
2. Depth (ft) - feet below ground surface.
3. Results below the laboratory Sample Detection Limit (SDL) are preceded by "<".
4. **Bold** values represent detectable concentrations above the SDLs.
5. **Bold and Shaded** - Reported concentration exceeds NMAC Regulatory Limits.

Regulatory Limits:
TPH = 100 mg/kg

0 45 90
Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

Project Number : 60689116

TPH Soil Sample Analytical Results Map

GIS File: Figure 3A.mxd

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POC	09/26/2024	3A

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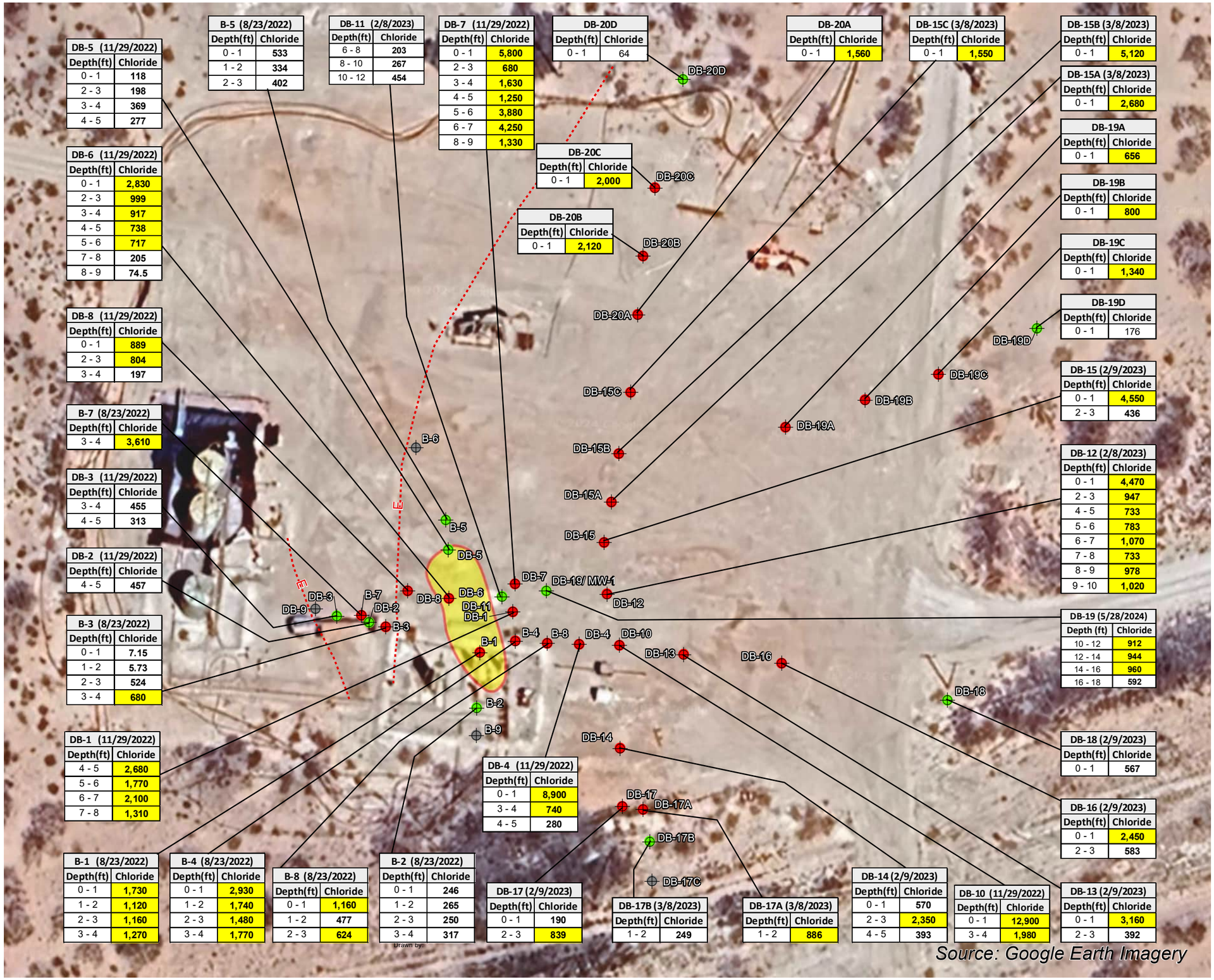


Legend

- Aproximate Extent of Release Area
- Electric Line
- Soil Boring with no exceedances
- Soil Boring with exceedance
- Soil Boring not sampled/analyzed

N

Notes

1. Units for all analytical data provided are mg/Kg (milligrams per kilogram).
2. Depth (ft) - feet below ground surface.
3. Results below the laboratory Sample Detection Limit (SDL) are preceded by "<".
4. **Bold** values represent detectable concentrations above the SDLs.
5. **Bold and Shaded** - Reported concentration exceeds NMAC Regulatory Limits.

Regulatory Limits:
Chloride = 600 mg/kg

0 45 90
Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

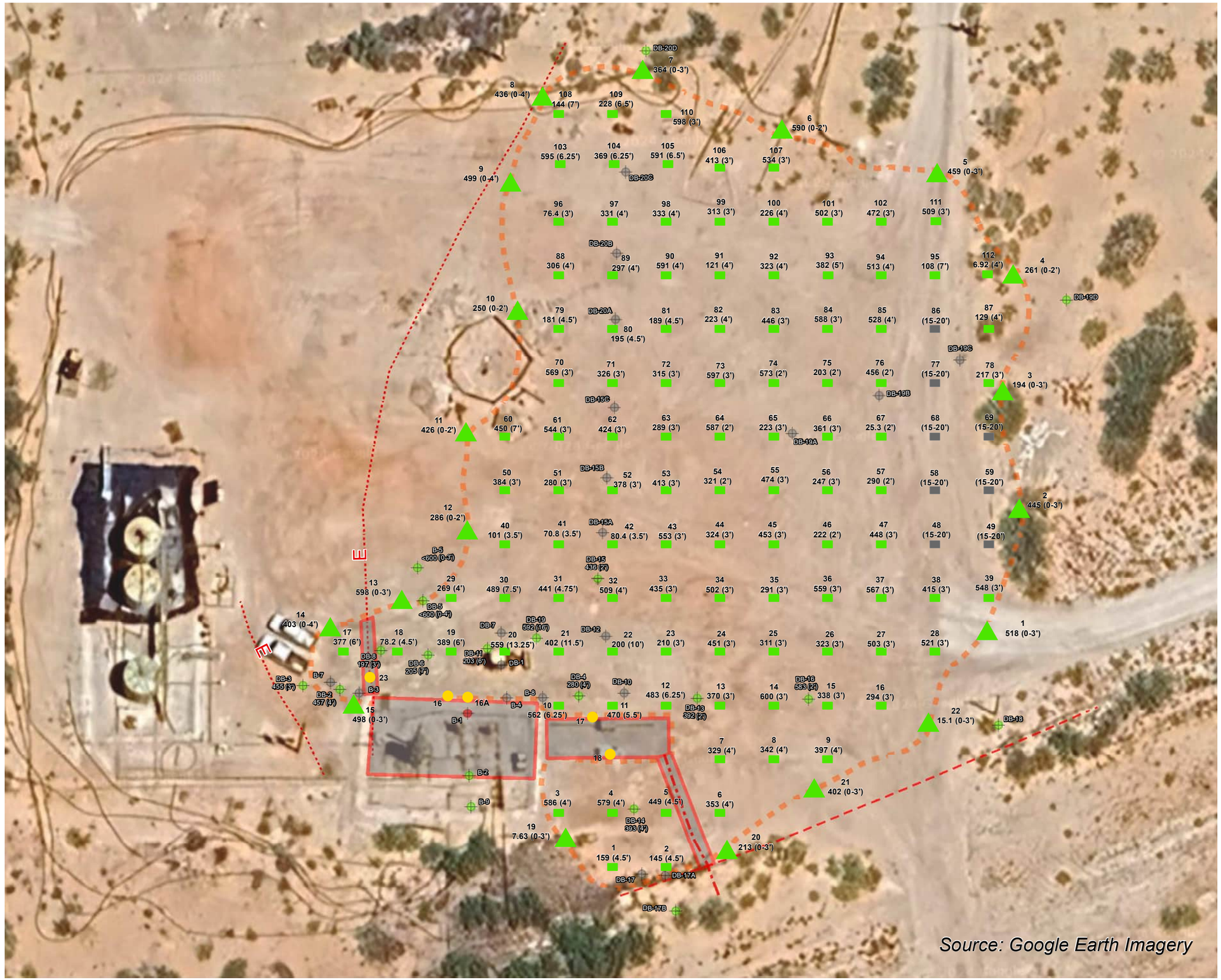
Project Number : 60689116

Chloride Soil Sample Analytical Results Map

GIS File: Figure 3B.mxd

Drawn by:	Date:	Figure:
POC	09/26/2024	3B

Path: C:\Users\Lazar\AECOM\GDS GIS Services - DCS AMERICAS\Chevron\MCBU NM\Workspace\Eddy County\Amoco Site\09 16 2024\Figure 3B.mxd Date: 09/26/2024



Legend

- Proposed Area for Deferral
- Final Excavation Extents
- Electric Line
- Active Chevron Flowline
- Enterprise Lines
- Previous Soil Boring Location with no exceedances
- Previous Soil Boring Location with exceedances (Excavated)
- Previous Soil Boring Location with exceedances (Deferred Area)
- Composite Confirmation Base Samples (every 500 sq ft) with no exceedances
- Soil excavated to competent rock layer – sample not possible
- Composite Confirmation Wall Samples (every 50 ft) with no exceedances
- Deferred Area Sample

111 → Sample ID
509(3') → Average Depth of Sample Grid or Sample Interval
Chloride Concentration

