



SITE SAMPLING PLAN

**BAKER STATE B #36-11 WELLHEAD AND FLOWLINE
API #05-123-17429
FACILITY ID #249626
REM #20766**

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January 24, 2025

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EXECUTIVE SUMMARY

Montrose Environmental Solutions, Inc. (Montrose) will be conducting environmental confirmation sampling at the Baker State B #36-11 wellhead and associated flowline in Weld County, Colorado (Site). Sampling will consist of the collection of surface and subsurface soil samples for analysis of the complete Colorado Energy and Carbon Management Commission (ECMC, formerly the Colorado Oil and Gas Conservation Commission, COGCC) Table 915-1 analyte list to advance the Site towards a No Further Action (NFA) determination from the ECMC. Should groundwater be encountered during soil sampling activities, groundwater samples will be collected and compared to the Colorado Department of Public Health and Environment's (CDPHE's) Water Quality Control Division (WQCD) Regulation 41. All work is being conducted in accordance with ECMC Rule 911 and the Chevron Decommissioning Sample Reference Guide. Montrose personnel will comply with all Montrose and Chevron health and safety standards.

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1 PROJECT PURPOSE AND BACKGROUND

Montrose has prepared this Site Sampling Plan (SSP) for Chevron Corporation (Chevron) and its subsidiaries for sampling activities at the Baker State B #36-11 wellhead and associated flowline (Site). These sampling activities are intended to help Chevron comply with Rule 915 (Section 2 CCR 404-1-915, Concentrations and Sampling for Soil and Groundwater), and to move the Site towards a No Further Action (NFA) determination from the ECMC.

Materials that may be present during Site activities include exploration and production (E&P) waste, including but not limited to produced water, crude oil, and condensate.

The land adjacent to the Site is cropland. Potential nearby receptors include residential land approximately 0.2 miles southwest and farm structures approximately 0.17, 0.19, and 0.2 miles southwest.

Groundwater was not previously encountered on Site and is expected to be greater than 20 feet below ground surface (bgs), according to information obtained from reviewed documentation.

The tank battery (TB) BAKER ST B 36-11,12,13,14, CLYNCKE STATE B 36-25,20, located 0.45 miles southwest of Baker State B #36-11 wellhead and associated flowline, has been removed and is in the process of remediation with an estimated date of completion of December 29, 2025. This tank battery is listed under a separate remediation number (REM #20768) and is being managed by others. Three (3) site associated wellheads share a common flowline with Baker State B #36-11 wellhead, these associated wellheads are: Clyncke State B #36-20 (REM #20774), Baker State B #36-12 (REM #20770), and Clyncke State B #36-25 (REM #20778). All sites excluding Baker State B #36-11 are currently also being managed for others with varying levels of flowline abandonment and wellhead Plug and Abandoned (PA) statuses.

1.1 Decommissioning and Environmental Sampling History

The former Baker State B #36-11 wellhead was cut and capped on August 30, 2023. Approximately 300 feet of flowline was removed and approximately 2,158 to 2,258 feet of the remaining flowline was abandoned in place (ABIP) on November 30, 2023 (Form 44, Document #4033466651)

Decommissioning sampling included the collection of one (1) soil sample at the base of the wellhead excavation, four (4) grab samples were collected along the flowline alignment, and one (1) sample at the flowline terminus at the oil-water separator (Document #403780436, June 7, 2024). The wellhead excavation sidewalls were field screened in the cardinal directions with a photoionization detector (PID); the highest reading was 2.3 parts per million (ppm) and therefore no soil samples were collected from the excavation sidewalls. Soil samples were analyzed by an ECMC-certified laboratory for TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons) organic compounds in soil (per ECMC Table 915-1); electric conductivity (EC), sodium absorption ratio (SAR), pH, and boron. No exceedances of the Table 915-1 analytes were reported.

Additional soil samples are to be collected along the flowline alignment every 250 feet and at points listed on the site investigation plan (Document #403780491, May 9, 2024). Additionally, no background samples were collected or screened at the Site.

Operator comments on an approved Form 27 (Document #403780436, June 7, 2024) state that:

The wellhead and initial flowline decommissioning assessments were completed at the BAKER STATE B36-11 location in accordance with approved initial Form 27 Doc. # 402864761, included under related forms. Per Supp. Form 27 Doc. # 403708728, additional site investigations will be scheduled to assess the BAKER STATE B36-11, BAKER STATE B36 12, CLYNCKE STATE B36-25, and CLYNCKE STATE B36-20 flowlines.

