Vadose Zone Assessment Workplan

Hobbs Gas Plant
Lea County, New Mexico
AP-122
NMOCD Incident # nPAC0706832026

Prepared for:

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Denver, CO 80237-3658

Prepared by:

2620 W Marland Boulevard
Hobbs, New Mexico 88240

December 11, 2025

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1. Introduction

Tasman, Inc. (Tasman) on behalf of DCP Operating Company, LP (DCP) is submitting this new Vadose Zone Assessment Workplan (Plan) to the New Mexico Oil Conservation Division (NMOCD) based on comments DCP received in a October 31, 2025 letter rejecting the *Abatement Completion Report* associated with the Hobbs Gas Plant (Site) in Lea County, New Mexico (Figure 1). The Site is assigned an Abatement Plan Number AP-122 and Incident Number nPAC0706832026 by the NMOCD and the main constituents of concern (COCs) at the Site are benzene, toluene, ethylbenzene, and total xylenes (BTEX). This new Plan presents assessment activities to demonstrate that the vadose zone beneath the Site has been abated of COCs in accordance with New Mexico Administrative Code (NMAC) 19.15.30 and requirement provided by the NMOCD in the October 31, 2025, letter.

2. Site Location and Background

The Site is located in the southwestern quarter of the northeastern quarter (Unit G) of Section 36, Township 18 South, Range 36 East (approximate coordinates 32.705330 degrees north and 103.306600 degrees west). It is approximately 0.5 miles north and 0.45 miles east of the intersection of US Highway 62 and County Road 41. The Site is an inactive cryogenic gas processing plant spanning approximately 3.5 acres surrounded by undeveloped land. The facility contained a laboratory, an amine unit, compressors, molecular sieve dehydration equipment, tank batteries, and an on-site water production well used for non-potable water.

A petroleum release was first discovered when Duke Energy Field Services (DEFS), which is now DCP, conducted an environmental assessment of the Site in support of a property transaction in the spring of 2004. Initial findings indicated groundwater from a monitor well near the amine skid in the southeast corner of the facility contained elevated concentrations of benzene.

There are eight groundwater monitoring wells at the site (MW-AR2, MW-BR, MW-CR, MW-DR, MW-ER, MW-FR, MW-GR2, and MW-H) that make up the current monitoring well network. Monitor well MW-H was installed outside of the facility fence and each well was drilled to a depth of approximately 90 feet below grade surface (bgs) using a truck mounted air rotary drilling rig. These wells were installed during the 4th quarter 2022 reporting period due to decreasing groundwater elevations at the Site and because the previously installed monitoring wells (MW-AR, MW-B, MW-C, MW-D, MW-E, MW-F, and MW-GR) became dry over time. The dry wells were subsequently plugged and abandoned during the same mobilization and in accordance with local and State guidelines. Figure 2 illustrates the locations of the current groundwater monitoring network onsite.

3. Vadose Zone Assessment

Following the approval and acknowledgment that groundwater monitoring at the Site was complete based on eight consecutive quarterly monitoring events with groundwater concentrations being below New Mexico Water Quality Control Commission (NMWQCC) standards, NMOCD directed DCP to complete an assessment of the vadose zone per the Abatement Standards set forth in 19.15.1.19 NMAC (prior to

2008) and the updated 19.15.30.19 NMAC standards to meet the requirements for requesting closure from the NMOCD and consideration of abatement completion for the Site.

Initial vadose zone assessment activities were completed in May 2025 based on the October 2024 conditionally approved *Vadose Zone Sampling Plan*. During the May 2025 vadose zone assessment, five soil borings were advanced to approximately 55 and 60 feet bgs to assess if petroleum hydrocarbon impacts to soil are present within the vadose zone, above the shallow groundwater table and have the potential to contact groundwater. Accordingly, the terminal depth of each soil boring was completed above the groundwater capillary fringe within the vadose zone. Further details of the drilling investigation and field screening and sampling activities were provided in the *Vadose Zone Assessment Summary and Incident Closure Request* that was submitted and approved by the NMOCD on September 19, 2025. Based on the information presented to the NMOCD in the previously submitted reports and the rejection of the *Abatement Completion Report,* DCP acknowledges the NMOCD comments and has included information in accordance with the Plan requirements provided in the rejection letter.