N

0 40 80
Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

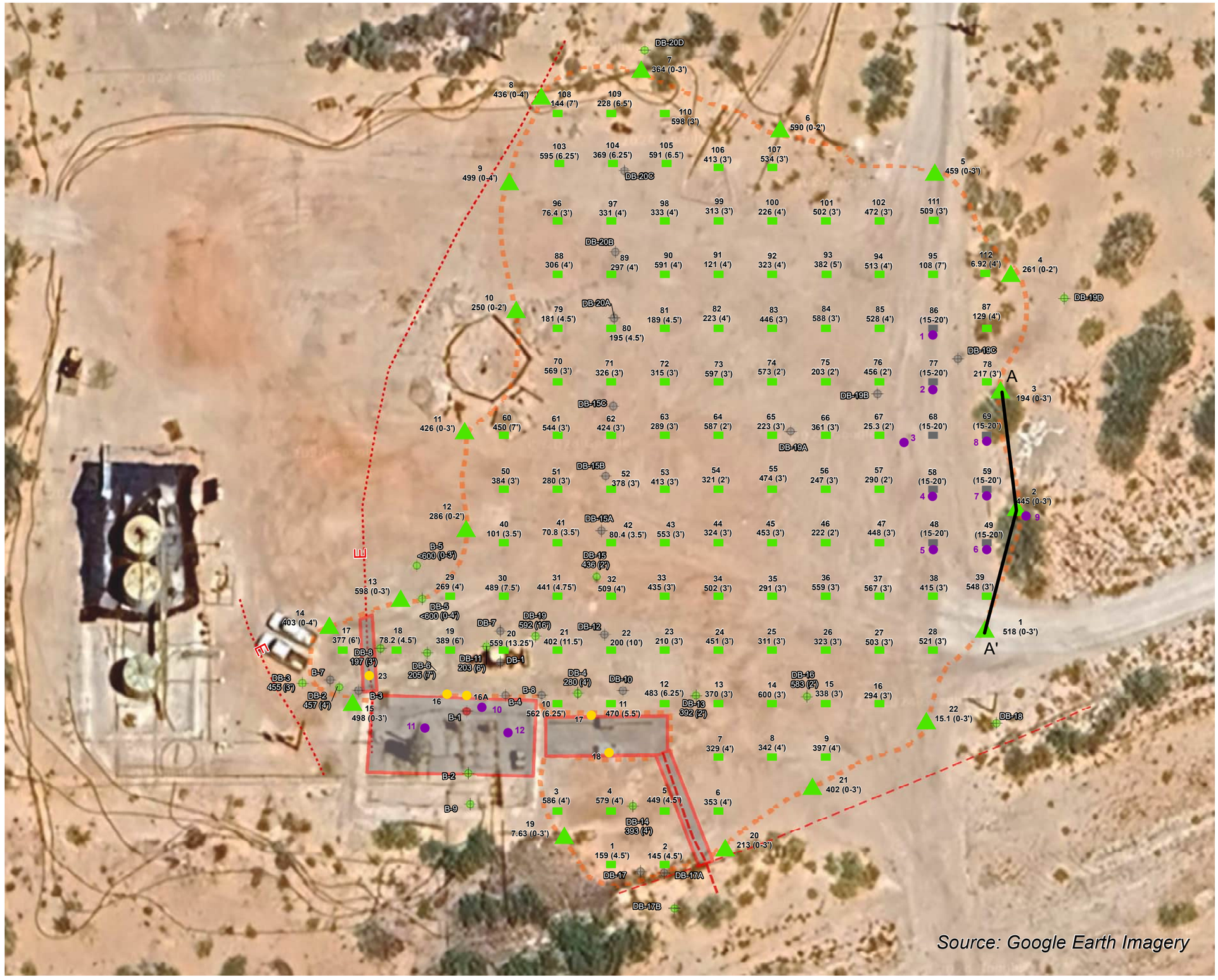
Project Number : 60734207

Final Excavation Extents and Confirmation Sample Results with Chloride Concentrations

GIS File: Figure 5.mxd

Drawn by:	Date:	Figure:
POC	9/18/2024	4

Path: C:\Users\PadureanuO\AECOM\EC GIS Services - DCS AMERICAS\Chevron\MCBU NM\Workspace\Eddy County\Amoco Site\09.16.2024\Figure 5.mxd Date: 9/18/2024



Legend

- Proposed Area for Deferral
- Final Excavation Extents
- Electric Line
- Active Chevron Flowline
- Enterprise Lines
- Sidewall Cross-section transect
- Previous Soil Boring Location with no exceedances
- Previous Soil Boring Location with exceedances (Excavated)
- Previous Soil Boring Location with exceedances (Deferred Area)
- Composite Confirmation Base Samples (every 500 sq ft) with no exceedances
- Soil excavated to competent rock layer – sample not possible
- Composite Confirmation Wall Samples (every 50 ft) with no exceedances
- Deferred Area Sample
- Proposed Borehole Drilling/ Sampling Locations
- 111 → Sample ID
- 509(3') → Average Depth of Sample Grid or Sample Interval
- Chloride Concentration

N

0 40 80

Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

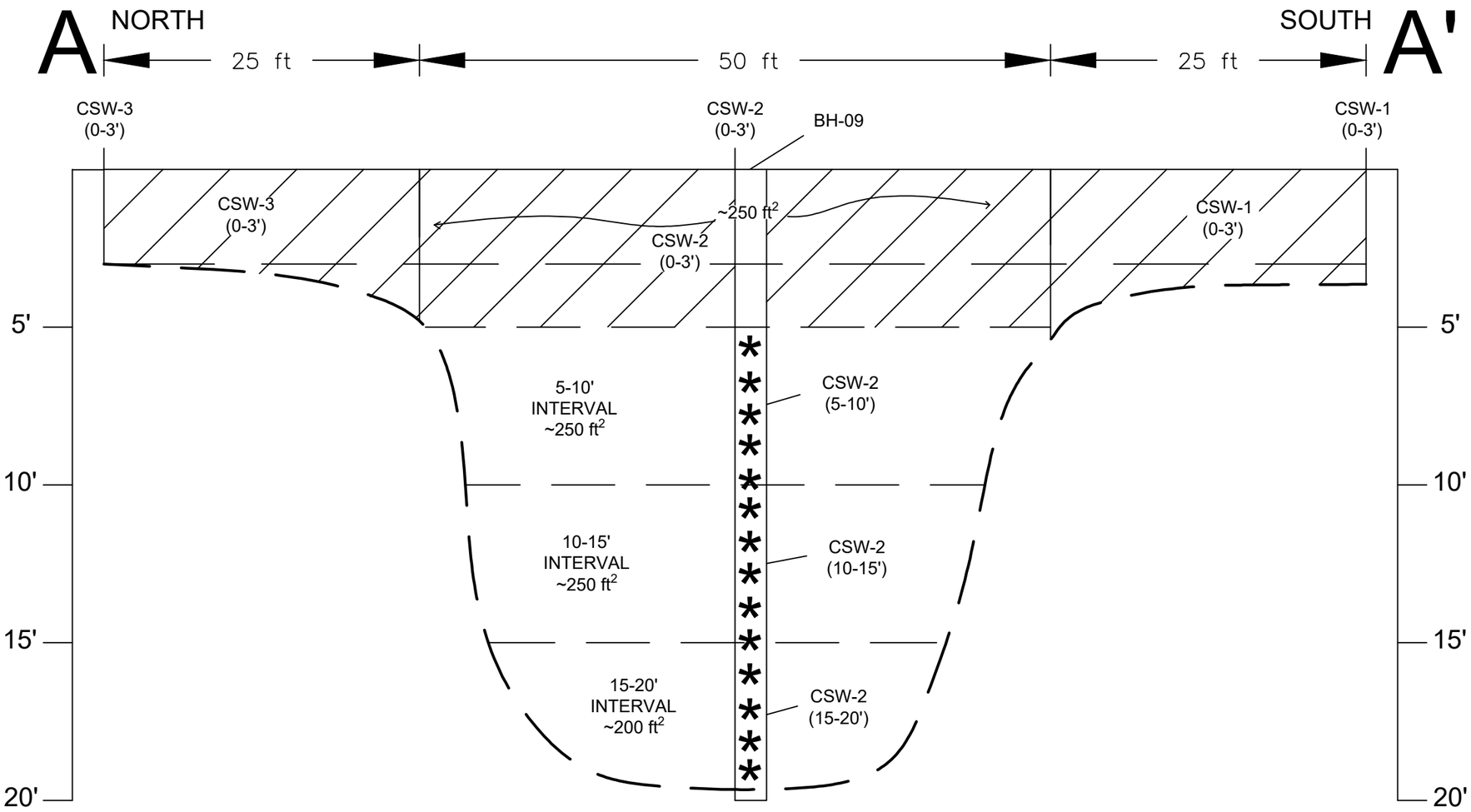
Project Number : 60734207

Proposed Post-Excavation Sampling Plan Location Map

GIS File: Figure 5.mxd

Drawn by:	Date:	Figure:
POC	12/17/2024	5

Path: C:\Users\PadureanuO\AECOM\EC GIS Services - DCS AMERICAS\Chevron\MCBU NM\Workspace\Eddy County\Amoco Site\10.21.2024\Figure 5.mxd Date: 12/17/2024



Legend

BH-09

PROPOSED BOREHOLE (SONIC CORE)

APPROXIMATE SIDE WALL BASE DEPTH

REPRESENTS APPROXIMATE ALIQUOT LOCATIONS FOR 5-POINT COMPOSITE SAMPLE

PREVIOUSLY SAMPLED/CLEARED AREA

0 12.5'
0
5'

AECOM

AMOCO FEDERAL 11 CTB
EDDY COUNTY, NEW MEXICO

Title: **EASTERN WALL CROSS-SECTION VIEW**

Client: **Chevron Environmental Management Company**

Scale:	Drawn by:	Date:	Project No.:	Filename:	Figure:
As Shown	PG	12/17/2024	60734207	Cross_Section AA.dwg	4B
	Chk'd by: BW	Date: 12/17/2024			

C:\Users\Padream\O:\AECOM\EC GIS Services - DCS AMERICAS\Chevron\MCBU NM\Workspace\Eddy County\Amoco Stot\Cross-Sections\Cross_Section AA.dwg

Legend

- Proposed Area for Deferral
- Final Excavation Extents
- Electric Line
- Active Chevron Flowline
- Enterprise Lines
- Proposed Background Sample Locations
- Townships
- Sections
- Administrative Unit Boundary

BLM NM Surface Ownership

- Bureau of Land Management

N

0 350 700

Scale in Feet

AECOM

Amoco Federal 11 CTB
Eddy County, New Mexico

Project Number : 60734207

Proposed Background Sample Location Map

GIS File: Figure 4B.mxd

Drawn by:	Date:	Figure:
POC	12/5/2024	4C

Path: C:\Users\PadureanuO\AECOM\EG GIS Services - DCS AMERICAS\Chevron\MCBU NM\Workspace\Eddy County\Amoco Site\10.21.2024\Figure 4B.mxd Date: 12/5/2024

Tables

Table 1
Confirmation Soil Analytical Results (BTEX, TPH, Chloride)
Chevron MCBU - Amoco Federal 11 CTB Spill Site
Eddy County, New Mexico

