March 21, 2018 Reference No. 11103550

Mr. Bradford Billings
Energy, Minerals, and Natural Resources Department
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Billings:

Re: Jal No. 4 Former Tank Battery, RP-1457
Lea County, New Mexico
Proposed 2018 Work Scope

GHD Services Inc. (GHD) submits this work scope for the ETC Field Services LLC (ETC), Jal No. 4 former tank battery (Site). The Site is located in Section 31, Township 23 S, Range 37E, Lea County, New Mexico. The Site is located on Deep Wells Road about one-half mile west of Highway 18 and approximately 10 miles north of Jal, New Mexico (Figure 1).

The Site is inactive and located on and surrounded by privately owned land. The Site is regulated by the New Mexico Oil Conservation Division (NMOCD).

1. Project Understanding

The Site is a former tank battery that stored condensate and produced water. A condensate release was discovered from a 410-barrel (bbl) tank in April 2007. Approximately 140 bbls of condensate and 140 bbls of produced water were estimated to have been released. In November 2012 and January 2013, approximately 7,500 cubic yards of soil were excavated from the release area, and a liner was placed in the bottom of the excavation at a depth of approximately 15 feet (ft) below ground surface (bgs) and the excavation was backfilled and compacted.

Six monitoring wells and one recovery well were installed around the release area following backfill of the excavation (see Figure 2). Recovery well RW-1 was installed presumably to recover light non-aqueous phase liquids (LNAPL), although only a sheen has ever been noted in the well. Monitoring well MW-1 has consistently been found to contain LNAPL since installation. Groundwater is present in silty sand at a depth of approximately 115 feet bgs.

Groundwater sampling was performed during March, June, and October of 2015. Additionally, a bail-down test and a paraffin, isoparaffin, aromatics, naphthalene, and olofins (PIANO) analysis on LNAPL collected from MW-1 during March 2015 was conducted. GHD performed groundwater sampling on October 1 and 2, 2015. GHD also installed an active product skimmer system in MW-1 in November of 2015.

Contaminates of concern (COC) in wells for 2015 consisted of LNAPL in well MW-1 and groundwater in well RW-1 had a hydrocarbon sheen that was visible upon sampling. Lab results from 2015 indicated that

groundwater samples collected from the Site monitoring wells (MW-2, MW-4, MW-5, and MW-6) were below laboratory detection limits for benzene, toluene, ethylbenzene, and xylene (BTEX) and below New Mexico Water Quality Control Commission (NMWQCC) standard for total dissolved solids (TDS) and chlorides. MW-3 was found to contain a concentration of benzene below regulatory limits from all three sampling events in 2015, indicative of potential contaminant migration from the original release location near MW-1. LNAPL was measured in monitoring well MW-1 during all three sampling events in 2015 and therefore was not sampled. Groundwater collected from RW-1 during October 2015 exceeded NMWQCC standards for benzene and TDS.

GHD performed groundwater sampling on April 7-11, 2016 and October 5, 2016. GHD also performed monthly gauging for LNAPL in MW-1 and conducted operations and maintenance (O&M) on the skimmer system as needed. LNAPL thickness ranged from 1.82 feet in September to 3.41 feet in November. Laboratory results from October 5, 2016 indicated that groundwater samples collected from Site monitoring wells (MW-2, MW-3, MW-4, MW-5, and MW-6) were below laboratory detection limits for BTEX and below NMWQCC standard for TDS and chlorides. Groundwater collected from RW-1 during October 2016 exceeded NMWQCC standard for benzene with a concentration of 0.51 mg/L.

GHD performed semi-annual groundwater sampling on May 10, 2017 and November 30, 2017 and continued approximate monthly gauging for LNAPL in MW-1 and O&M on the skimmer system as needed. LNAPL thickness ranged from 0.79 foot in December to 2.33 feet in February.

Laboratory results from November 30, 2017 indicated that groundwater samples collected from Site monitoring wells (MW-2, MW-3, MW-4, MW-5, and MW-6) were below laboratory detection limits for BTEX and below NMWQCC standard for TDS and chlorides. Groundwater collected from RW-1 during November 2017 exceeded the NMWQCC standard for benzene with a concentration of 0.076 mg/L.