3.1 Vadose Zone Assessment Activities

The proposed soil boring locations will be cleared for underground utilities subsequent to 811 utility locates and utilizing hydro-excavation potholing. Based on previous Site experience and regional lithologic conditions, caliche is typically encountered within two feet from the surface and then intermittently throughout the subsurface. In accordance with NMOCD requirements and for this Plan, DCP will utilize sonic drilling with continuous core sampling methods as originally proposed to advance five (5) soil borings at the locations illustrated on Figure 3. Drilling will be completed to approximately 72-75 feet bgs at each location and/or until the groundwater interface is identified which is suspected to be encountered around 78 feet bgs based on the November 2025 gauging event. The static water level was measured in the existing wells nearby on November 20, 2025 to determine the approximate terminal depth of each soil boring, which is proposed to be within 5 feet of the static water level. Lithologic conditions at each soil boring location will be evaluated and recorded by a qualified professional during the drilling activities and soil will be field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) approximately every 5-10 feet of core and following generally accepted industry practices. Soils samples will be collected approximately every 10 feet beginning around 10 feet bgs until terminal depth. During the field screening for each 10-foot interval, and pursuant to 19.15.29.11 A (5)(d), if a zone within the 10 interval exhibits elevated PID readings, a soil sample will be collected from that interval with the highest observed reading rather than the final depth of that interval.

Subsequent to a 30-Day review period of this Plan by NMOCD and contingent on approval of the proposed investigation activities provided herein, DCP will notify the NMOCD Special Projects division via email at least one week before the proposed start date, anticipated to commence in January 2026. Lithologic soil boring logs, field observations, and photographic documentation will be presented to the NMOCD in a vadose zone assessment summary report following the investigative activities.

DCP will complete the required NMOCD permitting and sampling notification prior the vadose zone assessment activities. Drilling will be completed by a licensed New Mexico driller (Cascade) and drilling equipment will be decontaminated after each boring and drill cuttings will be managed according to State

regulations and will be disposed of at an approved off-site disposal facility as needed. Upon completion of the soil boring and vadose zone assessment, each borehole will be plugged and abandoned by the drill crew in accordance with New Mexico Office of State Engineers (NMOSE) regulations. A NMOSE well-plugging plan of operations will also be prepared by the drilling company. General practices for plugging borings in unconsolidated material or aquifers includes filling the boring to the static water level (if present) with clean sand or clean gravel then the borehole is filled with clean native clays, cement, drill cuttings, or high solid bentonite or grout to the ground surface to match existing Site conditions.

3.2 Soil Sampling and Analysis Quality Procedures

The collection of soil samples for laboratory analysis will be conducted in accordance with NMOCD criteria and approved industry standards. During the assessment activities, soil samples will be collected and placed in laboratory provided containers, properly labeled, and preserved on ice in a cooler with a trip blank provided by the laboratory until delivery under a chain of custody procedures to PACE Laboratory located in Mt. Juliet, Tennessee for analysis. DCP will also notify NMOCD two (2) business days prior to collecting any confirmation samples and complete NMOCD Permitting C-141N (Sampling Notice) following the requirements outlined in 19.15.29.12 D (1)(a) of the guidelines.

Soil samples for laboratory analysis will be collected pursuant to 19.15.29.11 A(5)(d) beginning approximately every ten (10) feet bgs until terminal depth. Each soil sample will be analyzed for the constituents listed below per NMOCD guidance using the appropriate United States Environmental Protection Agency (USEPA) published analytical methods or other NMOCD-approved methods. Laboratory analytical methods are as follows:

- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) – USEPA SW-846 Method 8260B.
- Chloride - USEPA Method 300.0,
- Polyaromatic Hydrocarbons (PAH) - USEPA Method 8270-SIM
- Total Petroleum Hydrocarbons (TPH) – USEPA SW-846 Method 8015M.

