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March 30, 2017

APPROVED
By Olivia Yu at 9:28 am, Apr 03, 2017

Ms. Olivia Yu
Environmental Specialist
New Mexico Oil Conservation Division
District 1 - Hobbs
1625 N. French Drive
Hobbs, New Mexico 88240

Re: *1RP-1607*-Submittal of Work Plan for Additional Soil Delineation at the Lea DS State No. 001,Unit E, Section 36, T-19-S, R-34-E, Lea County, New Mexico

Dear Ms. Yu:

Atkins Engineering Associates, Inc. (AEA) on behalf of Trainer Partners LTD (Trainer) is pleased to provide this work plan for additional soil delineation at the Lea DS State No. 001(Site). The purpose of this work plan is to describe proposed methodologies and activities at the Site to fully characterize impacted soils.

Background

In a report dated February 14, 2017, AEA submitted a summary of additional investigation activities ***(Report of Additional Soil Delineation at the Lea DS State No. 001, Unit E, Section 36, T-19-S, R-34-E, Lea County, New Mexico (1RP-1607)*** to the New Mexico Oil Conservation Division (NMOCD). The additional investigation did not reveal any petroleum hydrocarbon impacted soil in the twelve (12) soil borings installed at the Site. However, chloride impacted soil was observed, above the 250 mg/Kg standard, in two (2) soil borings (SB-7 and SB-8) of the West Excavation, in three (3) soil borings (SB-9, SB-11 and SB-12) of the North Excavation, and at depth in the background location (BL-1).

Based on discussions with the NMOCD on March 21, 2017, AEA is submitting this work plan for additional soil delineation at the Site. AEA proposes to install one (1) additional background soil boring (BL-2) to a total depth of 100 feet BLS, to ascertain if groundwater is greater than or less than 100 feet BLS. If groundwater is encountered less than 100 feet BLS, a groundwater sample will be collected to determine of the groundwater is protectable. Additional soil borings will be

collected in the Western and Northern excavations and near the background location (BL-1) to vertically define the chloride impacted soils.

Task 1 – Additional Soil Delineation Background BL-2

Health and Safety

AEA will use the existing site-specific Health and Safety Plan (HSP) for the performance of the activities discussed below. Personal Protective Equipment (PPE) will be Level D: hard hat, safety glasses, steel toes boots, hearing protection, H2S meters, and gloves (work, nitrile). AEA plans to self-perform all drilling activities and will be directed by AEA personnel onsite.

NM 811

Prior to mobilization AEA will "whiteline" the proposed soil borings with lathe and white marking tape or white pin flags. AEA will place a New Mexico 811 at least 48 hours prior to the commencement of soil boring investigation activities.

Soil Investigation

The soil delineation is being performed to confirm all impacted soil has been either removed from the site during 2007 excavation activities, or vertically delineated. All bore holes shall be advanced using an Hollow Stem Auger (HSA) drill rig with augers having inside diameters of either 3.25 or 4.25 inches. Prior to drilling activities, drill tooling will be pressure washed and scrubbed with an Alconox water mixture. The soil from the borehole will be logged using the Universal Soil Classification System (USCS) method.

Soil samples will be field screened for chlorides at discreet five (5) foot or ten (10) foot intervals. Soil samples will be analyzed for chloride by EPA Method 300/300.1. All soil samples will be placed in a cooler on ice and shipped with the appropriate chain of custody documentation to Hall Environmental Analysis Laboratory located in Albuquerque, New Mexico for laboratory analyses.

The soil bores that don't encounter water will be plugged with backfill, and the top ten feet to surface with hydrated bentonite pellets. All decontamination water and drill cuttings generated during this investigation will be collected and stored in either the designated stockpile or labeled DOT-approved 55-gallon steel drums on-site.

Background Soil Boring BL-2

AEA proposes to advance one (1) additional background soil boring (BL-2) to a depth of one hundred (100) feet BLS utilizing a HSA drill rig. The soil boring will be located north and west of the original background location in an upgradient and undisturbed location as shown on **Figure 1**. Prior to mobilization AEA will obtain an exploratory permit and an approved *Plugging Plan of Operations* from the District II Office of the State Engineer.