ECMC listed Conditions of Approval (COA) on approved Form 27 (Document #403780436, June 7,2024) state that:

Given the lack of documented flowline integrity at abandonment, Operator shall conduct soil sampling at a minimum of every 250 feet between the proposed sample locations shown on the Proposed Assessment Map (Document #403780491)

1.2 Sample Plan Objectives

According to available documentation, the following objectives are required to meet ECMC compliance and/or Chevron policy gaps:

- 1) Collect and submit soil samples around the wellhead for the complete Table 915-1 analyte suite.
- 2) Identify the location of the ABIP flowline, including any flowline risers (both ends), drainage or surface water crossings, HPH crossings, significant direction changes, and co-mingling locations.
- 3) Complete the PID screening along the flowline alignment every 250 feet; for any screening locations above 10 ppm, a soil sample will be collected and submitted for analysis of the full Table 915-1 analyte suite. Samples will be collected and submitted for laboratory analysis at any flowline risers (both ends), drainage or surface water crossings, HPH crossings, significant direction changes, and co-mingling locations.
- 4) Collect and submit background soil samples for the inorganic suite of analytes on Table 915-1 analyte suite.

2 SAMPLING PLAN

2.1 Health and Safety

Field sampling will be conducted by Montrose personnel. Personnel will comply with all health and safety policies and procedures as indicated by Chevron and in Montrose SOP 004 Surface and Subsurface Soil Sampling. Additionally, Montrose has prepared a Site-specific Job Safety Analysis (JSA) form, which will be present onsite during sampling activities. Refer to the Chevron Decommissioning Sample Reference Guide (Appendix B) for more information. Depending on the individual project, a Chevron representative may be present at the Site.

2.2 Utility Clearance

Prior to conducting fieldwork, Montrose personnel will coordinate Site access with Chevron through the Landowner Access Request Tracker. Utilities will be cleared in accordance with Montrose SOP 003 Utility Clearance and located by Colorado 811 Utility Location service prior to mobilization to the field. Once at the Site, a secondary sweep will be conducted by Montrose personnel in accordance with Chevron policy utilizing a Radiodetection Schonstedt® utility locator or similar device.

2.3 Wellhead Sampling

Montrose standard for wellhead soil sampling:

1. Collect field screenings at a depth of one-half (½) foot on the north, east, south, and west sides of the wellhead excavation, no more than ten (10) feet from the abandoned wellhead.
2. A grab soil sample will be collected at the wellhead base at depth of six (6) feet below ground surface (bgs), unless noted otherwise, and submitted to the lab.
3. Collect sidewall field screenings at depth of one (1) foot above the base wellhead excavation depth on the north, east, south, and west sides of the wellhead excavation; as best practice is to cut and cap the wellhead at six (6) feet bgs, sidewall samples will typically be collected at a depth of approximately five (5) feet bgs.
4. Collect a reading from all field screenings using a photoionization detector (PID); note any samples with readings > 10 ppm (i.e., “hot” readings).
5. Any field screenings with a PID reading over 10 ppm, as well as the wellhead base excavation sample, will be submitted to a certified laboratory for the full ECMC Table 915-1 suite of chemicals.
6. Record all sampling locations using Trimble GPS unit.

Table 2-1: Proposed Wellhead Sampling Locations

Sample ID	Coordinates		Analysis (Lab/Field Screen)	Justification
	Latitude	Longitude		
Wellhead				
WH01 @ 6'	40.354147	-104.500520	Lab	Excavation wellhead floor sample
Sidewall				
FLR01 @ 5'	40.354162	-104.500520	Lab	Sidewall with flowline riser
WH01-E @ 5'	40.354144	-104.500496	Field Screen	Sidewall

WH01-S @ 5'	40.354124	-104.500517	Field Screen	Sidewall
WH01-W @ 5'	40.354144	-104.500541	Field Screen	Sidewall
Directional Surface Screening				
WHS-N	40.3541758	-104.5005201	Field Screen	Step-out screening at cardinal direction
WHS-E	40.3541443	-104.5004780	Field Screen	Step-out screening at cardinal direction
WHS-S	40.3541102	-104.5005168	Field Screen	Step-out screening at cardinal direction
WHS-W	40.3541439	-104.5005589	Field Screen	Step-out screening at cardinal direction

