

REVIEWED*By Kellie Jones at 9:16 am, Jan 25, 2016***APPROVED***By Kellie Jones at 9:16 am, Jan 25, 2016*

1. Ensure State Land Office approval/concurrence.

January 9, 2016

Reference No. 074638

Ms. Kellie Jones
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
1625 N. French Dr
Hobbs, New Mexico 88240

Dear Ms. Jones,

Re: Work Plan
Abo Reef Gathering System (AB TN-9)
RP# 1RP-3942
Unit J, Section 6, Township 18-S, Range 35-E
Latitude: N 32.772019, Longitude: W 103.493366
Lea County, New Mexico

1. Project Information

The Site is located in Unit J, Section 6, Township 18 South, Range 35 East, approximately 2.91-miles southeast of Buckeye, New Mexico, in eastern Lea County. Chevron submitted an initial C-141 form to the New Mexico Oil Conservation Division (NMOCD) dated January 7, 2011, describing a release of 1.565 barrels (bbls) of oil and 34.696 bbls of water with zero (0) volume being recovered. The source of the release was recorded to have been a gas gathering trunkline.

The Site contains an excavation that is configured in a generally rectangular fashion and dimensioned approximately 50-feet by 100-feet. The long axis of the excavation is oriented approximately north-south, with an underground pipeline in proximity to its western border. This excavation is apparently associated with remediation efforts for a prior release at the Site that occurred at an unknown time. Information regarding the nature and extent of that potential prior release are also unknown. Based on the dimensions of the excavation, approximately 1,000 yd³ of soils were removed from the excavation. The actual volume and final disposition of the excavated soils are unknown.

Information available on the Petroleum Recovery Research Center (PRRC) Mapping Portal and the United States Geological Survey (USGS) Current Water Database for the Nation indicates the following:

- The depth to groundwater at the Site is greater than 100-feet bgs;
 - The nearest private domestic water source is greater than 200-feet from the release site;
 - The nearest public/municipal water source is greater than 1,000-feet from the release site;
- and

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- The release site lies more than 1,000 horizontal feet from the nearest surface water body.

Consequently, the NMOCD total ranking criteria score is zero (0) for the Site. The anticipated site-specific Recommended Remediation Action Levels (RRALs) to be applied to this location by the NMOCD are 10 milligram per kilogram (mg/kg) for benzene; 50 mg/kg for total benzene, toluene, ethylbenzene, and xylenes (BTEX); 5,000 mg/kg for total petroleum hydrocarbons (TPH); and a NMOCD accepted concentration of 500 mg/kg for chlorides.

Subsurface investigations were implemented at the Site. Evaluation of the analytical data obtained from soil assessment and delineation activities performed in March of 2014 and August of 2015 indicates that vertical delineation of chloride impacts have not been achieved at the Site in proximity to surface soil sample SS-2.

On November 10, 2015, GHD and Chevron representatives met with NMOCD regarding further delineation activities addressing the presence of chloride concentrations within the former excavation. An agreement was made by all parties that both further vertical delineation of SS-2 and addressing the previous excavation were necessary. The following scope was agreed upon by all parties.

2. Scope of Work

The scope of work for this project will involve the vertical assessment of SS-2 via the installation of an additional soil boring accompanied by soil sample analysis. Field screening of soil cuttings for chlorides will be performed to guide drilling activities. Subsequently, the previous excavation area will be lined, backfilled with clean soil, fertilized, and seeded. The following outlines basic project details that will be completed by GHD and Chevron subcontractors:

Field Program

The field program will consist of the following:

Soil Boring Installation:

- Prior to mobilizing the drilling equipment to the Site, the boring location will be marked and New Mexico 811 (One Call) will be contacted by the driller to identify any subsurface hazards within the proposed drilling areas. Chevron will spot locate any underground utilities and/or pipelines within the assessment area.
- A post-hole digger, hydro-excavation methods or similar borehole clearance equipment will be utilized to clear the boring location to a depth of approximately 5 feet below ground surface (bgs), or refusal, and approximately 8 inches in diameter. An air-rotary drilling rig, operated by a licensed State of New Mexico water well driller, will be utilized to advance the proposed boring.
- A field geologist will record the subsurface lithology and sample data on soil boring logs. Soil samples will be collected at 5 foot intervals. Samples will be field screened for chloride concentrations using Hach Chloride Titration strips and evaluated by the field geologist during the sampling event.

- Selected soil samples will be submitted to Xenco Laboratories, Midland, Texas for analysis of chlorides by EPA Method 300.0. The total depth and nature of any sampling of soils will be based on results of the chloride field screening and the professional judgment of the GHD geologist with the intent to establish the depth at which soil concentrations are below the Site RRAL's.
- The soil boring will be properly plugged with bentonite.

Previous Excavation Liner and Backfilling Activities:

- A 20 mil polyethylene liner will be placed in the bottom of the excavation. Liner seams will be overlapped a minimum of 24 inches. The liner will be placed without rips or tears; and
- The excavation will be backfilled to grade using clean fill material. The disturbed area will be fertilized and reseeded with a Bureau of Land Management-approved seed mix (seed mix #3).

Health and Safety Considerations

Personal protective equipment, including fire-retardant clothing, steel-toed work boots, gloves, safety glasses, and hard hats will be required during all field tasks. The project health and safety plan will be maintained on Site and will be reviewed and signed by on-Site personnel, subcontractors, and authorized visitors.