NMOCD assessment and cleanup levels for hydrocarbon and produced water releases are based on depth to groundwater and proximity to sensitive receptors as established in NMAC 19.15.29. Based on the site characteristics and previously approved action Levels for a site with a depth to groundwater anticipated between 50 and 100 feet, the following Action Levels were utilized:

Constituent	Remediation Action Level
Chloride	10,000 mg/kg
TPH (GRO+DRO+MRO)	2,500 mg/kg
TPH (GRO+DRO)	1,000 mg/kg
BTEX	50 mg/kg
Benzene	10 mg/kg
PAHs	Undefined*

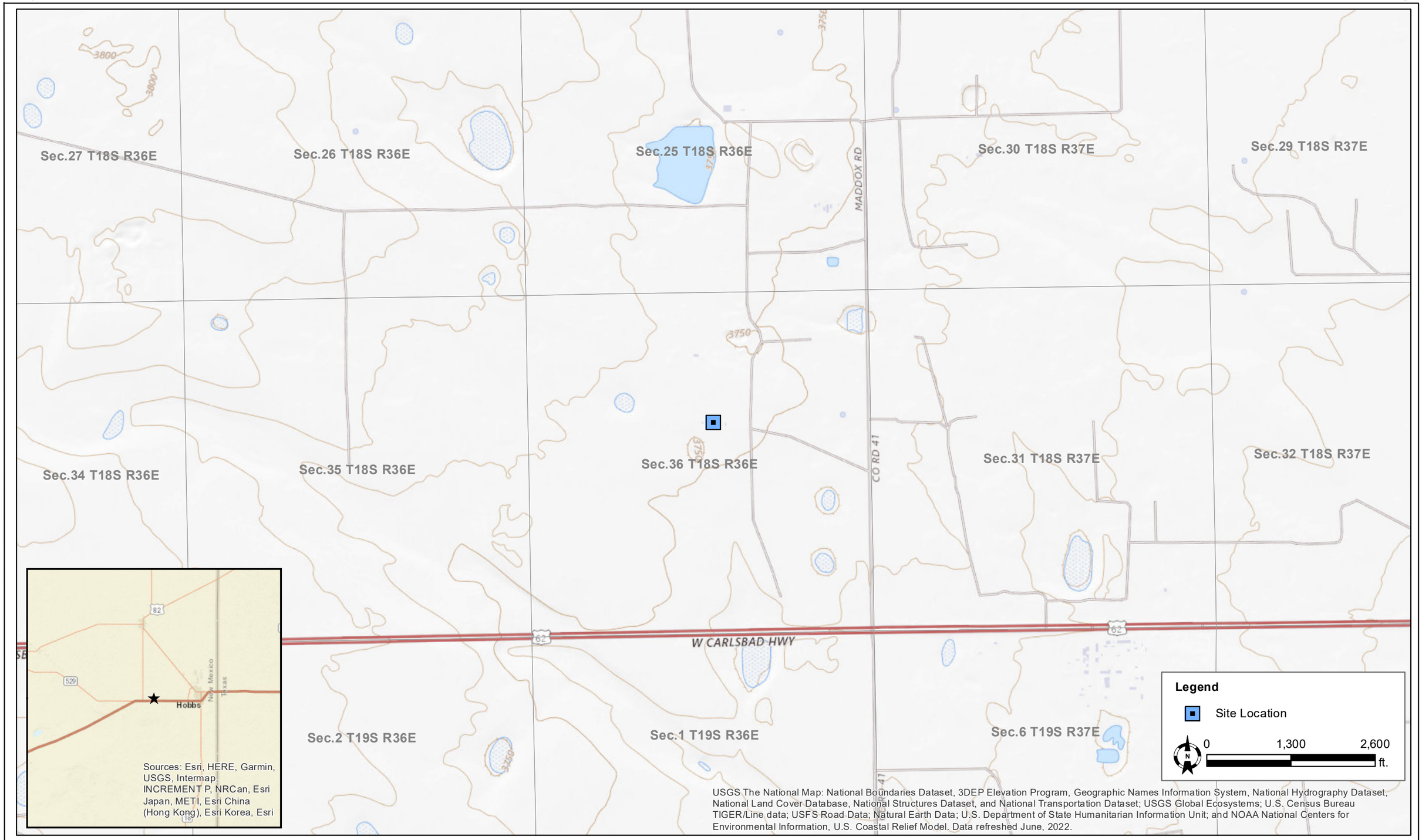
TPH – total petroleum hydrocarbons
DRO – diesel range organics
BTEX – benzene, toluene, ethylbenzene, total xylenes
PAH – Polyaromatic hydrocarbons
GRO – gasoline range organics
MRO – motor/lube oil range organics
mg/kg – milligrams per kilogram
*(NMOCD referenced NMAC 20.2.6.3103 Water Quality Regulations for Specific PAHs)

