December 1, 2016

Mr. Kyle Waggoner
Whiting Oil and Gas Corporation
208 Racquette Drive
Fort Collins, Colorado 80524

RE: Confirmation Sampling
Razor 30K Tank Battery
Weld County, Colorado
Project # 701530.027.02

Mr. Waggoner:

On October 5, 7, 11, 12, 14, 17, 18, 19, & 20, 2016, Talon/LPE conducted confirmation soil sampling at the Razor 30K tank battery (Site) in Weld County, Colorado. The purpose of the sampling events was to ensure that produced water had not impacted soils located under a lined tank battery and if so, that all produced water impacted soil had been removed to the extent required by the Colorado Oil and Gas Conservation Commission (COGCC). The Site is identified by the COGCC as Spill/Release Point ID 401122812.

On September 5, 2016, Talon/LPE arrived on site and collected confirmation samples in an excavation around an underground produced water line which was identified as the source of the produced water release. A total of five (5) grab samples (BH-1 @ 6', SW-N @ 4', SW-E @ 4', SW-S @ 4', and SW-W @ 4') were collected from the excavation. One (1) grab sample (UL-1) was collected from an area under the tank battery's liner where the liner appeared to be compromised. Additionally, six (6) grab samples (P-1 @ 1', P-2 @ 1', P-3 @ 1', P-4 @ 1', P-5 @ 1', and P-6 @ 1') were collected outside of the main excavation where the ground surface appeared to be impacted. Site maps with the sample locations are presented in Figure 1a and Figure 1b.

The collected samples were analyzed for Total Petroleum Hydrocarbons (TPH) via Gasoline Range Organics (GRO) method EPA8260B and Diesel Range Organics (DRO) method 8015, for Benzene, Toluene, Ethyl-benzene, and Xylenes (BTEX) via method EPA8260B, and for inorganics (Electrical Conductivity (EC), Sodium Adsorption Ratio (SAR), and pH) via method USDA60 at Summit Scientific (Summit) in Golden, Colorado. All samples were below COGCC Table 910-1 thresholds for TPH

and BTEX. Samples UL-1, P-1 @ 1', P-2 @ 1', and P-4 @ 1' were below COGCC thresholds for inorganic constituents, while the remainder of the samples were above COGCC Table 910-1 thresholds for at least one of the inorganic constituents. Soil concentration maps are presented in Figures 2a, 2b, 2c, and 2d, a topographic map is presented in Figure 3, and a breakdown of the soil analytical data is presented in Table 1.

On October 7, 2016, Talon/LPE collected three (3) grab samples (UL-3, UL-4, and UL-5) from under the tank battery's liner in additional areas where the liner appeared compromised. These samples were analyzed for TPH, BTEX, and inorganics at Summit. All samples were below COGCC Table 910-1 thresholds for TPH and BTEX. Samples UL-2 and UL-3 were below COGCC Table 910-1 thresholds for inorganic constituents. Sample UL-4 was below COGCC Table 910-1 thresholds for EC and SAR, but was above the COGCC threshold for pH.

On October 11, 2016, Talon/LPE collected six (6) grab samples (UL-5, UL-6, UL-7, UL-8, UL-9, and UL-10) from new areas where the tank battery liner appeared to be compromised. These samples were analyzed for TPH, BTEX, and inorganics at Summit. All samples were below COGCC Table 910-1 thresholds for TPH and BTEX. All samples, with the exception of UL-5 and UL-7, were below COGCC Table 910-1 thresholds for the inorganic constituents. Sample UL-5 was above thresholds for pH and sample UL-7 was above for SAR and pH.

Based on the collected analytical data, potholing was performed by Whiting contractors to define the extent of impacted areas. On October 12, 2016, Talon/LPE collected a total of twenty-four (24) grab samples in the six (6) areas potholed (Pothole A, Pothole B, Pothole C, Pothole D, Pothole E, and Pothole F) from various depths. Additionally, a grab sample (BH-1 @ 8') was collected after Whiting contractors further excavated in the original excavation. These samples were analyzed for TPH, BTEX, and inorganics at Summit. Sample BH-1 @ 8' was reported to be below COGCC Table 910-1 concentrations for BTEX, TPH, EC, and SAR but was above for pH. Of the twenty-four (24) samples obtained from the potholes, all samples were below COGCC Table 910-1 concentrations for BTEX, TPH, and inorganics with the exception of three samples (Pothole A @ 4', Pothole C @ 2', and Pothole D @ 3'). These three (3) samples were below COGCC Table 910-1 thresholds for BTEX and TPH but were above thresholds for at least one of the inorganic constituents.

