



June 11, 2012

Mr. John Axelson
Northeast Region Environmental Protection Specialist
Colorado Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

**RE: Proposed Site Assessment Workplan
Beren Corporation
Loudder 2-X Pit Complex
API: 05-121-09042
NOAV #200350687
SWSE Sec. 7 T4S R53W, 6th Principal Meridian
Washington County, Colorado**

Dear Mr. Axelson:

LT Environmental, Inc. (LTE), on behalf of the Beren Corporation (Beren), is pleased to present this proposed Site Assessment Workplan for the Loudder 2-X Pit Complex (Site) located in Washington County, Colorado (Figure 1). The purpose of this investigation is to conduct a sensitive area determination at the Site via groundwater assessment. LTE will install and sample three monitoring wells surrounding the pit complex.

Background

On May 8, 2012, the Colorado Oil and Gas Conservation Commission (COGCC) issued a Notice of Alleged Violation (NOAV) to Beren. The NOAV (#200350687) requires a sensitive area determination including the following tasks:

- Groundwater characterization including site specific depth to groundwater;
- Groundwater gradient and flow direction determination;
- Sampling and analysis to determine if groundwater has been impacted by disposal of produced water at the pit complex and unlined skim pit; and
- Assessment of soil and groundwater impact via the advancement of soil borings and installation of groundwater monitoring wells.



Soil Boring Advancement and Monitoring Well Installation

LTE proposes advancing three soil borings at the Site using a truck-mounted, direct push drill rig owned and operated by High Plains Drilling of Denver, Colorado. Soil borings will be advanced to a maximum depth of 35 feet below the ground surface or 5 feet below the groundwater table, whichever depth is reached first.

Soil borings MW02 and MW03 will be advanced downgradient of the pit complex to assess the potential for groundwater impact from historical operation of the produced water ponds and oil skim pit (Figure 2). Soil boring MW02 will be logged from the surface to the boring terminus to characterize the vertical profile of potential impact adjacent to the produced water pit complex. As the remaining boring locations are also outside the pit complex perimeter, there is no reason to suspect soil impact or the need for lithologic characterization along the entire boring; therefore, the first 24 feet of drilling will not be logged. Soil boring MW01 will be installed upgradient of the pit complex to collect a background groundwater sample. This sample will be used to determine naturally occurring groundwater concentrations in the area.

The soil borings will be logged by LTE personnel and will be inspected for petroleum hydrocarbon odor and/or staining. The soil from each boring will be characterized by visually inspecting soil samples collected in clear acetate liners and screened using a photo-ionization detector (PID) to monitor the soil headspace for the presence of volatile organic vapors. Soil samples will be collected in 4 foot intervals as the boring is advanced. Each boring will be completed as a temporary 1-inch diameter monitoring well. This will allow for groundwater sample collection. The monitoring wells will be completed with temporary polyvinyl chloride stick-ups. The wells will be staked with flags to attempt to protect them from being damaged by traffic.

Soil Sampling

LTE does not intend on collecting soil samples from the soil borings unless the field screening equipment indicates the presence of petroleum hydrocarbons. If the PID indicates hydrocarbons are present, LTE will submit one sample from each boring to an analytical laboratory. LTE proposes submitting each of the soil samples to a contract laboratory for the following analyses:

| Analyte | Method |
|--|--|
| Benzene, toluene, ethylbenzene, and total xylenes (BTEX), Total Petroleum Hydrocarbons – Gasoline Range Organics (TPH-GRO) | United States Environmental Protection Agency (EPA) Method 8260B |
| Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO) | EPA Modified Method 8015 |



Groundwater Sampling

Following installation, each of the three groundwater monitoring wells will be purged and developed. Groundwater samples will be collected from each well and will be submitted for the following laboratory analyses:

| Analyte | Method |
|------------------------|------------------|
| BTEX | EPA Method 8260B |
| Total Dissolved Solids | EPA Method 160.1 |
| Chloride, Sulfate | EPA Method 300.0 |

Following assessment activities, soil and groundwater analytical data will be summarized and submitted to the COGCC. Should you have any questions, please contact Rodney Reynolds with Beren at (316) 337-8340.

Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in black ink that reads "Devin Girtin".

Devin Girtin, G.I.T.
Staff Geologist

A handwritten signature in black ink that reads "Brian Dodek".