AECOM

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Total Petroleum Hydrocarbons (SW846 Method 8015 NM)				Volatile Organic Compounds (SW846 Method 8021B)					Chloride (Method EPA 300.0 Anions by Ion Chromatography)	PID (ppm)
				GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C36)	Total TPH GRO+DRO+MRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX		
NMAC Regulatory Limits (Groundwater <50 ft bgs)			0 - 4 ft bgs	--	--	--	100	10	--	--	--	50	600	--
			> 4 ft bgs	--	--	--	100	10	--	--	--	50	600	--
Confirmation Base Samples														
CSB-001	CSB-001-4.0-20240822	8/22/2024	4.0	<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**670**	**2.2**
	CSB-001-4.5-20240826	8/26/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**159**	NM
CSB-002	CSB-002-4.0-20240822	8/22/2024	4.0	<14.5	<15.1 *+	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**858**	**2.0**
	CSB-002-4.5-20240826	8/26/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**145**	NM
CSB-003	CSB-003-4.0-20240815	8/15/2024	4.0	<14.6	<15.2	<15.2	<15.2	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**586 F1**	NM
CSB-004	CSB-004-4.0-20240815	8/15/2024	4.0	<14.6	<15.3	<15.3	<15.3	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**579**	NM
CSB-005	CSB-005-4.0-20240821	8/21/2024	4.0	<14.5	**17.8 J**	<15.1	**17.8 J**	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**767**	NM
	CSB-005-4.5-20240823	8/23/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**449**	NM
CSB-006	CSB-006-4.0-20240822	8/22/2024	4	<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**353**	**1.5**
CSB-007	CSB-007-4.0-20240822	8/22/2024	4	<14.5	**15.2 J**	<15.1	**15.2 J**	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**329**	**1.4**
CSB-008	CSB-008-4.0-20240822	8/22/2024	4	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**342**	**1.7**
CSB-009	CSB-009-4.0-20240822	8/22/2024	4	<14.4	<15.0	<15.0	<15.0	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**397**	**2.0**
CSB-010	CSB-010-4.0-20240813	8/13/2024	4.0	<14.4	**49.0 J**	<15.0	**49.0 J**	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**601**	NM
	CSB-010-5.5-20240816	8/16/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,300**	NM
	CSB-010-6.0-20240820	8/20/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**684**	NM
	CSB-010-6.25-20240822	8/22/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**562**	NM
CSB-011	CSB-011-4.0-20240813	8/13/2024	4.0	<14.4	**18.8 J**	<15.0	**18.8 J**	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**1,530**	NM
	CSB-011-5.0-20240814	8/14/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,020**	NM
	CSB-011-5.5-20240816	8/16/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**470**	NM
CSB-012	CSB-012-3.0-20240813	8/13/2024	3.0	<14.6	**40.4 J**	<15.2	**40.4 J**	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**1,520**	NM
	CSB-012-4.0-20240814	8/14/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,130**	NM
	CSB-012-5.5-20240816	8/16/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,110**	NM
	CSB-012-6.0-20240820	8/20/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**613**	NM
	CSB-012-6.25-20240822	8/22/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**483**	NM
CSB-013	CSB-013-3.0-20240813	8/13/2024	3.0	<14.6	**49.5 J**	<15.3	**49.5 J**	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**370**	NM
CSB-014	CSB-014-3.0-20240822	8/22/2024	3.0	<14.5	<15.1	<15.1	<15.1	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**600**	**1.7**
CSB-015	CSB-015-3.0-20240822	8/22/2024	3.0	<14.4	<15.0	<15.0	<15.0	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**338**	**1.9**
CSB-016	CSB-016-3.0-20240822	8/22/2024	3.0	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**294**	**1.5**
	CSB-016-DUP-3.0			<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**398**	
CSB-017	CSB-017-2.5-20240809	8/9/2024	2.5	<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**922**	**1.6**
	CSB-017-4.0-20240812	8/12/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**795**	NM
	CSB-017-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**377**	NM
CSB-018	CSB-018-4.0-20240806	8/6/2024	4.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	**0.00407**	**0.00407**	**1,010**	NM
	CSB-018-4.5-20240809	8/9/2024	4.5	<14.5	**24.7 J**	<15.1	**24.7 J**	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	**78.2 F1**	**2.1**
CSB-019	CSB-019-6.0-20240806	8/6/2024	6.0	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**389**	NM
CSB-020	CSB-020-10.3-20240809	8/9/2024	10.3	<14.5	**244**	<15.1	**244**	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	**893**	**1.4**
	CSB-020-12.0-20240812	8/12/2024	12.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**3,140**	NM
	CSB-020-13.0-20240814	8/14/2024	13.0	<14.5	**55.5 F1 B**	<15.1	**55.5**	NA	NA	NA	NA	NA	**3,450**	NM
	CSB-020-13.25-20240820	8/20/2024	13.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**559**	NM
CSB-021	CSB-021-10.25-20240809	8/9/2024	10.25	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00202	<0.00110	<0.00230	<0.00230	**1,060**	**0.1**
	CSB-021-11.5-20240812	8/12/2024	11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**402**	NM
CSB-022	CSB-022-10.0-20240808	8/8/2024	10.0	<14.5	**22.6 J**	<15.1	**22.6 J**	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**200**	**0.5**
CSB-023	CSB-023-3.0-20240726	7/26/2024	3.0	<49.7 *1	<49.7 *+*1	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**210**	**1.5**
CSB-024	CSB-024-3.0-20240726	7/26/2024	3.0	<49.7 *1	<49.7 *+*1	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**451**	**1.7**
CSB-025	CSB-025-3.0-20240726	7/26/2024	3.0	<50.0 *1	<50.0 *+*1	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**311**	**2.1**
CSB-026	CSB-026-3.0-20240726	7/26/2024	3.0	<49.8 *1	<49.8 *+*1	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**323**	**0.9**
CSB-027	CSB-027-3.0-20240726	7/26/2024	3.0	<49.8 *1	<49.8 *+*1	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**503**	**1.2**
CSB-028	CSB-028-3.0-20240820	8/20/2024	3.0	<14.4	<15.0 *+	<15.0	<15.0	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**521**	**1.9**
	CSB-028-3.0-20240828	8/28/2024	3.0	<14.4	<15.0	<15.0	<15.0	NA	NA	NA	NA	NA	NA	NM
CSB-029	CSB-029-4.0-20240806	8/6/2024	4.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**269**	NM
CSB-030	CSB-030-4.0-20240806	8/6/2024	4.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**1,060**	NM
	CSB-030-4.75-20240809	8/9/2024	4.75	<14.4	<15.0	<15.0	<15.0	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**631**	NM
	CSB-030-5.5-20240812	8/12/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,610 F1**	NM
	CSB-030-7.0-20240814	8/14/2024	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,850**	NM
	CSB-030-7.25-20240820	8/20/2024	7.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**662**	NM
	CSB-030-7.5-20240822	8/22/2024	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**489**	NM
CSB-031	CSB-031-4.0-20240806	8/6/2024	4.0	<49.9 *1	<49.9 *1	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**602**	NM
	CSB-031-4.75-20240809	8/9/2024	4.75	<14.4	<15.0	<15.0	<15.0	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**441**	NM
CSB-032	CSB-032-4.0-20240808	8/8/2024	4.0	<14.5	**40.0 J**	<15.1	**40.0 J**	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**509**	**1.2**
CSB-033	CSB-033-2.0-20240723	7/23/2024	2.0	<50.1	<50.1	<50.1	<50.1	<0.00199 *+	<0.00199	<0.00199	<0.00398	<0.00398	**1,380**	**0.7**
	CSB-033-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**435**	NM
CSB-034	CSB-034-2.0-20240719	7/19/2024	2.0	<49.7	<49.7 *1	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**929 F1**	**2.4**
	CSB-034-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**502**	NM
CSB-035	CSB-035-2.0-20240719	7/19/2024	2.0	<49.9	<49.9 *1	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**759**	**1.4**
	CSB-035-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**291**	NM
CSB-036	CSB-036-2.0-20240719	7/19/2024	2.0	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**927**	**0.5**
	CSB-036-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**559**	NM
CSB-037	CSB-037-2.0-20240719	7/19/2024	2.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**1,100**	**2.1**
	CSB-037-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**567**	NM
CSB-038	CSB-038-3.0-20240820	8/20/2024	3.0	<14.5	**51.8 B**	<15.1	**51.8**	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	**415**	**1.2**
CSB-039	CSB-039-3.0-20240820	8/20/2024	3.0	<14.5	**27.5 JB**	<15.1	**27.5 J**	<0.00138	<0.00198	<0.00108	<0.00226	<0.00226	**548**	**1.0**
CSB-040	CSB-040-3.5-20240805	8/5/2024	3.5	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**101**	**1.2**
CSB-041	CSB-041-3.0-20240801	8/1/2024	3.0	<49.8	**118**	<49.8	**118**	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**1,130**	NM
	CSB-041-3.5-20240805	8/5/2024	3.5	<49.7	<49.7	<49.7	<49.7	NA	NA	NA	NA	NA	**70.8**	**1.0**
CSB-042	CSB-042-3.5-20240805	8/5/2024	3.5	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**80.4**	**0.9**
CSB-043	CSB-043-2.0-20240723	7/23/2024	2.0	<49.6	<49.6	<49.6	<49.6	<0.00199 *+	<0.00199	<0.00199	<0.00398	<0.00398	**886**	**0.2**
	CSB-043-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**553**	NM
CSB-044	CSB-044-2.0-20240719	7/19/2024	2.0	<50.0	<50.0 *1	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**904**	**0.3**
	CSB-044-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**324**	NM
CSB-045	CSB-045-2.0-20240719	7/19/2024	2.0	<49.9	<49.9 *1	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**909**	**0.8**
	CSB-045-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**453**	NM
CSB-046	CSB-046-2.0-20240719	7/19/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**222**	**1.1**
CSB-047	CSB-047-2.0-20240719	7/19/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**1,260**	**2.0**
	CSB-047-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**448**	NM
CSB-048	CSB-048-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	**725**	**0.9**
	CSB-048-3.5-20240812	8/12/2024	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**952 F1**	NM
	CSB-048-5.0-20240814	8/14/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,020**	NM
	CSB-048-5.25-20240816	8/16/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**659**	NM
	CSB-048-5.5-20240821	8/21/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**744**	NM
CSB-049	CSB-049-3.0-20240731	7/31/2024	3.0	<14.4 *+	<15.0	<15.0	<15.0	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**998**	**1.3**
	CSB-049-3.5-20240812	8/12/2024	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**886**	NM
	CSB-049-5.0-20240814	8/14/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**828**	NM
	CSB-049-5.25-20240816	8/16/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**995**	NM
	CSB-049-5.5-20240821	8/21/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**668**	NM
	CSB-049-10.0-20240823	8/23/2024	10.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**937**	NM
CSB-050	CSB-050-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**384**	**1.7**
CSB-051	CSB-051-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**280**	**1.5**
CSB-052	CSB-052-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**378**	**1.0**
CSB-053	CSB-053-2.0-20240723	7/23/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00200 *+	<0.00200	<0.00200	<0.00399	<0.00399	**978**	**1.4**
	CSB-053-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**413**	NM
CSB-054	CSB-054-2.0-20240719	7/19/2024	2.0	<49.8	<49.8 *1	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**321**	**1.4**
CSB-055	CSB-055-2.0-20240719	7/19/2024	2.0	<49.6	<49.6 F1	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**1,430**	**0.4**
	CSB-055-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**474**	NM
CSB-056	CSB-056-2.0-20240719	7/19/2024	2.0	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	**669**	**1.9**
	CSB-056-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**247**	NM
CSB-057	CSB-057-2.0-20240719	7/19/2024	2.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**290**	**2.1**
CSB-058	CSB-058-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**775**	**1.1**
	CSB-058-DUP-3.0			<14.4 *+	<15.0	<15.0	<15.0	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**990**	
	CSB-058-3.5-20240812	8/12/2024	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**951**	NM
	CSB-058-5.0-20240814	8/14/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,240**	NM
	CSB-058-5.5-20240816	8/16/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**815**	NM
	CSB-058-5.75-20240821	8/21/2024	5.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	**783**	NM
CSB-059	CSB-059-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	**1,010**	**1.0**
	CSB-059-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,130**	NM
	CSB-059-5.5-20240812	8/12/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,440**	NM
	CSB-059-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,190**	NM
	CSB-059-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,120**	NM
	CSB-059-6.5-20240821	8/21/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**644**	NM
	CSB-059-13.0-20240823	8/23/2024	13.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**758**	NM

