January 9, 2015

Reference No. 074287

RECEIVED
By JKeyes at 2:12 pm, Jan 12, 2016

APPROVED
By JKeyes at 2:13 pm, Jan 12, 2016

Mr. Jamie Keyes
Environmental Specialist, District 1
Oil Conservation Division, EMNRD
1625 N. French Drive
Hobbs, New Mexico 88240

Dear Mr. Keyes,

Re: Work Plan
Lovington Paddock Unit No. 89 Well-Site
RP# 1RP-3745
Unit E, Section 31, Township 16-S, Range 37-E
Latitude: N 32.881105, Longitude: W 103.295128
Lea County, New Mexico

1RP 4017

pJXK1534930085
nJXK1534930223

1. Project Information

The Site is located in Unit E, Section 31, Township 16 South, Range 37 East, approximately five miles southeast of Lovington, New Mexico, in eastern Lea County. GHD understands the surface property is owned by the City of Lovington and the minerals are managed by the Bureau of Land Management. The LPU No. 89 well was plugged and abandoned in July 2010. A dry hole marker is present at the location and surface equipment has been removed from the Site.

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

Consequently, the New Mexico Oil Conservation Division (NMOCD) total ranking criteria score is zero (0) for the Site. The site-specific Recommended Remediation Action Levels (RRALs) that could be applied to this Site 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 an NMOCD accepted 500 mg/kg for chlorides.

GHD Services Inc.
6320 Rothway Suite 100 Houston Texas 77040 USA
T 713 734 3090 F W www.ghd.com

Subsurface investigations were implemented at the Site. Evaluation of the analytical data obtained from soil assessment and delineation activities performed in 2011 and September of 2015 indicates that vertical delineation of chloride impacts have been achieved at the Site, but elevated chloride concentrations are present in soil at approximately 2 feet below ground surface (bgs). Per NMOCD request, the following scope of work addressing shallow chloride impacted soils at the Site is detailed below.

2. Scope of Work

The scope of work for this project will involve the excavation of chloride impacted soil accompanied by soil sample analysis. A Right of Entry Permit will be obtained from the New Mexico State Land Office prior to commencement of excavation activities. Field screening of soils will be performed in order to guide excavation activities. Subsequently, the excavation will be backfilled with clean soil, fertilized, and seeded. The following outlines basic project details that will be completed by GHD and GHD subcontractors:

Field Program

The field program will consist of the following:

- Prior to mobilizing the equipment to the Site, a site visit will be performed by GHD. GHD will mark the proposed excavation area and New Mexico 811 (One Call) parameters. A One Call ticket will be initiated by the excavation subcontractor to identify any subsurface hazards within the proposed excavation areas. Chevron will spot locate any underground utilities and/or pipelines within the assessment area;
- A ground penetrating radar (GPR) survey will be conducted across the Site for additional utility clearance and the findings of the survey will be marked, as appropriate;
- Impacted soil in the affected area will be excavated. The soil disposal facility identified for this project is Sundance/Parabo, in Eunice, New Mexico;
- Soils will be field screened for chloride during excavation by mixing soil samples with de-ionized water. The rinsate will be analyzed using Hach chloride test strips. If field screening indicates that soils are below regulatory levels, excavation would halt to minimize excavating clean soil;
- Confirmation laboratory samples will be collected at intervals to be determined during excavation. Samples will be sent to Xenco Laboratories of Odessa, Texas, and analyzed for chloride;
- If impacts appear to extend past four feet bgs, the sides of the excavation will be sloped and a 20 mil polyethylene liner will be placed in the bottom of the excavation. Liner seams will be overlapped a minimum of 24 inches. Each 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 remediation 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 excavation and other Site features;
- Tabulation of field screening and laboratory analytical results;
- Copies of landfill manifests; 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