Quality Assurance/ Quality Control

Confirmation soil sampling will be completed in accordance with our standard Quality Assurance/ Quality Control procedures designed to minimize cross-contamination between samples and to provide reliable laboratory results.

Reporting

A short letter report summarizing soil delineation and previous excavation lining and backfilling activities will be submitted. The letter report will include a Site description, project history, description of field events, a discussion of results, and recommendations (if any).

The report will include:

- A scaled Site plan showing the locations of the soil boring, excavation, and other Site features;
- Boring log;
- Tabulation of field screening and laboratory analytical results; and
- Geotagged photographic documentation of field activities.

3. Work Plan Approval Request

GHD is prepared to initiate the scope of work immediately. If you have any questions or comments with regards to this work plan, please do not hesitate to contact our Houston office at (713) 734-3090.

Your timely response to this correspondence is appreciated.

Sincerely,

GHD

A handwritten signature in blue ink, appearing to read 'Scott Foord', with a stylized, flowing script.

Scott Foord

Project Manager

Sf/bb/1

Encl. (1)

A handwritten signature in blue ink, appearing to read 'Bernard Bockisch', with a stylized, flowing script.

Bernard Bockisch, PMP

Senior Project Manager

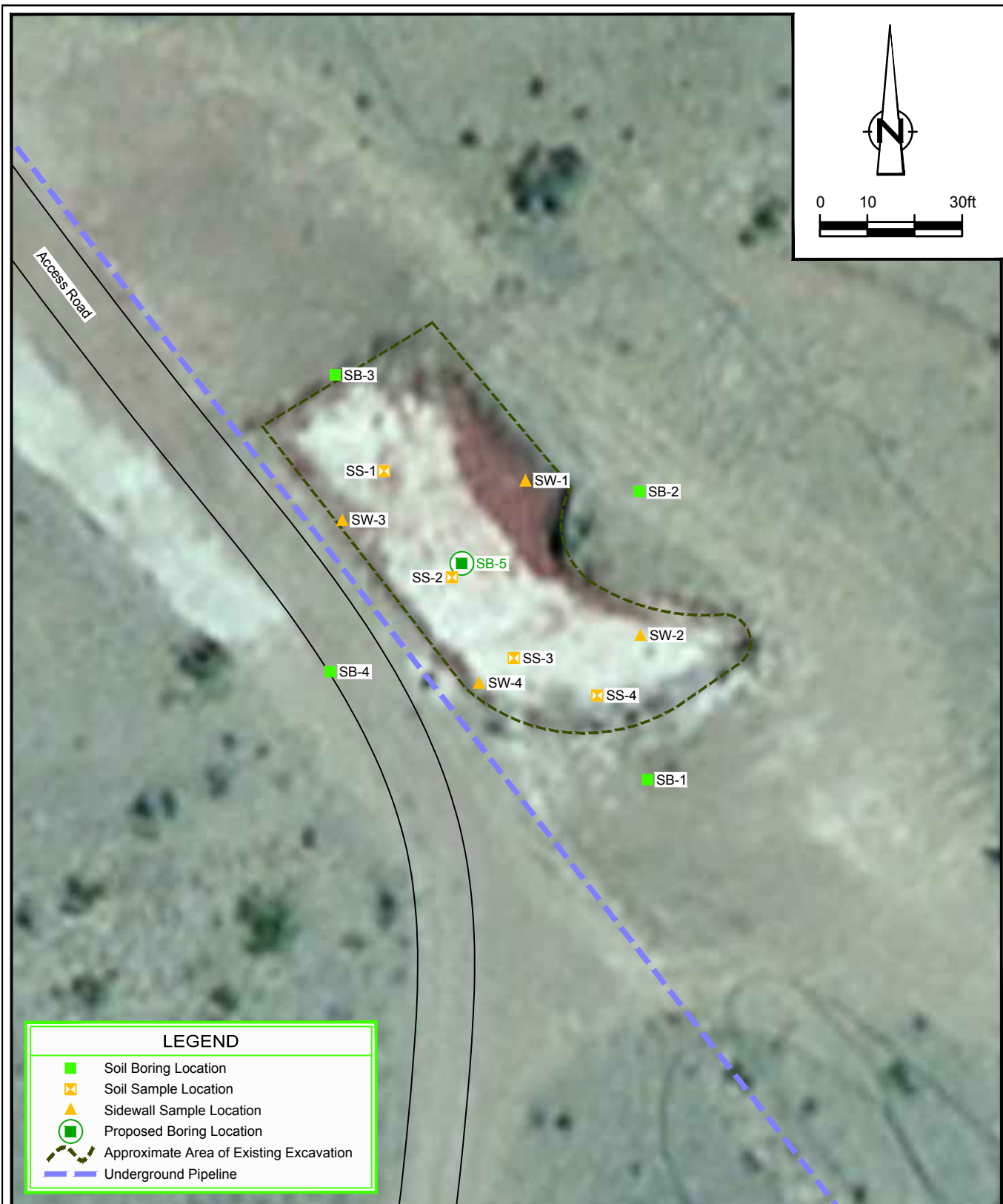


figure 1

PROPOSED SOIL BORING MAP
ABO REEF GATHERING SYSTEM (AB TN9)
LEA COUNTY, NEW MEXICO

Chevron Environmental Management Company