The NMWQCC regulatory limits for the Site are:

Constituent	NMWQCC Regulatory Limit
Benzene	10 µg/L
Toluene	750 µg/L
Ethylbenzene	750 µg/L
Xylene	620 µg/L
Chlorides	250 mg/L
Total dissolved solids (TDS)	1000 mg/L

2. Proposed Scope of Work

Based upon review of the existing data, our understanding of the various regulatory programs and conversations with ETC personnel, GHD has prepared the following scope of services for 2018.

2.1 2018 Basic Scope of Services

2.1.1 Monthly Water Level Gauging and Skimmer O&M

GHD will continue to perform consecutive monthly water level gauging in the groundwater monitoring wells through December 2018. For this Scope of Services, GHD proposes 12 additional months of gauging and LNAPL skimmer O&M. The purpose of the groundwater gauging is to continue monitoring for LNAPL fluctuations. During the gauging events, GHD will replace nitrogen bottles as necessary, check the fluid levels in the skimmer drum, and check/change the absorbent socks in RW-1 as necessary. Disposal of LNAPL that is collected from the skimmer system will be coordinated with Sundance Services when the collection drums are full.

2.1.2 Groundwater Sampling

GHD proposes to perform semi-annual groundwater monitoring in the second and fourth quarters of 2018. An oil/water interface probe will be used to measure groundwater depths and check for the presence of LNAPL in each of the monitoring wells. Any well found to contain a measurable amount of LNAPL will not be sampled. Before and after each use, the oil/water interface probe will be cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water.

Monitoring wells will be purged and sampled using a low flow bladder pump or disposable polyethylene bailer. Wells will be purged until field parameters including groundwater temperature, pH, and conductivity stabilize within 10% or until three well volumes have been removed. Field parameters will be collected using an appropriate multi-parameter groundwater quality meter. The wells to be sampled will include monitoring wells RW-1, MW-1 (if LNAP is not present), MW-2, MW-3, MW-4, MW-5, and MW-6. Purge water generated during the monitoring event will be transported to the House Compressor for disposal.

Following collection, groundwater samples will be labeled, placed on ice, and submitted to Hall Environmental Analysis Laboratory (HEAL) for analyses of BTEX by EPA Method 8260, TDS by SM 2540C, and for chloride by EPA Method 300.0. The information obtained from this sampling event will be included in the 2018 Annual Report. If the results indicate significant changes in hydrocarbon concentrations or migration, GHD may recommend more frequent groundwater sampling.

2.1.3 2018 Annual Report

A report will be completed summarizing groundwater monitoring and assessment data collected at the Site during the 2018 calendar year. The annual report will include tabulated analytical and gauging data, groundwater gradient and concentration maps for contaminants of concern from the semi-annual events, and recommendations for future activities at the Site.

A draft final version of the Annual Report will be submitted to ETC for review. The final report will incorporate comments received from ETC on the draft final. It will be submitted to the NMOCD as a final report following receipt of comments from ETC.

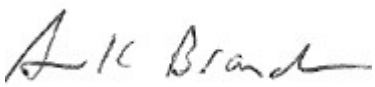
3. Schedule

GHD is submitting this work plan to the NMOCD for their review following approval by ETC. Field work will be scheduled pending ETC approval.

GHD submits this work scope to assist with the management, assessment and closure of Jal No. 4. Please feel free to contact Bernie or Alan at 505-884-0672 if you have questions or comments.