Scott Foord

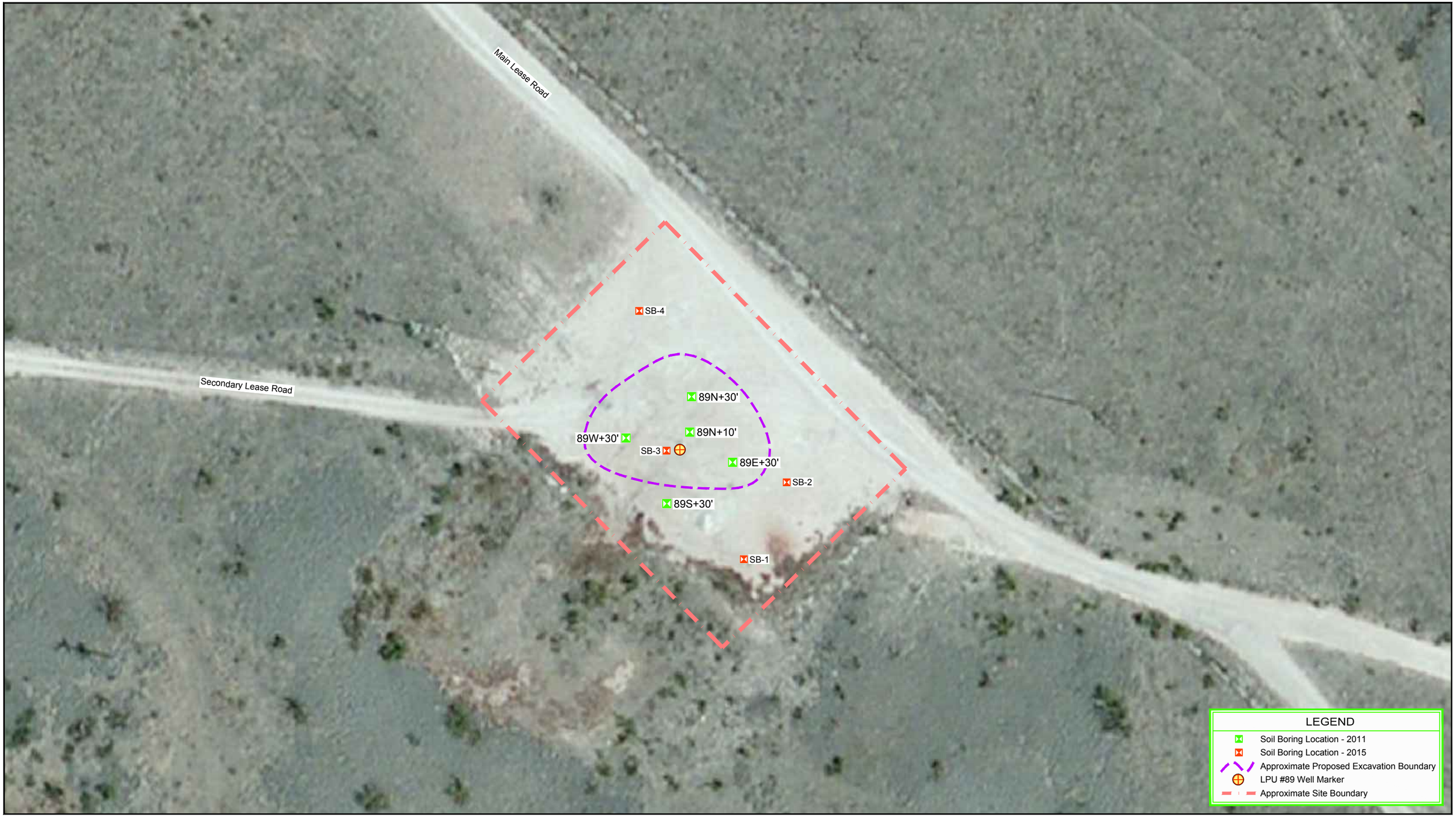
Project Manager

Bernard Bockisch, PMP

Senior Project Manager

Sf/bb/1

Encl. (1)



Source: UDSA FSA Imagery, May 10, 2014

Lat/Long: 32.881111° North, 103.29512° West

0 20 50ft

Coordinate System:
NAD 1983 StatePlane-
New Mexico East (US Feet)

CHEVRON ENVIRONMENTAL MANAGEMENT COMPANY
LEA COUNTY, NEW MEXICO
LOVINGTON PADDOCK UNIT #89

074287-00

Jan 8, 2016

PROPOSED REMEDIAL ACTIVITIES

FIGURE 1

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