



**BISHOP LOSS OF CONTAINMENT
GALETON, COLORADO
AGRICULTURE RECLAMATION SAMPLING ANALYSIS PLAN**

Version 1.1

Prepared on Behalf of:
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1.0 Introduction and Purpose

This Agriculture Reclamation Sampling Analysis Plan was prepared by H2 Enterprises on behalf of Noble Energy, Inc. (Noble) in response to the Bishop Loss of Containment in Galeton, Colorado. The incident occurred on 4/6/2025. The GPS coordinates for the approximate location of the release Site are: (40.505384, -104.585581).

The purpose of this plan is to develop a systematic process for determining suitable backfill material for agricultural parcels if soil is to be removed as part of remediation, and to select agronomic sample locations and analyte parameters within impacted areas identified through initial sampling as denoted in the ESAP (version 1.4, 5/7/2025) and Non-Residential Soil Sampling Locations Plan (version 1.1; 4/29/25).

2.0 Health and Safety

Safety is the most important consideration when implementing this plan. All Site personnel will review and adhere to the incident Site Safety and Control Plan (ICS Form 208) and company/contractor-specific Health and Safety Plans (HASP), as applicable. Daily tailgate safety briefings will be conducted prior to going into the field. Additional safety briefings may be given prior to undertaking activities such as sampling near water. In general, sampling will only be conducted during daylight hours by qualified third-party personnel and under weather or other environmental conditions that do not create unsafe working conditions. The appropriate personal protective equipment (PPE) will be utilized for each task. Any incident will be promptly reported in accordance with the Site-specific Site safety plan and to Incident Command (IC).

3.0 Landowner Access

Prior to H2 Enterprises accessing private land, Noble will obtain access approval via a signed access agreement or a verbal approval. Once Noble secures access to a parcel, H2 Enterprises will be notified so the parcel can be accessed for assessment and/or sampling. H2 Enterprises will not assess a private land parcel without the landowner's permission.

4.0 Agronomic Soil Sampling

The process for horizontal and vertical delineation of impact is described in Section 6.0 of the Non-Residential Soil Sampling Locations Plan (version 1.1; 4/29/25). The plan states that once horizontal extent is determined, vertical delineation will then be determined. In coordination with vertical delineation, H2 Enterprises will identify a sampling grid to sample agronomic soil parameters from the potential depths of 0-6", 6-12", 12-18", and 18-24"; however, sampling depth will be dictated by vertical extent of

impact. For example, if impact is only found in the top 4", agronomic samples will be analyzed from the 0-6" depth only. The sampling grid will be developed to an appropriate scale warranted by delineation of impact. The sample(s) will be analyzed at a discrete location which will be identified by H2 Enterprises and tested for suitability parameters as seen in Table 1. Since agronomic sampling locations will be coordinated with vertical delineation locations, results for Soil Suitability for Reclamation parameters (EC, SAR, pH, and boron) will not be retested by H2, but cross referenced per location with CTEH.

In addition to the agronomic samples, a minimum of three (3) discrete reference sample locations will be identified, based on soil type and land use, outside of the immediate area impacted from the loss of containment. The reference sample(s) will be tested for analytes (Table 1) at the 0-6" depth, and if required, 6-12" depth. In the situation a subsoil reference sample is needed, samples should be taken at same discrete location below the topsoil layer at one-foot intervals. Depths will be determined through vertical delineation process. This reference sample will be used as a comparison for all parcels that require agronomic soil suitability analysis with similar soil types.

4.1 Form 27 Work Plan

Parcel specific Form 27 Work Plans will be created for each parcel so that agronomic sampling protocols, test results, and other data directly address the parcel of interest.

All samples within identified areas of impact will be analyzed for agronomic suitability (Table 1) with respect to land use type (e.g. crop, fallow, pasture, dryland, etc.) Table 1 identifies soil parameters that will be used to create a site remedial plan document. The parcel specific remedial plan will outline potential remediation options for each delineated impact level (and depths) and determine potential remediation options to effectively mitigate potential impact. Remediation options may include soil excavation and removal and import of topsoil or suitable clean fill in which texture is identified as a sampling parameter for areas that need imported topsoil. Topsoil material will not be reimported until target analyte concentrations are below their respective background concentrations or screening values identified through the Non-Residential Soil Sampling Locations Plan (version 1.1; 4/30/25). Parcels may require remedial alternatives that may include mowing, removal of vegetation, or excavation of soils. If the remedial alternative is deemed as vegetation removal only, there is no need to test for agronomic soil suitability parameters. When there is need for imported topsoil, topsoil will be analyzed to ensure that material will meet regulation parameters based on Table 915-1 Soil Suitability for Reclamation standards, as well as meet representative soil suitability parameters referenced in Table 1. In the case that the landowner has specific requests for imported topsoil, landowner approval of imported topsoil will be used. If landowner needs additional nutrients for crop and/or forage growth, specific rates will be

determined based on respective parameters of imported topsoil. If subsoil import is required, ensure subsoil import materials are equivalent to or better than the subsoil that may have been lost due to contamination. Subsoil import should be tested for parameters found in Table 2.

Additionally, maps of agronomic sample(s) locations as well as reference location(s) will be provided through Form 27 Supplemental as seen in the Non-Residential Soil Sampling Locations Plan (version 1.1; 4/30/25).

Table 1. Additional Agronomic Soil Sampling List for parcels in Form 27 Work Plan.

Parameter	Method
Sodium Adsorption Ratio (SAR)	Saturated paste extract
pH	Saturated paste method
Electrical Conductivity (EC)	Saturated paste extract
Boron	Hot Water-Soluble method
Exchangeable Sodium Percentage (ESP)	Standard method
Cation Exchange Capacity (CEC)	Standard method
Organic Matter (%)	Walkley-Black method
Nitrate-Nitrogen (NO ₃)	AB-DTPA
Ammonium-Nitrogen (NH ₄)	AB-DTPA
Phosphorus (P)	AB-DTPA
Potassium (K)	AB-DTPA
Zinc (Zn)	AB-DTPA

Iron (Fe)	AB-DTPA
Manganese (Mn)	AB-DTPA
Copper (Cu)	AB-DTPA
Chloride (Cl)	Saturated paste extract
Calcium Carbonate Equivalent (%)	Gravimetric method
Texture	Hydrometer method (USDA classification)
Bicarbonate	Saturated paste extract
Sulfate-Sulfur	Acetic Acid / Barium Turbidimetric method
Plant Available Arsenic	TBD
CO ₂ -C (Microbial Activity)	24-hour respiration test
Phospholipid Fatty Acid (PLFA) Soil Microbial Community Analysis	Standard method

Table 2. Subsoil Agronomic Soil Sampling List

Parameter	Method
Sodium Adsorption Ratio (SAR)	Saturated paste extract
pH	Saturated paste method
Electrical Conductivity (EC)	Saturated paste extract
Boron	Hot Water-Soluble method

Texture	Hydrometer method (USDA classification)
Calcium Carbonate Equivalent (%)	Gravimetric method