Sincerely,

GHD



Alan Brandon
Senior Project Manager

Bernard Bockisch, PMP
Senior Project Manager

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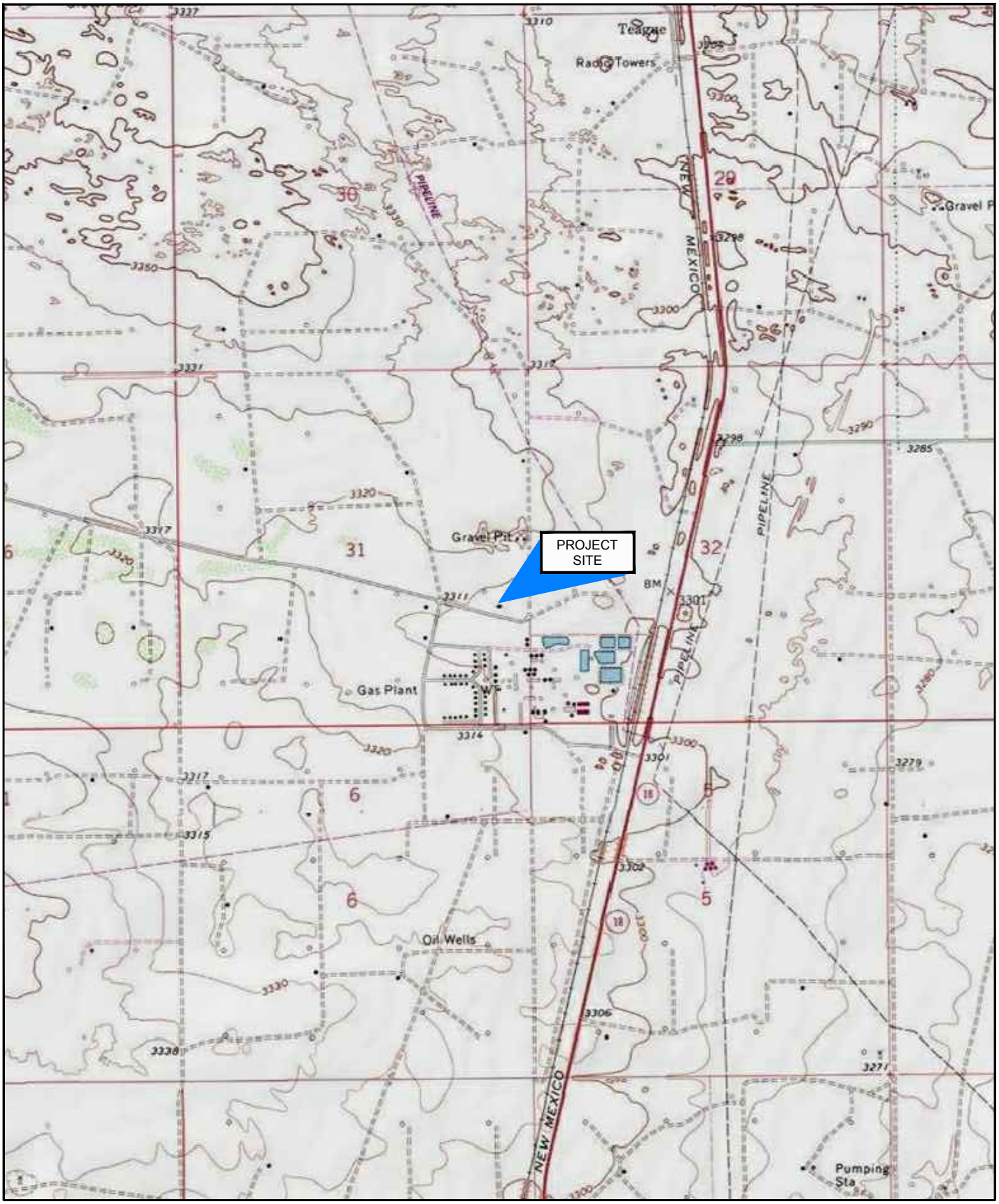
Encl.



Source: USGS 7.5 Minute quad "Rattlesnake Canyon and JAL NW, New Mexico"

Lat/Long: 32.258541° North, 103.195023° West

0 1000 2000ft

Coordinate System:
NAD 83 State Plane -
New Mexico East (US Feet)

ETC FIELD SERVICES LLC
LEA COUNTY, NEW MEXICO
JAL 4 REMEDIATION

11103550-00

Feb 26, 2018

SITE LOCATION MAP

FIGURE 1

CAD File: I:\CAD\Files\Eight Digit Job Numbers\1110----\11103550-Energy Transfer-Jal 4 Remediation\11103550-00\11103550-00(004)\11103550-00(004)GN-DL001.dwg

Source: USDA FSA Imagery, May 10, 2014

Lat/Long: 32.258541° North, 103.195023° West

0 50 100ft

Coordinate System:
NAD 83 State Plane -
New Mexico East (US Feet)

ETC FIELD SERVICES LLC
LEA COUNTY, NEW MEXICO
JAL 4 REMEDIATION

11103550-00

Feb 26, 2018

SITE PLAN

FIGURE 2

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