2.4 Flowline Sampling

Montrose standard for flowline soil sampling:

1. Soil sample to be collected below flowline riser at wellhead and at separation tank, if location is known, and submitted to the lab.
2. Flowline field screenings will be conducted along length of flowline, in increments of approximately 250 feet.
3. Additional assessments will be conducted at the following locations: point of integrity test failure, below each flowline riser (at both the “start” and “end” locations), any drainage or surface water crossing (on both sides), adjacent to and at any high pressure, high temperature (HPH) crossing (on both sides), at significant direction changes, and at any co-mingling locations.
4. If flowline riser is present but abandoned, and was previously unknown, another soil sample will be taken below that riser; coordinates will be noted and added to Table 2-2, if applicable.
5. Collect a PID reading from all field screenings; note any samples with readings > 10 ppm (i.e., “hot” readings).
6. Samples collected with a PID readings over 10 ppm, or at significant flowline directional changes, and at flowline riser locations will be submitted to a certified laboratory for the full ECMC Table 915-1 suite of chemicals.
7. Record all sampling locations using Trimble GPS unit.

Table 2-2: Proposed Flowline Sampling Locations

Sample ID	Coordinates		Analysis (Lab/Field Screen)	Justification
	Latitude	Longitude		
Flowline Riser				
FLR02@5'	40.348913	-104.502543	Lab	Flowline riser sampling below oil-water separator
Flowline				
FL01@6'	40.35416	-104.501215	Lab	Previous consultant sample point
FL02@4'	40.354151	-104.501641	Lab	Flowline sampling along turn.
FL03@4'	40.353782	-104.502001	Lab	Flowline sampling along turn.
FL04@4'	40.352865	-104.502070	Lab	Flowline sampling along turn.

FL05@4'	40.352866	-104.502602	Lab	Flowline sampling along length.
FL06@4'	40.352854	-104.503095	Lab	Flowline sampling along length.
FL07@4'	40.352834	-104.504041	Lab	Flowline sampling along length.
FL08@4'	40.352816	-104.504872	Lab	Flowline sampling along turn.
FL09@4'	40.352353	-104.502075	Lab	Flowline sampling along length.
FL10@4'	40.351902	-104.502054	Lab	Flowline sampling along length.
FL11@4'	40.351242	-104.502046	Lab	Flowline sampling along length.
FL12@4'	40.350588	-104.502028	Lab	Flowline sampling along length.
FL13@4'	40.349884	-104.502004	Lab	Flowline sampling along length.
FL14@4'	40.349069	-104.501991	Lab	Flowline sampling along turn.

2.5 Background Sampling

Montrose standard for background sampling:

1. Collect two (2) wellhead background samples outside of the wellhead zone on untouched and upgradient land, at least 50 to 100 feet away from the above-mentioned sample locations.
2. Samples will be collected from depths in correlation to the above-mentioned wellhead, flowline, and sidewall sample depths.
3. Record background sampling locations using Trimble GPS unit.
4. If a flowline is present, collect background samples on untouched and upgradient land, 50 to 100 feet away from the above-mentioned sample locations; samples will be collected from a depth of four (4) feet bgs, or in correlation to the above-mentioned flowline sample depths.
5. Collect a PID reading from all Ziploc bags; note any samples with readings > 10 ppm (i.e., "hot" readings)
6. All background soil samples will be submitted to a certified laboratory for soil suitability for reclamation and metals in soil from the ECMC Table 915-1 suite of chemicals.

Table 2-3: Proposed Background Sampling Locations

Sample ID	Coordinates		Analysis (Lab/Field Screen)	Justification
	Latitude	Longitude		
Flowline				
FL01 BKG01	40.3543640	-104.501108	Lab	Flowline upgradient background sample
FL01 BKG02	40.352984	-104.501789	Lab	Flowline upgradient background sample
FL01 BKG03	40.352990	-104.504664	Lab	Flowline upgradient background sample
FL01 BKG04	40.349200	-104.501789	Lab	Flowline upgradient background sample
Wellhead				
WH01 BKG01	40.354346	-104.500275	Lab	Upgradient background sample

WH01 BKG02	40.354300	-104.500493	Lab (on hold)	Cross gradient background sample
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2.6 Groundwater Sampling

If groundwater is encountered during any soil sampling activities, a sample will be collected in accordance with the Chevron Decommissioning Sample Reference Guide (Appendix B). Specifically, groundwater samples will be collected from soil boring locations that represent points of compliance per Chevron and ECMC guidance.