Soil samples will be collected at discrete five (5) foot internals until 50 feet BLS, then at ten (10) foot intervals to a total depth of 100 feet BLS. Soil samples will be analyzed for chloride by EPA Method 300/300.1.

The bore hole shall be allowed to "sit" overnight to allow shallow groundwater (if present) to migrate into the bore hole. If groundwater is encountered, a temporary 2" monitor well be screened across the apparent water bearing strata with silica pack, hydrated plug and riser to above land surface. The temporary well would be developed using bailers and allowed to sit prior to sampling.

Sampling will be conducted by purging three (3) well volumes and measuring water quality parameters using a YSI Probe. If the well will produce sufficient water, purging will be deemed complete when field measurements, including temperature, pH, and electrical conductivity are stabilized and turbidity has been reduced to the greatest possible extent. After purging a sample will be collected using a disposable bailer and analyzed for total dissolved solids (TDS) by EPA Method SM 2540 C modified.

If no water is encountered, the soil bore will be plugged with backfill and the top ten feet to surface with hydrated bentonite pellets. If water is encountered, after sampling the temporary screen and casing will be removed, and the well will be plugged to land surface using neat cement.

The results of the groundwater sample will provide details if water is present less than 100 feet BLS, if it is "protectable" (less than 10,000 ppm TDS) and will therefore drive the additional soil investigative work. If groundwater is not encountered in the borehole, or the groundwater is determined to be "unprotectable", the chloride standard for impacted soils will be 600 mg/Kg; otherwise, if groundwater is encountered in the borehole and determined to be "protectable," the chloride standard of 250 mg/Kg shall prevail.

Background boring BL-2 and reporting will be completed prior to the additional borings listed below.

Task 2 – Additional Soil Delineation

West Excavation Soil Boring Locations

AEA proposes to advance two (2) additional soil borings (SB-13 and SB-14) to vertically delineate the impacted soils near SB-5, SB-7 and SB-8, as shown on the attached site map, **Figure 1**. Soil samples will be collected from five (5) foot intervals to an approximate depth of 25-30 feet BLS, or until the chloride impacted soils are reported below the appropriate chloride standard.

North Excavation Soil Boring Locations

AEA proposes to advance two (2) additional soil borings (SB-15 and SB-16) to vertically delineate the impacted soils near SB-9, SB-11 and SB-12, as shown on the attached site map, **Figure 1**. Soil samples will be collected at five (5) foot intervals to an approximate depth of 30-35 feet BLS, or until the chloride impacted soils are reported below the appropriate chloride standard.

Background (BL-1) Soil Boring Locations

Laboratory results for the original background locations indicate increasing chloride concentrations with depth at approximately 20-30 feet BLS. Therefore, to fully vertically and laterally delineate the impacted soils near BL-1, AEA proposes to advance three (3) additional soil borings (SB-17, SB-18 and SB-19) as shown on the attached site map, **Figure 1**. Soil samples will be collected at five (5) foot intervals to an approximate depth of 40 feet BLS, or until the chloride impacted soils are reported below the appropriate chloride standard.

Reporting

Data collected from event will be presented in two reports which will discuss all field activities. The following will be included in each report:

- Site Map – illustrating the site layout including soil boring and monitor well locations and limits of the excavation.
- Soil Bore Lithologic Logs
- Soil Analytical Results – including sample dates, analytical results.

- Excavation Plan with proposed volume of soil to be removed, disposition of soil, and backfill operations (if necessary).