Table 1
Confirmation Soil Analytical Results (BTEX, TPH, Chloride)
Chevron MCBU - Amoco Federal 11 CTB Spill Site
Eddy County, New Mexico

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Total Petroleum Hydrocarbons (SW846 Method 8015 NM)				Volatile Organic Compounds (SW846 Method 8021B)					Chloride (Method EPA 300.0 Anions by Ion Chromatography)		PID (ppm)
				GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C36)	Total TPH GRO+DRO+MRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX			
NMAC Regulatory Limits (Groundwater <50 ft bgs)			0 - 4 ft bgs	--	--	--	100	10	--	--	--	50	600		--
			> 4 ft bgs	--	--	--	100	10	--	--	--	50	600		--
CSB-060	CSB-060-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,060		0.7
	CSB-060-3.5-20240805	8/5/2024	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,020		0.8
	CSB-060-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	658		0.1
	CSB-060-5.5-20240812	8/12/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	762		NM
	CSB-060-7.0-20240814	8/14/2024	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	450		NM
CSB-061	CSB-061-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	544		1.1
CSB-062	CSB-062-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	424		1.1
CSB-063	CSB-063-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	289		2.1
CSB-064	CSB-064-2.0-20240723	7/23/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	587		1.3
CSB-065	CSB-065-2.0-20240719	7/19/2024	2.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	650		0.8
	CSB-065-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	223		NM
CSB-066	CSB-066-2.0-20240719	7/19/2024	2.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	692		1.4
	CSB-066-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	361		NM
CSB-067	CSB-067-2.0-20240719	7/19/2024	2.0	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	25.3		1.6
CSB-068	CSB-068-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00136	<0.00195	<0.00106	<0.00223	<0.00223	964		0.7
	CSB-068-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	691		NM
	CSB-068-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	739		0.8
	CSB-068-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	988		NM
	CSB-068-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,230		NM
	CSB-068-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,020		NM
	CSB-068-6.5-20240821	8/21/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	923		NM
	CSB-068-14.0-20240823	8/23/2024	14.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	678		NM
CSB-069	CSB-069-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00146	<0.00210	<0.00114	<0.00240	<0.00240	915		0.5
	CSB-069-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	880		NM
	CSB-069-4.5-20240812	8/12/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,250		NM
	CSB-069-5.0-20240814	8/14/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,700	F1	0.9
	CSB-069-5.5-20240816	8/16/2024	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,120		NM
	CSB-069-5.75-20240821	8/21/2024	5.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,010		NM
	CSB-069-15.0-20240823	8/23/2024	15.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	833		NM
CSB-070	CSB-070-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	569		0.9
CSB-071	CSB-071-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	326		1.3
CSB-072	CSB-072-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	315	F1	1.5
CSB-073	CSB-073-2.0-20240723	7/23/2024	2.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,660		0.8
	CSB-073-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	597		1.2
CSB-074	CSB-074-2.0-20240719	7/19/2024	2.0	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	573		1.0
CSB-075	CSB-075-2.0-20240719	7/19/2024	2.0	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	203		0.3
CSB-076	CSB-076-2.0-20240719	7/19/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	456		1.5
	CSB-076-DUP-2.0			<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	433		
CSB-077	CSB-077-3.0-20240731	7/31/2024	3.0	<14.4 *+	<15.0	<15.0	<15.0	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	1,150		0.9
	CSB-077-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,080		0.8
	CSB-077-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	978		1.3
	CSB-077-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	819		NM
	CSB-077-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,530		NM
	CSB-077-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,090		NM
	CSB-077-6.5-20240821	8/21/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,030		NM
	CSB-077-12.0-20240823	8/23/2024	12.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	830		NM
CSB-078	CSB-078-3.0-20240801	8/1/2024	3.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	217		1.0
CSB-079	CSB-079-3.5-20240802	8/2/2024	3.5	<49.7	**84.0**	<49.7	**84.0**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	1,360		1.0
	CSB-079-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	748		0.1
	CSB-079-4.5-20240820	8/20/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	181		NM
CSB-080	CSB-080-3.0-20240802	8/2/2024	3.0	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,240		1.1
	CSB-080-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	639		0.1
	CSB-080-4.5-20240820	8/20/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	195		NM
CSB-081	CSB-081-3.0-20240802	8/2/2024	3.0	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,070		0.9
	CSB-081-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	713		0.1
	CSB-081-4.5-20240820	8/20/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	189		NM
CSB-082	CSB-082-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	738		1.3
	CSB-082-4.0-20240731	7/31/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	223		NM
CSB-083	CSB-083-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	446	F1	0.5
	CSB-083-DUP-3.0			NA	NA	NA	NA	NA	NA	NA	NA	NA	402		
CSB-084	CSB-084-2.0-20240719	7/19/2024	2.0	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	610		1.4
	CSB-084-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	588		NM
CSB-085	CSB-085-2.0-20240719	7/19/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	951		0.5
	CSB-085-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	654		NM
	CSB-085-4.0-20240729	7/29/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	528		NM
CSB-086	CSB-086-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	984		1.2
	CSB-086-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,090		0.7
	CSB-086-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,280		1.1
	CSB-086-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200		NM
	CSB-086-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,240		NM
	CSB-086-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,150		NM
	CSB-086-6.5-20240821	8/21/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,150		NM
CSB-087	CSB-087-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00139	<0.00199	<0.00108	<0.00228	<0.00228	1,010		0.8
	CSB-087-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	129		NM
CSB-088	CSB-088-3.0-20240802	8/2/2024	3.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,610		1.2
	CSB-088-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	306		0.1
CSB-089	CSB-089-3.0-20240802	8/2/2024	3.0	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,480		1.3
	CSB-089-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	297		0.1
CSB-090	CSB-090-3.5-20240802	8/2/2024	3.5	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,370		1.2
	CSB-090-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	591	F1	1.0
CSB-091	CSB-091-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	911		0.9
	CSB-091-4.0-20240731	7/31/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	121		NM
CSB-092	CSB-092-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	803		0.7
	CSB-092-4.0-20240730	7/30/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	323		NM
CSB-093	CSB-093-2.0-20240719	7/19/2024	2.0	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	841	F1	1.6
	CSB-093-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	603		NM
	CSB-093-4.0-20240729	7/29/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	707		NM
	CSB-093-5.0-20240731	7/31/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	382		NM
CSB-094	CSB-094-2.0-20240719	7/19/2024	2.0	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,200		1.7
	CSB-094-3.0-20240724	7/24/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,060		NM
	CSB-094-4.0-20240726	7/26/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	513		NM
CSB-095	CSB-095-3.0-20240731	7/31/2024	3.0	<14.5 *+	<15.1	<15.1	<15.1	<0.00148	<0.00213	<0.00116	<0.00243	<0.00243	896		0.7
	CSB-095-4.0-20240805	8/5/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,080		0.6
	CSB-095-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,280		0.9
	CSB-095-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,320		NM
	CSB-095-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,490		NM
	CSB-095-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,420		NM
	CSB-095-6.5-20240821	8/21/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	870		NM
	CSB-095-7.0-20240823	8/23/2024	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	108		NM
CSB-096	CSB-096-3.0-20240801	8/1/2024	3.0	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	76.4		NM
CSB-097	CSB-097-3.5-20240802	8/2/2024	3.5	<49.6	<49.6	<49.6	<49.6	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	1,810		0.9
	CSB-097-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	331		0.1
CSB-098	CSB-098-3.0-20240802	8/2/2024	3.0	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	2,120		1.2
	CSB-098-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	333	F1	0.1
CSB-099	CSB-099-3.0-20240729	7/29/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	313		0.8
CSB-100	CSB-100-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	800		0.9
	CSB-100-4.0-20240730	7/30/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	226		NM
CSB-101	CSB-101-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	502		1.4
CSB-102	CSB-102-3.0-20240726	7/26/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	472		0.4
CSB-103	CSB-103-3.5-20240802	8/2/2024	3.5	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	1,120		0.8
	CSB-103-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	722		0.1
	CSB-103-4.5-20240812	8/12/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	799		0.9
	CSB-103-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	698	F1	NM
	CSB-103-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	595		NM
CSB-104	CSB-104-3.5-20240802	8/2/2024	3.5	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	1,600		1.1
	CSB-104-4.5-20240808	8/8/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	993		0.1
	CSB-104-5.0-20240812	8/12/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	727		NM
	CSB-104-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	736		NM
	CSB-104-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	369		NM

Table 1
Confirmation Soil Analytical Results (BTEX, TPH, Chloride)
Chevron MCBU - Amoco Federal 11 CTB Spill Site
Eddy County, New Mexico