Brian Dodek, P.G.
Client Manager/Senior Geologist

Attachments:

Figure 1 – Site Location Map

Figure 2 – Proposed Monitoring Well Locations

FIGURES



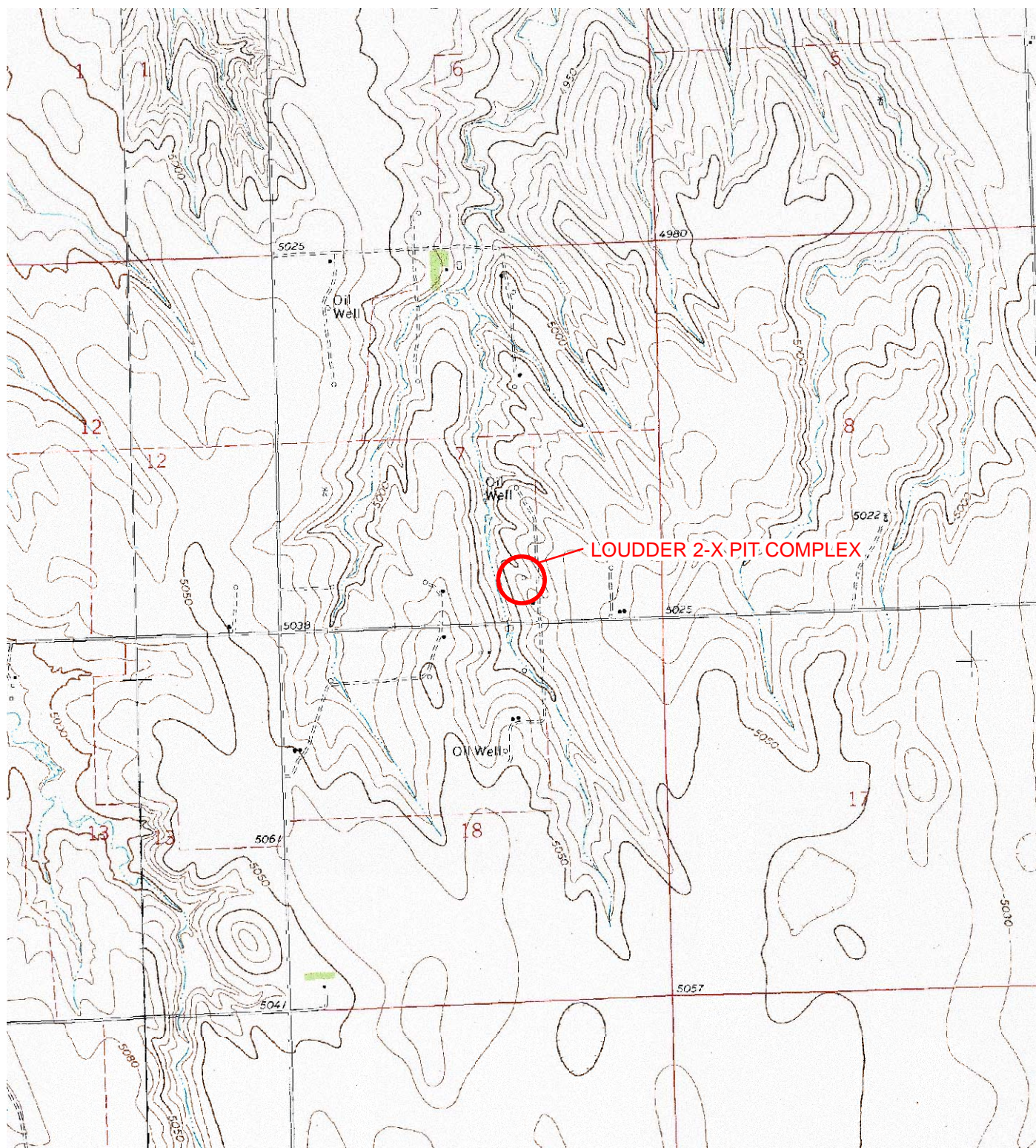


IMAGE COURTESY OF USDA/NRCS, 1994

LEGEND

○ SITE LOCATION

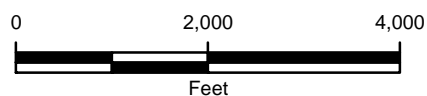


FIGURE 1
SITE LOCATION
LOUDDER 2-X PIT COMPLEX
WASHINGTON COUNTY, COLORADO

BEREN CORPORATION





IMAGE COURTESY OF GOOGLE EARTH, 08/18/2011

LEGEND

- ⊗ PROPOSED MONITORING WELL LOCATION
- WELLHEAD
- ↖ ESTIMATED GROUNDWATER FLOW DIRECTION

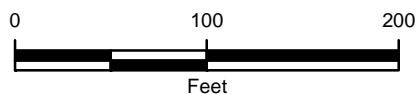


FIGURE 2
PROPOSED MONITORING WELL LOCATIONS
LOUDDER 2-X PIT COMPLEX
WASHINGTON COUNTY, COLORADO

BEREN CORPORATION