Chevron will be notified if hydrocarbon impacts are discovered at any soil sample location that is in contact with groundwater.

2.7 Field Decontamination

Field decontamination will be conducted in accordance with Montrose SOP 017 Decontamination of Equipment. Reusable equipment that is used for sampling, testing, or measuring, including heavy equipment, that comes in contact with potentially impacted media, will be decontaminated prior to use and between sampling locations. Disposable sampling equipment will not require decontamination before use provided it is sterile and individually wrapped in aluminum foil. Disposable equipment will be discarded after use and will not be used at more than one sampling location.

2.8 Site Restoration

Hand-augured borings will be backfilled in accordance with Chevron processes and procedures. Backfilling activities will include the addition of bentonite chips into each boring to ground surface; per Chevron guidance, the bentonite chips will not be hydrated by field personnel to prevent the introduction of foreign water into the aquifer system. Bentonite chips will be naturally hydrated by precipitation.

2.9 Field Documentation

Sampling activities will be documented in accordance with Montrose SOP 001 Field Documentation Procedures. Each Field Team conducting sampling activities shall maintain a field logbook to document the activities performed by the Field Team each day that field work is conducted. All soil samples will be documented on the Soil Sample Summary Form attached in Appendix A. A Daily Field Report will be submitted to Chevron following each day of field activities.

2.10 Investigation Derived Waste Disposal

All investigation-derived waste (IDW) will be disposed of in accordance with Montrose SOP 018 Management of IDW. Used personal protective equipment (PPE) will be double bagged and placed in a municipal refuse dumpster. This waste is not considered hazardous and can be sent to a municipal landfill.

Decontamination fluids that will be generated in the sampling event will consist of deionized water mixed with Alconox[®]. The volume and concentration of the decontamination fluid will be sufficiently low to allow disposal at the Site or collected in the designated area for collection and disposal in the Denver-Julesburg (DJ) Basin field office as provided by Chevron. Chevron will manage handling and disposal of sampling wastes collected at the designated sites.

3 LABORATORY ANALYSIS

3.1 Analysis

Origins Laboratory (Origins) will analyze the samples using EPA SW-846 analytical methods. The method selected will have detection limits less than or equal to the cleanup concentrations in ECMC Table 915-1 and WQCD Regulation 41, as incorporated by reference in ECMC Rule 901.b.

Chevron will adhere to the specialized agricultural analytical methods where required pursuant to footnote 2 to Table 915-1. Origins lab has experience with agricultural analysis as required by ECMC.

3.2 Chain of Custody

All samples will be collected in accordance with Montrose SOP 016 Sample Labeling, Packing, and Shipping. Samples will be collected, preserved, documented, and delivered to the Origins lab drop-off facility in Evans, Colorado or the Origins lab in Denver, Colorado using a chain-of-custody protocol using standard environmental sampling procedures in a manner to ensure accurate representation of Site conditions.

A copy of the chain-of-custody form is found in Appendix 1. Forms will be completed and will remain with the samples for until they reach the lab. All chain-of-custody forms must include the RBUEUF27@chevron.com email.

The chain-of-custody form will identify the Site name, Chevron location billing number, contents of each shipment, and signatures, and is to maintain the custodial integrity of the samples. Generally, a sample is considered to be in someone's custody if it is either in someone's physical possession, in someone's view, locked up, or kept in a secured area that is restricted to authorized personnel. Until the samples are dropped off at the Origins lab Evans pickup location or at the Origins lab Denver location, the custody of the samples will be the responsibility of Montrose. The sampling team leader or designee will sign the form in the "relinquished by" box and note date, time, and shipment number.

A self-adhesive custody seal will be placed across the lid of each sample. Custody seals will be provided by the laboratory. The shipping containers in which samples are stored (usually a sturdy cooler provided by Origins) will be sealed with self-adhesive custody seals any time they are not in someone's possession or view before shipping. All custody seals will be signed and dated.

Figure

Appendix A – Field Forms

Appendix B – Chevron Decommissioning Sample Reference Guide