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Total Petroleum Hydrocarbons (SW846 Method 8015 NM)				Volatile Organic Compounds (SW846 Method 8021B)					Chloride (Method EPA 300.0 Anions by Ion Chromatography)	PID (ppm)
				GRO (C6-C10)	DRO (C10-C28)	MRO (C28-C36)	Total TPH GRO+DRO+MRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX		
NMAC Regulatory Limits (Groundwater <50 ft bgs)			0 - 4 ft bgs	--	--	--	100	10	--	--	--	50	600	--
			> 4 ft bgs	--	--	--	100	10	--	--	--	50	600	--
CSB-105	CSB-105-3.0-20240802	8/2/2024	3.0	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**860**	**1.1**
	CSB-105-4.0-20240808	8/8/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**782**	**0.1**
	CSB-105-4.5-20240812	8/12/2024	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,330**	NM
	CSB-105-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,150**	NM
	CSB-105-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,230**	NM
	CSB-105-6.5-20240820	8/20/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**591**	NM
CSB-106	CSB-106-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**413**	**1.7**
CSB-107	CSB-107-3.0-20240730	7/30/2024	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**534**	**2.1**
CSB-108	CSB-108-4.0-20240805	8/5/2024	4.0	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**911** F1	**1.2**
	CSB-108-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**633**	**0.8**
	CSB-108-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**727**	NM
	CSB-108-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**966**	NM
	CSB-108-6.5-20240820	8/20/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**704**	NM
	CSB-108-6.75-20240822	8/22/2024	6.75	NA	NA	NA	NA	NA	NA	NA	NA	NA	**709**	NM
	CSB-108-7.0-20240826	8/26/2024	7.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**144**	NM
CSB-109	CSB-109-4.0-20240805	8/5/2024	4.0	<49.6	<49.6	<49.6	<49.6	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	**759**	**0.5**
	CSB-109-5.0-20240808	8/8/2024	5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**661**	**0.5**
	CSB-109-5.25-20240812	8/12/2024	5.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**822**	NM
	CSB-109-6.0-20240814	8/14/2024	6.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**901**	NM
	CSB-109-6.25-20240816	8/16/2024	6.25	NA	NA	NA	NA	NA	NA	NA	NA	NA	**993**	NM
	CSB-109-6.5-20240820	8/20/2024	6.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**228**	NM
CSB-110	CSB-110-3.0-20240731	7/31/2024	3.0	<14.4 *+	<15.0	<15.0	<15.0	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**598**	**1.6**
CSB-111	CSB-111-3.0-20240820	8/20/2024	3.0	<14.5	**15.1** J	<15.1	**15.1** J	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**509** F1	NM
CSB-112	CSB-112-3.0-20240821	8/21/2024	3.0	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**882**	NM
	CSB-112-3.5-20240823	8/23/2024	3.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	**622**	NM
	CSB-112-4.0-20240827	8/27/2024	4.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	**6.92**	NM
Confirmation Wall Samples														
CSW-01	CSW-01-0-3-20240820	8/20/2024	0 - 3	<14.5	<15.1	<15.1	<15.1	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**751**	**1.5**
	CSW-01-0-3-20240822	8/22/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**518** F1	NM
CSW-02	CSW-02-0-3-20240731	7/31/2024	0 - 3	<14.5 *+	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**997**	**1.0**
	CSW-02-0-3-20240812	8/12/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,060**	NM
	CSW-02-0-3-20240814	8/14/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**445**	NM
CSW-03	CSW-03-0-3-20240731	7/31/2024	0 - 3	<14.5 *+	**15.9** J	<15.1	**15.9** J	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**194**	**1.3**
CSW-04	CSW-04-0-3-20240731	7/31/2024	0 - 3	<14.4	<15.0	<15.0	<15.0	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	**698**	**1.4**
	CSW-04-0-2-20240805	8/5/2024	0 - 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	**261**	NM
CSW-05	CSW-05-0-2-20240731	7/31/2024	0 - 2	<14.5 *+	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**731**	**0.8**
	CSW-05-0-3-20240812	8/12/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,460**	NM
	CSW-05-0-3-20240814	8/14/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**760**	NM
	CSW-05-0-3-20240816	8/16/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**820**	NM
	CSW-05-0-3-20240820	8/20/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**459**	NM
CSW-06	CSW-06-0-2-20240731	7/31/2024	0 - 2	<14.5 *+	<15.1	<15.1	<15.1	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	**634**	**0.5**
	CSW-06-0-2-20240805	8/5/2024	0 - 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	**590**	NM
CSW-07	CSW-07-0-2-20240731	7/31/2024	0 - 2	<14.5 *+	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**789**	**0.8**
	CSW-07-0-2-20240805	8/5/2024	0 - 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	**888**	NM
	CSW-07-0-3-20240808	8/8/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**912**	NM
	CSW-07-0-3-20240815	8/15/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,070**	NM
	CSW-07-0-3-20240820	8/20/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**364**	NM
CSW-08	CSW-08-0-2-20240805	8/5/2024	0 - 2	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**1,670**	**0.4**
	CSW-08-0-3-20240812	8/12/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,400**	NM
	CSW-08-0-2-20240815	8/15/2024	0 - 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,660**	NM
	CSW-08-0-4-20240820	8/20/2024	0 - 4	NA	NA	NA	NA	NA	NA	NA	NA	NA	**436**	NM
CSW-09	CSW-09-0-2-20240805	8/5/2024	0 - 2	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**10,700**	**0.5**
	CSW-09-0-2-20240815	8/15/2024	0 - 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,740**	NM
	CSW-09-0-4-20240820	8/20/2024	0 - 4	NA	NA	NA	NA	NA	NA	NA	NA	NA	**436**	NM
	CSW-09-DUP-0-4			NA	NA	NA	NA	NA	NA	NA	NA	NA	**499**	
CSW-10	CSW-10-0-2-20240801	8/1/2024	0 - 2	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**250**	**0.6**
CSW-11	CSW-11-0-2-20240801	8/1/2024	0 - 2	<50.0	<50.0	<50.0	<50.0	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**426**	**0.8**
CSW-12	CSW-12-0-2-20240801	8/1/2024	0 - 2	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**286** F1	**1.0**
CSW-13	CSW-13-0-3-20240806	8/6/2024	0 - 3	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	**598**	NM
CSW-14	CSW-14-0-4-20240809	8/9/2024	0 - 4	<14.5	<15.1	<15.1	<15.1	<0.00138	<0.00198	<0.00108	<0.00227	<0.00227	**403**	NM
CSW-15	CSW-15-0-2-20240809	8/9/2024	0 - 2	<14.4	<15.0	<15.0	<15.0	<0.00138	<0.00199	<0.00108	<0.00227	<0.00227	**1,020**	**1.5**
	CSW-15-0-3-20240812	8/12/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**498**	NM
CSW-16	CSW-16-0-3-20240813	8/13/2024	0 - 3	<14.6	<15.3	<15.3	<15.3	<0.00141	<0.00202	<0.00110	<0.00231	<0.00231	**707**	NM
	CSW-16-DUP-0-3			<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**716**	NM
CSW-16A	CSW-16A-5-9-20240826	8/26/2024	5 - 9	<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**811**	NM
CSW-17	CSW-17-0-3-20240813	8/13/2024	0 - 3	<14.5	**51.6**	<15.1	**51.6**	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**2,160**	NM
CSW-18	CSW-18-0-2-20240815	8/15/2024	0 - 2	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**654**	NM
	CSW-18-DUP-0-2			<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00228	<0.00228	**666**	NM
CSW-19	CSW-19-0-2-20240815	8/15/2024	0 - 2	<14.4	<15.0	<15.0	<15.0	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**1,020**	NM
	CSW-19-0-3-20240821	8/21/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**734**	NM
	CSW-19-0-3-20240823	8/23/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**635** F1	NM
	CSW-19-0-3-20240827	8/27/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.63**	NM
CSW-20	CSW-20-0-3-20240822	8/22/2024	0 - 3	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**213**	**1.1**
CSW-21	CSW-21-0-3-20240822	8/22/2024	0 - 3	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00109	<0.00229	<0.00229	**402**	**1.0**
CSW-22	CSW-22-0-3-20240822	8/22/2024	0 - 3	<14.5	<15.1	<15.1	<15.1	<0.00140	<0.00201	<0.00110	<0.00230	<0.00230	**711**	**1.3**
	CSW-22-0-3-20240826	8/26/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**639**	NM
	CSW-22-0-3-20240828	8/28/2024	0 - 3	NA	NA	NA	NA	NA	NA	NA	NA	NA	**15.1**	NM
CSW-23	CSW-023-0-3-20240821	8/21/2024	0 - 3	<14.5	<15.1	<15.1	<15.1	<0.00139	<0.00200	<0.00109	<0.00229	<0.00229	**847**	NM

Notes:

1. Soil analyses performed by Eurofins Environment Testing in Midland, Texas.
2. All analytical data are reported in units of milligrams per kilogram (mg/kg).
3. Regulatory Limits are from 19.15.29 New Mexico Administrative Code (NMAC) - "Closure Criteria for Soils Impacted by a Release."
4. "--" Indicates that no applicable regulatory limit exists for that analyte.
5. "ft bgs" - feet below ground surface.
6. "GRO" - Gasoline Range Organic Compounds
7. "DRO" - Diesel Range Organic Compounds
8. "MRO" - Motor Oil/Lube Range Organic Compounds
9. "NA" - Not analyzed.
10. "NM" - Not measured.
11. Results reported below laboratory Sample Detection Limits (SDLs) are preceded by "<".
12. **Bold** values represent detectable concentrations above the SDLs.
13. **Bold and Shaded** - Reported concentration exceeds NMAC Regulatory Limits.
14. Results followed by "F1" indicate Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds laboratory control limits.
15. Results followed by (*1) indicate that Laboratory Control Sample (LCS) and/or Laboratory Control Sample Duplicate (LCSD) Relative Percent Difference is outside laboratory control limits.
16. Results followed by (*+) indicate that LCS and/or LCSD is outside laboratory control limits, and result is potentially high-biased.
17. Results followed by "J" indicate an estimated concentration, which is less than the Reporting Limit but greater than or equal to the SDL.
18. Results followed by "B" indicate that the analyte was detected in a laboratory blank.
19. Soil removed down to very hard/competent rock layer - further sampling not possible.
20. Sample collected from deferred area for documentation.

Appendix A

Form C-141 (Amoco Federal 11 CTB) and Project Correspondence

From: Guillory, Ronald
To: Barnhill, Amy; Wynne, Brad
Subject: FW: RE: Amoco Federal 11 CTB Closure Denial Response
Date: Thursday, November 7, 2024 8:05:24 AM

Amy/Brad

I hope this email finds you well and in good health.

Please see the response from Brittnay Hall below.

Amy- I request that you set up a meeting to discuss her response and the proposed plan.