On October 14, 2016, Talon/LPE collected three (3) grab samples (UL-4 @ 1' and

UL-5 @ 1', and UL-7 @ 1') from the previous sampling locations after further excavation by Whiting contractors. These samples were analyzed for TPH, BTEX, and inorganics at Summit. The three (3) samples were reported to exhibit BTEX, TPH, and inorganic concentrations below COGCC Table 910-1. Additionally, a sample was obtained from the original location of sample Pothole A @ 4' and was only analyzed for pH at Summit. This sample was below the pH concentration of COGCC Table 910-1.

On October 17, 2016, Talon/LPE collected four (4) grab samples (BH-2 @ 4', SW-1 @ 2', SW-2 @ 2', and SW-3 @ 2') following additional excavation in an area north of the original excavation and in the direct vicinity of Pothole D. These samples were analyzed for TPH, BTEX, and inorganics at Summit. All samples were below COGCC Table 910-1 thresholds for TPH and BTEX. Samples BH-2 @ 4', SW-2 @ 2', and SW-3 @ 2' were below COGCC Table 910-1 thresholds for inorganic constituents. Sample SW-1 @ 2' was below COGCC Table 910-1 thresholds for pH but was above the thresholds for EC and SAR.

On October 18, 2016, Talon/LPE collected two (2) grab samples (SW-4 @ 2' and SW-5 @ 2') in the southeast area of the extent of the existing excavation. These samples were analyzed for TPH, BTEX, and inorganics at Summit. Both samples were below COGCC Table 910-1 thresholds for TPH and BTEX but were above the thresholds for at least one inorganic constituent.

Based on the collected analytical data, further excavation was performed by Whiting contractors in the areas where sample results were above COGCC Table 910-1. On October 19, 2016, Talon/LPE collected five (5) grab samples (BH-1 @ 9', SW-6 @ 6' SW-7 @ 6', SW-8 @ 6', and SW-9 @ 6') in the west end of the excavation and had them analyzed for TPH, BTEX, and inorganics at Summit. All samples were below COGCC Table 910-1 thresholds for TPH and BTEX. All samples, with the exception of SW-9 @ 6', were below COGCC Table 910-1 thresholds for the inorganic constituents. Sample SW-9 @ 6' was below thresholds for SAR and pH but above for EC.

On October 20, 2016, Talon/LPE collected six (6) grab samples (BH-3 @ 4', BH-4 @ 4', SW-10 @ 3' SW-11 @ 3', SW-12 @ 3', and SW-12 @ 3') in the eastern side of the excavation and had them analyzed for TPH, BTEX, and inorganics at Summit. All samples were below COGCC Table 910-1 thresholds for TPH and BTEX. All samples, with the exception of BH-3 @ 4', were below COGCC Table 910-1 thresholds for the inorganic constituents. Sample BH-3 @ 4' was below thresholds for pH but above

thresholds for EC and SAR.

Following the excavations, Whiting contractors transported and disposed the excavated stockpile material at an approved landfill facility. Clean soil was then brought in to the Site to backfill the excavated areas.

The entire Site is below COGCC Table 910-1 concentrations for BTEX and TPH. Samples BH-3 @ 4' and SW-9 @ 6' exceeded COGCC Table 910-1 concentrations for inorganic constituents; therefore, the reclamation thresholds for inorganics will need to be evaluated and addressed at the time of final reclamation. A soil concentration map showing the final excavation limits is presented in Figure 2e.

Based upon the collected analytical data and the fact the Site is not being reclaimed, Talon/LPE believes that no further corrective action is necessary and that Whiting can request conditional closure from the COGCC. If you have any questions or comments, please do not hesitate to call me at (970) 818-5330.

Respectfully Submitted,

Colby Sterling
District Manager
Talon/LPE