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Jim Coburn P.E.
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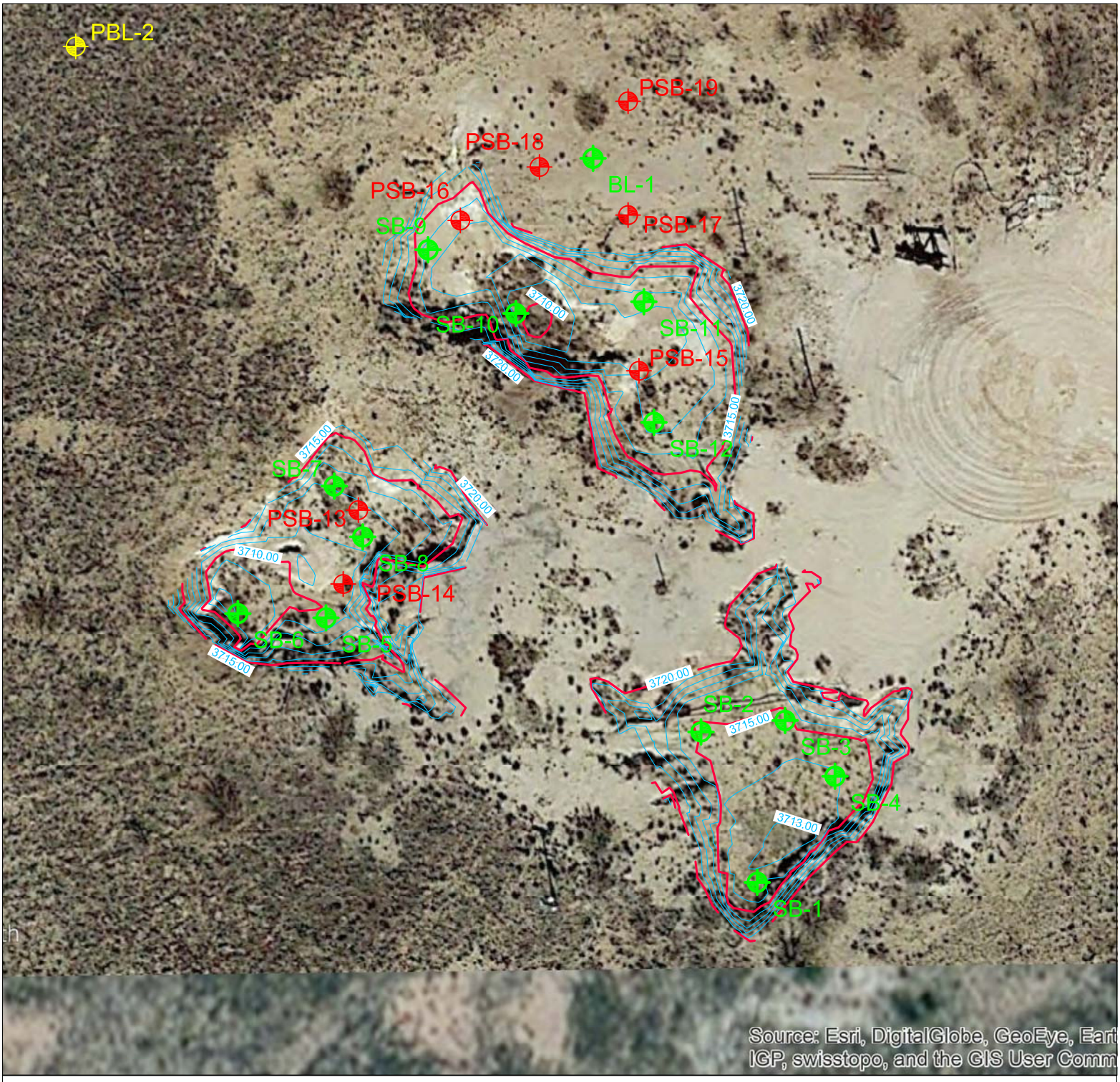

Legend

- Contour Line
- Soil Boring Location
- Proposed Background Soil Boring Location
- Proposed Soil Boring Location

N

50 25 0 50

Scale: 1" = 50'

Figure 1.
Soil Boring Locations
Lea DS State No. 001

SCALE 1" = 50'

March 2017

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