Thanks

Ron

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Tuesday, November 5, 2024 4:00 PM
To: Guillory, Ronald <rong@chevron.com>
Cc: Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: [**EXTERNAL**] RE: [EXTERNAL] Amoco Federal 11 CTB Closure Denial Response

Mr. Guillory,

I received an email on 10/23/2024 from Amy Barnhill stating that the requested sampling plan discussed during the meeting on October 10, 2024, was almost ready. I had instructed Amy to send me the sampling plan via email as there is currently no way to upload a sampling plan through the OCD portal. As of today, I still have not received a copy of a sampling plan.

OCD is not opposed to having another meeting to discuss additional concerns, but we would like to review the sampling plan prior to having a meeting to ensure that Chevron's and OCD's concerns are addressed at the same time. Is the sampling plan available for review prior to

scheduling a meeting?

To detail some of OCD's concerns, please see my responses in blue below. These responses are addressing your comments included in this email. Once the sampling plan has been submitted via email and reviewed, additional concerns and comments may arise.

1. **Sample Analysis for Table I Constituents:** It was noted that numerous confirmation/final samples were not analyzed for all Table I constituents of concern (TPH, BTEX, and chloride) as instructed in the conditions of approval for the remediation plan dated May 8, 2024. We acknowledge this oversight and will ensure that all future samples are analyzed for these constituents. Following the conversation that Chevron had with NMOCD on October 10, 2024, it is our understanding that resampling this site will not be required. OCD requested that a variance be included in the sampling plan as to why all constituents were not analyzed. The variance request must meet the variance requirements of 19.15.29.14 A. NMAC.

2. **Sample Collection Depths:** From our October 10th meeting, it was specifically indicated that a wall sample between CSW-2 and the deeper excavation extent nearby will be the only confirmation sample that will need to be collected. We plan to collect this sample between 10-15 feet (ft.) below ground surface (bgs) with the use of a drilling rig. OCD requested the sampling plan to ensure that the proposed number of samples collected from this area and the method of sampling were adequate. One sample collected between 10-15 ft. is not adequate for the area of CSW-2. CSW-2 only had a confirmation sample collected from 0-3 ft bgs and the adjacent bases were excavated to 20 ft based on the information included in the rejected report.

3. **Sample Depth Discrepancies:** Based on the submitted closure report, NMOCD noted discrepancies between the sample depths listed in the table and the laboratory analytical results for CSB-048, CSB-049, CSB-058, CSB-059, CSB-068, CSB-069, CSB-077, and CSB-086 compared to the depths indicated on the map. Chevron determined that analytical samples were not collected beyond the depths listed on the table due to elevated field screening readings at multiple depths down to 20 ft. bgs. While additional samples could be collected at these total depths by deploying a drilling rig to the location, we have concerns about drilling through the hard pack caprock currently in place at 20 feet bgs. This could potentially create a conduit, allowing possible constituents in the area a direct route to the shallow groundwater table. We would appreciate further discussion on this matter. OCD is open to discussing this but be advised that closure will not be granted if contamination above the remediation closure criteria is left in place unless a variance is requested. A variance must meet the variance requirements of 19.15.29.14 A. NMAC and be fully delineated. OCD was also not provided any data (laboratory analytical or field screening results) from the deepest intervals of the excavation in this area in the rejected remediation closure report. Additionally, the report states that mass source removal has been completed and any

remaining contamination that would flow through any potential conduits that may or may not be created during boring activities should already be mitigated during remediation activities. Additionally, properly plugged boreholes are sufficient to protect groundwater.

4. **Analytical Results for DB-19/MW-1:** We will include these results in the upcoming reports. Please include field screening and laboratory analytical results, if applicable.

5. **Facility Deferral Request Review:** In the submitted closure report, Chevron requested a review for deferral of the impacted area around the battery on the south side of the pad. Following the NMOCD's review, it was determined that the remediation of this release does not necessitate a major facility deconstruction. Consequently, a deferral for this release will not be granted, and the remediation must adhere to the most stringent closure criteria. Given the complexity of addressing this issue, Chevron is requesting an additional meeting with the NMOCD to discuss a path forward. This discussion will include a proposed interim remedial step and a potential reevaluation of the deferral request. The proposed interim step involves removing the shallow impacted soil in the battery area, thereby eliminating the majority of the impacted source material that could affect shallow groundwater. We believe that this interim step, which focuses on removing the majority of the chloride mass, will be protective of the shallow groundwater. Additionally, a boring within the battery area will be drilled to confirm vertical delineation. Deferrals must comply with 19.15.29 NMAC. Chevron has communicated to the OCD that the site was to be decommissioned and there was going to be some verification as to if and when that was going to happen. OCD has not received a status update regarding decommissioning of the site yet. If the deferral requirements cannot be met, a variance can also be requested.

In addition to addressing the listed concerns during the upcoming meeting, we would also like to discuss the possibility of drilling temporary groundwater monitoring wells. This would allow us to analyze the local groundwater for chlorides and determine the existing background levels in the area. OCD would like to review the locations of the temporary groundwater monitoring wells before they are installed.

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

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-

notifications/ under “2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS”.

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Guillory, Ronald <rong@chevron.com>
Sent: Tuesday, November 5, 2024 8:32 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Hudson, Matt <MHudson@chevron.com>; Tyler, Loyd <Loyd.Tyler@chevron.com>
Subject: [EXTERNAL] Amoco Federal 11 CTB Closure Denial Response

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

NMOCD Leadership

I hope this email finds you well and in good health.

We are writing in response to the denial of our closure/deferral request for the spill at the Amoco Federal 11 CTB [NAPP2216547154], submitted on September 27, 2024. We appreciate the detailed feedback and would like to address the concerns raised. Additionally, we would like to schedule a follow-up meeting with NMOCD to discuss these concerns in further detail to help clarify and align on our path forward.

1. **Sample Analysis for Table I Constituents:** It was noted that numerous confirmation/final samples were not analyzed for all Table I constituents of concern (TPH, BTEX, and chloride) as instructed in the conditions of approval for the remediation plan dated May 8, 2024. We acknowledge this oversight and will ensure that all future samples are analyzed for these constituents. Following the conversation that Chevron had with NMOCD on October 10, 2024, it is our understanding that resampling this site will not be required.

2. **Sample Collection Depths:** From our October 10th meeting, it was specifically indicated that a wall sample between CSW-2 and the deeper excavation extent nearby will be the only confirmation sample that will need to be collected. We plan to collect this sample between 10-15 feet (ft.) below ground surface (bgs) with the use of a drilling rig.

3. **Sample Depth Discrepancies:** Based on the submitted closure report, NMOCD noted discrepancies between the sample depths listed in the table and the laboratory analytical results for CSB-048, CSB-049, CSB-058, CSB-059, CSB-068, CSB-069, CSB-077, and CSB-086 compared to the depths indicated on the map. Chevron determined that analytical samples were not collected beyond the depths listed on the table due to elevated field screening readings at multiple depths down to 20 ft. bgs. While additional

samples could be collected at these total depths by deploying a drilling rig to the location, we have concerns about drilling through the hard pack caprock currently in place at 20 feet bgs. This could potentially create a conduit, allowing possible constituents in the area a direct route to the shallow groundwater table. We would appreciate further discussion on this matter.

4. **Analytical Results for DB-19/MW-1:** We will include these results in the upcoming reports.

5. **Facility Deferral Request Review:** In the submitted closure report, Chevron requested a review for deferral of the impacted area around the battery on the south side of the pad. Following the NMOCD's review, it was determined that the remediation of this release does not necessitate a major facility deconstruction. Consequently, a deferral for this release will not be granted, and the remediation must adhere to the most stringent closure criteria. Given the complexity of addressing this issue, Chevron is requesting an additional meeting with the NMOCD to discuss a path forward. This discussion will include a proposed interim remedial step and a potential reevaluation of the deferral request. The proposed interim step involves removing the shallow impacted soil in the battery area, thereby eliminating the majority of the impacted source material that could affect shallow groundwater. We believe that this interim step, which focuses on removing the majority of the chloride mass, will be protective of the shallow groundwater. Additionally, a boring within the battery area will be drilled to confirm vertical delineation.

In addition to addressing the listed concerns during the upcoming meeting, we would also like to discuss the possibility of drilling temporary groundwater monitoring wells. This would allow us to analyze the local groundwater for chlorides and determine the existing background levels in the area.

We appreciate your guidance and are committed to addressing all concerns to achieve regulatory compliance.

Thank you for your time and consideration.

Best regards,

Ron Guillory
MCBU Environmental Field Team Lead
Mid-Continent Business Unit (MCBU)
Chevron North America Exploration and Production Company
6301 Deauville
Midland, TX
office 432-687-7329
Mobile 432-215-2131

rong@Chevron.com

Ron Guillory
MCBU Environmental Field Team Lead
Mid-Continent Business Unit (MCBU)
Chevron North America Exploration and Production Company
6301 Deauville
Midland, TX
office 432-687-7329
Mobile 432-215-2131
rong@Chevron.com

From: Barnhill, Amy
To: Wynne, Brad
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 388004
Date: Wednesday, October 2, 2024 1:15:59 PM

Thank you,
Amy

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>
Sent: Wednesday, October 2, 2024 12:05 PM
To: Barnhill, Amy <ABarnhill@chevron.com>
Subject: [**EXTERNAL**] The Oil Conservation Division (OCD) has rejected the application, Application ID: 388004

To whom it may concern (c/o Amy Barnhill for CHEVRON U S A INC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2216547154, for the following reasons:

- **Numerous confirmation/final samples were not analyzed for all Table I constituents of concern (TPH, BTEX, and chloride) as instructed in the conditions of approval for the remediation plan on 5/8/2024.**
- **Sample analytical results from CSW-02 indicate that the sample was collected from 0-3' bgs. Representative samples of the deeper portions of the excavation walls adjacent to the deeper excavation must be collected and analyzed for TPH, BTEX, and chloride.**
- **Sample depths found on the table and the laboratory analytical results for CSB-048, CSB-049, CSB-058, CSB-059, CSB-068, CSB-069, CSB-077 and CSB-086 do not correlate with the sample depths indicated on the map. Clarify as to why samples were not collected at the total depth of the excavation at these sample locations.Samples must be collected at the total depth of the excavation prior to submitting a closure report.**

- **Include a copy of the analytical results of the samples that were collected from DB-19/MW-1.**
- **The OCD reviews each deferral request on a case-by-case basis. Major facility deconstruction typically involves concrete poured pads, structures, engineered designed facilities that include automation/electrical lines, sprayed in lines, etc. After review, OCD does not consider the remediation of this release to require a major facility deconstruction. A deferral for this release will not be granted and the release will need to be remediated to the most stringent closure criteria.**
- **Include all correspondence via email for extensions, sampling variances, etc. in the next submission.**
- **All additional confirmation samples collected after 10/2/2024 must have appropriate sampling notifications submitted through the OCD permitting website on the C-141N. Sampling notifications must be submitted at least 2 full business days prior to collection pursuant to 19.15.29.12.D.(1)(a) NMAC.**
- **Submit a complete and accurate report through the OCD permitting website by 11/22/2024.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 388004.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Appendix B