The laboratory data and reports will be reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures to ensure all samples were analyzed using the correct analytical methods, within the correct holding times and the chain of custody forms are properly executed and data is reported using the correct method number and reporting units.

4. Conclusions

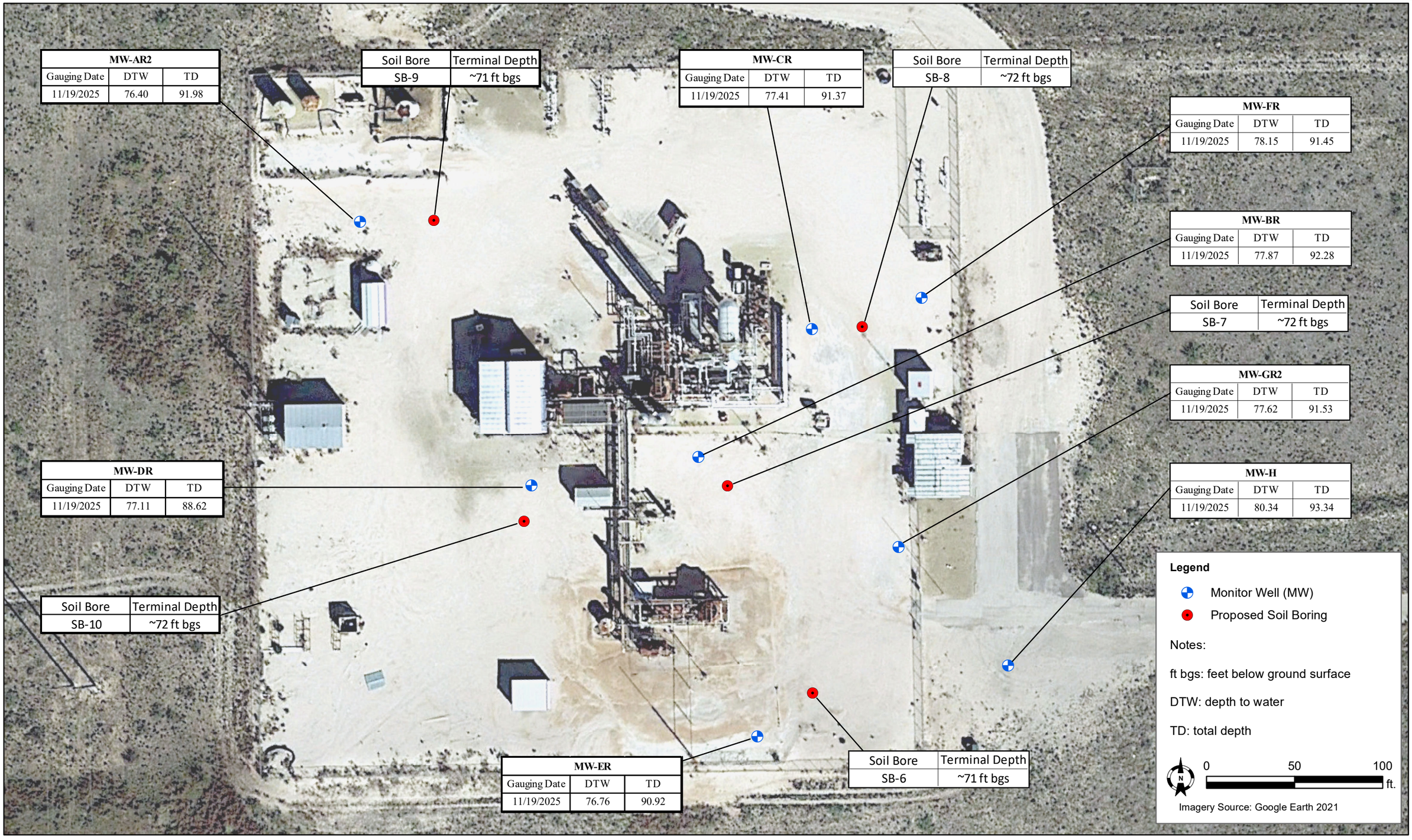
Following approval and execution of this Plan, DCP will present the NMOCD with the results in a Vadose Zone Assessment Summary Report. Based on the information previously provided to the NMOCD in the *Abatement Completion Report* and if the results demonstrate that COCs are not present above applicable State standards in the vadose zone and have naturally attenuated to below the applicable standards, DCP anticipates requesting that the Site be granted closure in the supplemental Vadose Zone Assessment Summary report. Upon receipt of approval from the NMCOD, all on-site monitoring wells will be plugged and abandoned per State and industry standard rules and regulation.