Soil Boring/Monitoring Well Construction Log and Laboratory Analytical Report (DB-19/MW-1)

AECOM

BORING LOG - WELL CONSTRUCTION DIAGRAM

BORING NUMBER AMOCO DB-19/MW-1

PAGE 1 OF 2

CLIENT Chevron MCBU **PROJECT NAME** MCBU NM Spill Sites

PROJECT NUMBER 60729416; 60729423 **PROJECT LOCATION** Loving, Eddy County, NM

DATE STARTED 5/28/24 **DRILLING CONTRACTOR** Talon/LPE **GROUND ELEVATION** _____

COMPLETED 5/29/24 **DRILLING METHOD** Geoprobe GV5 Sonic **GROUND WATER LEVEL**

LOGGED BY B. Cland **CHECKED BY** B. Wynne **AT TIME OF DRILLING** ---

NOTES Amoco Federal 11 CTB. Monitor well MW-1 installed on 5/29/2024. **LATITUDE** 32.318114 **LONGITUDE** -104.052821

Sample Type:
HA-Hand Auger; HSA-Hollow Stem Auger; SSA - Solid Stem Auger; DP- Direct Push; SC - Sonic Core

BOREHOLE DIAMETER 4.5"

WELL DIAMETER 2"

Depth (ft)	Sample Type	Drilling Log	Push/ Recovery (in.)	PID ppm	Sampled Interval	Analysis	Graphic Log	USCS	MATERIAL DESCRIPTION	Contact Depth
0								SW-SM	Light brownish-orange, well-graded, fine to very fine **silty sand** with abundant subangular caliche gravel; dry. - Caliche content up to approx. 30%, up to small cobble-sized.	2.0
	SC		60 60					ML	Light grey, hard/indurated **caliche**; dry.	4.0
5								SW-SM	Light tannish-orange, moderately to well-graded, fine to very fine **silty sand** with subangular caliche gravel; dry. - Caliche content approx. 15-20%, up to medium pebble-sized.	6.0
	SC		60 60					ML	Light grey, hard/indurated **caliche**; dry.	
10				0.0	(10-12')	Cl-				
	SC		60 60	0.0	(12-14')	Cl-				
15				0.0	(14-16')	Cl-				
	SC		12 12							16.0
	SC		18 18	0.0	(16-18')	Cl-		SW-SM	Light tannish-orange, fine to very fine **silty sand** with caliche gravel (same as 4-6'); dry.	17.0
								ML	Light grey, hard/indurated **caliche**; dry.	18.5
20	SC		48 48	0.0	(18-20')	Cl-		SW	Tannish-yellow, well-graded, fine **gravelly sand**; dry. - Gravel content consists of subangular caliche, up to 30%, small cobble-sized.	20.0
								ML	Light grey, hard/indurated **caliche**; dry.	21.0
				0.0	(20-22')	Cl-		SW	Tannish-yellow, well-graded, fine **gravelly sand** (same as 18.5-20'); dry.	22.0
	SC		54 28	0.0	(22-24')	Cl-		CL	Reddish-brown, low to medium plasticity **gravelly clay**; medium soft; dry. - Gravel content consists of subrounded to rounded caliche, approx. 15-20%, small pebble-sized. - Contains approx. 10-15% very fine sand and silt.	
25				0.0	(24-26')	Cl-				26.0
					(26-28')	Cl-		ML	Light to medium brownish-grey, consolidated, **gravelly silt** with minor sand; dry. - Gravel content consists of rounded caliche, approx. 10-15%, small pebble-sized.	
	SC		48 48		(28-30')	Cl-				
30										30.0

Portland Type I/II Cement.

Bentonite seal with 3/8" hydrated bentonite chips.

AECOM

BORING LOG - WELL CONSTRUCTION DIAGRAM

BORING NUMBER AMOCO DB-19/MW-1

PAGE 2 OF 2

CLIENT Chevron MCBU **PROJECT NAME** MCBU NM Spill Sites

PROJECT NUMBER 60729416; 60729423 **PROJECT LOCATION** Loving, Eddy County, NM

DATE STARTED 5/28/24 **DRILLING CONTRACTOR** Talon/LPE **GROUND ELEVATION** _____

COMPLETED 5/29/24 **DRILLING METHOD** Geoprobe GV5 Sonic **GROUND WATER LEVEL**

LOGGED BY B. Cland **CHECKED BY** B. Wynne **AT TIME OF DRILLING** ---

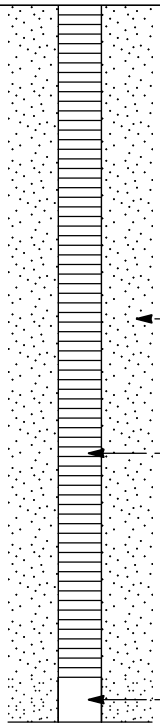
NOTES Amoco Federal 11 CTB. Monitor well MW-1 installed on 5/29/2024. **LATITUDE** 32.318114 **LONGITUDE** -104.052821

Sample Type:
HA-Hand Auger; HSA-Hollow Stem Auger; SSA - Solid Stem Auger; DP- Direct Push; SC - Sonic Core

BOREHOLE DIAMETER 4.5"

WELL DIAMETER 2"

Depth (ft)	Sample Type	Drilling Log	Push/ Recovery (in.)	PID ppm	Sampled Interval	Analysis	Graphic Log	USCS	MATERIAL DESCRIPTION	Contact Depth
30	SC		36 24					CL-ML	Brownish-orange, low plasticity **sandy to silty clay**; medium soft to stiff, consolidated; dry.	33.0
35	SC		36 36		(34-36')	Cl-		ML	Brownish-yellow, consolidated, very fine **sandy silt** with minor clay; stiff; moist. - Clay is low plasticity, content approx. 10-15%.	36.0
40	SC		48 48					SM	Brownish to greyish-yellow, poorly-graded, consolidated, very fine **silty sand**; stiff; moist.	40.0
	SC		36 30					CL-ML	Brownish to greyish-yellow, low plasticity, very fine **sandy to silty clay**; consolidated, stiff; moist.	42.0
								CL	Dark grey, low plasticity, very fine **sandy clay**; consolidated, very stiff; moist. Reddish-brown oxidation staining visible.	43.0
45	SC		36 30					CL-ML	Brownish-yellow, low plasticity, very fine **sandy to silty clay** (same as 40-42'); moist.	45.0
								ML	Light grey, hard/indurated **caliche**; dry. Monitor well installed as flush mount.	46.0
									Bottom of borehole at 46.0 feet.	



8/16 Silica Sand filter pack.

0.010" slotted PVC screen.

Cone-shaped PVC sump.

CARDINAL Laboratories

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

June 06, 2024

BRAD WYNNE

AECOM - DALLAS

13355

DALLAS, TX 75240

RE: AMOCO CTB

Enclosed are the results of analyses for samples received by the laboratory on 05/29/24 8:15.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

AECOM - DALLAS
BRAD WYNNE
13355
DALLAS TX, 75240
Fax To:

Received:	05/29/2024	Sampling Date:	05/28/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	AMOCO CTB	Sampling Condition:	Cool & Intact
Project Number:	60729416	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO., NM		

Sample ID: DB - 19 (10-12) (H242960-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/29/2024	ND	1.68	83.8	2.00	4.35	
Toluene*	<0.050	0.050	05/29/2024	ND	1.75	87.4	2.00	4.11	
Ethylbenzene*	<0.050	0.050	05/29/2024	ND	1.82	91.2	2.00	3.16	
Total Xylenes*	<0.150	0.150	05/29/2024	ND	5.54	92.3	6.00	2.31	
Total BTEX	<0.300	0.300	05/29/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**912**	16.0	05/30/2024	ND	448	112	400	3.51	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/29/2024	ND	221	111	200	0.609	
DRO >C10-C28*	<10.0	10.0	05/29/2024	ND	218	109	200	2.13	
EXT DRO >C28-C36	<10.0	10.0	05/29/2024	ND					

Surrogate: 1-Chlorooctane *79.4 %* *48.2-134*

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

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Analytical Results For:

AECOM - DALLAS
BRAD WYNNE
13355
DALLAS TX, 75240
Fax To:

Received:	05/29/2024	Sampling Date:	05/28/2024
Reported:	06/06/2024	Sampling Type:	Soil
Project Name:	AMOCO CTB	Sampling Condition:	Cool & Intact
Project Number:	60729416	Sample Received By:	Shalyn Rodriguez
Project Location:	CHEVRON - EDDY CO., NM		

Sample ID: DB - 19 (12-14) (H242960-02)

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**944**	16.0	05/31/2024	ND	400	100	400	7.69	

Sample ID: DB - 19 (14-16) (H242960-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	06/04/2024	ND	432	108	400	0.00	

Sample ID: DB - 19 (16-18) (H242960-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: HM**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**592**	16.0	06/06/2024	ND	432	108	400	3.64	

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

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

Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	AECOM
Project Manager:	Brad Wynne
Address:	13355 Noel Rd. Suite 400
City:	Dallas State: TX Zip: 75240
Phone #:	214-971-1829 Fax #:
Project #:	60729416 Project Owner: Chevron MCBU
Project Name:	Amoco
Project Location:	Loving, NM
Sampler Name:	James Lovely

BILL TO

P.O. #:	
Company:	AECOM
Attn:	BRAD WYNNE
Address:	13355 Noel Rd, Ste. 400
City:	Dallas
State:	TX Zip: 75240
Phone #:	214-971-1829
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Chlorides	BTEX / TPH	Chloride added 5-30-24 SR	Chloride added 4-3-24 SR	CL added 4/5/24 TB.						Hold
H247200															X	X									
1	DB-19 (10-12)	G	2			X					X		5/28/24	1715			X								X
2	DB-19 (12-14)	G	2			X					X		5/28/24	1717				X							X
3	DB-19 (14-16)	G	2			X					X		5/28/24	1730					✓						X
4	DB-19 (16-18)	G	2			X					X		5/28/24	1750											X
5	DB-19 (18-20)	G	2			X					X		5/28/24	1805											X
6	DB-19 (20-22)	G	2			X					X		5/28/24	1807											X
7	DB-19 (22-24)	G	2			X					X		5/28/24	1828											X
8	DB-19 (24-26)	G	2			X					X		5/28/24	1830											X
9	DB-19 (26-28)	G	2			X					X		5/28/24	1850											X
10	DB-19 (28-30)	G	2			X					X		5/28/24	1913											X

Relinquished By: AECOM	Date: 5/29/24 Time: 08:15	Received By:	
Relinquished By:	Date: Time:	Received By:	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

bradley.wynne@aecom.com

REMARKS: RUN First Sample on ac ~~2-DAY~~ (48 Hr) TAT

HOLD all other samples on RUSH (24 Hr) TAT

Turnaround Time: Standard ☐ Rush ☒

Bacteria (only) Sample Condition: Cool ☐ Yes Intact ☐ Yes

Thermometer ID #140 Correction Factor 0°C

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

Observed Temp. °C 3.4 Corrected Temp. °C

Sample Condition: Cool ☒ Yes Intact ☐ No

CHECKED BY: (Initials) SR

Bacteria (only) Sample Condition: Cool ☐ Yes Intact ☐ Yes Observed Temp. °C ☐ No ☐ No Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name:	AECOM
Project Manager:	Brad Wynne
Address:	13355 Noel Rd Suite 400
City:	Dallas State: TX Zip: 75240
Phone #:	214-971-1829 Fax #:
Project #:	60729416 Project Owner: Chevron MCBU
Project Name:	Amoco
Project Location:	Loving, NM
Sampler Name:	James Lovejoy

BILL TO

P.O. #:	
Company:	AECOM
Attn:	BRAD WYNNE
Address:	13355 Noel Rd, Ste. 400
City:	DALLAS
State: TX	Zip: 75240
Phone #:	214-971-1829
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	Chlorides	BTEX / TPH	Hold
H24260160 11	DB-19 (34-36)	G	2			X							5/28/24	1915			X

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

Relinquished By: AECOM	Date: 5/29/24 Time: 08:15	Received By:	
Relinquished By:	Date: Time:	Received By:	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
bradley.wynne@aecom.com

REMARKS: HOLD on 24-HR / RUSH TAT

Turnaround Time: Standard ☐ Rush ☒

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

Thermometer ID #140
Correction Factor 0°C

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

Observed Temp. °C 3.4
Corrected Temp. °C

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

CHECKED BY: (Initials) SR

FORM-006 R 3.4 07/11/23

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

Appendix C

Field Titration Data – Eastern Area

AECOM

Table 1 - Field Titration Results - Eastern Area
Chevron MCBU - Amoco Federal 11 CTB Spill Site
Eddy County, New Mexico

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Field Titration Readings (PPM)		Chloride (Method EPA 300.0 Anions by Ion Chromatography)	
				Initial Field Result	Correlated result (x2)*		
NMAC Regulatory Limits (Groundwater <50 ft bgs)			0 - 4 ft bgs			600	
			> 4 ft bgs			600	
Confirmation Base Samples							
CSB-048	CSB-048-3.0-20240731	7/31/2024	3.0	390	**780**	**725**	
	CSB-048-3.5-20240812	8/12/2024	3.5	340	**680**	**952**	F1
	CSB-048-5.0-20240814	8/14/2024	5.0	-	-	**1,020**	
	CSB-048-5.25-20240816	8/16/2024	5.25	-	-	**659**	
	CSB-048-5.5-20240821	8/21/2024	5.5	348	**696**	**744**	
	CSB-048-10.0	8/23/2024	10.0	408	**816**	-	
	CSB-048-15.0	8/24/2024	15.0	360	**720**	-	
	CSB-048-20.0	8/27/2024	20.0	505	**1010**	-	
CSB-049	CSB-049-3.0-20240731	7/31/2024	3.0	385	**770**	**998**	
	CSB-049-3.5-20240812	8/12/2024	3.5	-	-	**886**	
	CSB-049-5.0-20240814	8/14/2024	5.0	-	-	**828**	
	CSB-049-5.25-20240816	8/16/2024	5.25	-	-	**995**	
	CSB-049-5.5-20240821	8/21/2024	5.5	343	**686**	**668**	
	CSB-049-10.0-20240823	8/23/2024	10.0	400	**800**	**937**	
CSB-058	CSB-058-3.0-20240731 CSB-058-DUP-3.0	7/31/2024	3.0	275	**550**	**775** **990**	
	CSB-058-3.5-20240812	8/12/2024	3.5	385	**385**	**951**	
	CSB-058-5.0-20240814	8/14/2024	5.0	-	-	**1,240**	
	CSB-058-5.5-20240816	8/16/2024	5.5	-	-	**815**	
	CSB-058-5.75-20240821	8/21/2024	5.75	350	**700**	**783**	
	CSB-058-10.0	8/23/2024	10.0	438	**876**	-	
	CSB-058-15.0	8/23/2024	15.0	423	**846**	-	
	CSB-058-20.0	8/27/2024	20.0	495	**990**	-	
CSB-059	CSB-059-3.0-20240731	7/31/2024	3.0	400	**800**	**1,010**	
	CSB-059-5.0-20240808	8/8/2024	5.0	-	-	**1,130**	
	CSB-059-5.5-20240812	8/12/2024	5.5	-	-	**1,440**	
	CSB-059-6.0-20240814	8/14/2024	6.0	-	-	**1,190**	
	CSB-059-6.25-20240816	8/16/2024	6.25	-	-	**1,120**	
	CSB-059-6.5-20240821	8/21/2024	6.5	305	**610**	**644**	
	CSB-059-10.0	8/23/2024	10.0	428	**856**	-	
	CSB-059-13.0-20240823	8/23/2024	13.0	370	**740**	**758**	
CSB-068	CSB-068-3.0-20240731	7/31/2024	3.0	375	**750**	**964**	
	CSB-068-4.0-20240805	8/5/2024	4.0	318	**636**	**691**	
	CSB-068-5.0-20240808	8/8/2024	5.0	193	**386**	**739**	
	CSB-068-5.25-20240812	8/12/2024	5.25	-	-	**988**	
	CSB-068-6.0-20240814	8/14/2024	6.0	-	-	**1,230**	
	CSB-068-6.25-20240816	8/16/2024	6.25	-	-	**1,020**	
	CSB-068-6.5-20240821	8/21/2024	6.5	325	**650**	**923**	
	CSB-068-10.0	8/23/2024	10.0	515	**1030**	-	
	CSB-068-14.0-20240823	8/23/2024	14.0	345	**690**	**678**	
	CSB-068-18.0	8/23/2024	18.0	452	**904**	-	

AECOM

Table 1 - Field Titration Results - Eastern Area
Chevron MCBU - Amoco Federal 11 CTB Spill Site
Eddy County, New Mexico

Sample Location	Sample ID	Sample Date	Sample Depth (ft bgs)	Field Titration Readings (PPM)		Chloride (Method EPA 300.0 Anions by Ion Chromatography)	
				Initial Field Result	Correlated result (x2)*		
NMAC Regulatory Limits (Groundwater <50 ft bgs)			0 - 4 ft bgs			600	
			> 4 ft bgs			600	
CSB-069	CSB-069-3.0-20240731	7/31/2024	3.0	400	**800**	**915**	
	CSB-069-4.0-20240805	8/5/2024	4.0	358	**716**	**880**	
	CSB-069-4.5-20240812	8/12/2024	4.5	-	-	**1,250**	
	CSB-069-5.0-20240814	8/14/2024	5.0	248	**496**	**1,700**	F1
	CSB-069-5.5-20240816	8/16/2024	5.5	-	-	**1,120**	
	CSB-069-5.75-20240821	8/21/2024	5.75	333	**666**	**1,010**	
	CSB-069-10.0	8/23/2024	10.0	475	**950**	-	
	CSB-069-15.0-20240823	8/23/2024	15.0	305	**610**	**833**	
CSB-077	CSB-077-3.0-20240731	7/31/2024	3.0	498	**996**	**1,150**	
	CSB-077-4.0-20240805	8/5/2024	4.0	355	**710**	**1,080**	
	CSB-077-5.0-20240808	8/8/2024	5.0	250	**500**	**978**	
	CSB-077-5.25-20240812	8/12/2024	5.25	-	-	**819**	
	CSB-077-6.0-20240814	8/14/2024	6.0	-	-	**1,530**	
	CSB-077-6.25-20240816	8/16/2024	6.25	-	-	**1,090**	
	CSB-077-6.5-20240821	8/21/2024	6.5	305	**610**	**1,030**	
	CSB-077-10.0	8/23/2024	10.0	403	**806**	-	
	CSB-077-12.0-20240823	8/23/2024	12.0	375	**750**	**830**	
	CSB-077-15.0	8/23/2024	15.0	426	**852**	-	
CSB-086	CSB-086-3.0-20240731	7/31/2024	3.0	390	**780**	**984**	
	CSB-086-4.0-20240805	8/5/2024	4.0	378	**756**	**1,090**	
	CSB-086-5.0-20240808	8/8/2024	5.0	263	**526**	**1,280**	
	CSB-086-5.25-20240812	8/12/2024	5.25	340	**680**	**1,200**	
	CSB-086-6.0-20240814	8/14/2024	6.0	-	-	**1,240**	
	CSB-086-6.25-20240816	8/16/2024	6.25	-	-	**1,150**	
	CSB-086-6.5-20240821	8/21/2024	6.5	333	**666**	**1,150**	
	CSB-086-10.0	8/23/2024	10	378	**756**	-	
	CSB-086-15.0	8/23/2024	15	402	**804**	-	
	CSB-086-20.0	8/23/2024	20	418	**836**	-	

Notes:

1. Soil analyses performed by Eurofins Environment Testing in Midland, Texas.
2. All analytical data are reported in units of milligrams per kilogram (mg/kg).
3. Regulatory Limits are from 19.15.29 New Mexico Administrative Code (NMAC) - "Closure Criteria for Soils Impacted by a Release."
4. "-" Indicates not analyzed/sampled
5. "ft bgs" - feet below ground surface.
6. * - Field titration results were found to correlate to lab results generally with a multiplier of 2. This was liklely due to sample rinse time and calcium corbonate interfernces from the soil
7. Results reported below laboratory Sample Detection Limits (SDLs) are preceded by "<".
8. **Bold** values represent detectable concentrations above the SDLs.
9. **Bold and Shaded** - Reported concentration exceeds NMAC Regulatory Limits.
10. Results followed by "F1" indicate Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) recovery exceeds laboratory control limits.
11. Soil removed down to very hard/competent rock layer - further sampling not possible.

aecom.com

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 413774
	Action Type: [IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By	Condition	Condition Date
bhall	Sampling plan and variance request for the requirement to resample previously sampled locations which were missed for BTEX and TPH during the excavation activities are approved. A complete and accurate report (either a complete remediation closure report or remediation plan, whichever is applicable), is due by 2/28/2025.	12/19/2024