Figures



DATE: Februrary 2024 DESIGNED BY: B. Dennis DRAWN BY: B. Dennis	TASMAN **Tasman, Inc.** **6855 W. 119th Ave** **Broomfield, CO 80020**	**DCP Operating Company, LP** **Hobbs Gas Plant** SWNE, Section 36, Township 18 South, Range 36 East Lea County, New Mexico	Site Location Map	Figure 1

DATE: March 2023 DESIGNED BY: B. Dennis DRAWN BY: B. Dennis	TASMAN Tasman, Inc. 6855 W. 119th Ave Broomfield, CO 80020	**DCP Midstream, LP** **Hobbs Gas Plant** SWNE, Section 36, Township 18 South, Range 36 East Lea County, New Mexico	Site Overview Map	Figure 2



DATE: April 2025 DESIGNED BY: B. Dennis DRAWN BY: B. Dennis	TASMAN EST. 2009	**DCP Operating Company, LP** **Hobbs Gas Plant - nPAC0706832026** SWNE, Section 36, Township 18 South, Range 36 East Lea County, New Mexico	Proposed Soil Boring Location Map	Figure 3

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General Information
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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: DCP OPERATING COMPANY, LP 2331 Citywest Blvd Houston, TX 77042	OGRID: 36785
	Action Number: 534182
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
shanna.smith	Activities will comply with the Vadose Zone Assessment Workplan dated December 11, 2025. In the event a change needs to be made from the Workplan, activities must stop and get OCD approval before proceeding.	1/9/2026
shanna.smith	Pursuant to 19.15.30.9 (A) Each soil boring will have two soil samples collected from the depth exhibiting the highest concentration of VOC's based on PID screenings and at the capillary fringe or deepest depth investigated.	1/9/2026
shanna.smith	Scheduling of Workplan activities should begin by February 6, 2026.	1/9/2026
shanna.smith	DCP will email OCD Special Projects one week before drilling commences. DCP will complete/submit C-141N (Sampling Notice) notifying OCD 2 business days prior to collecting confirmation samples.	1/9/2026