

Wellington Operating Company (WOC)
10/27/2024
Well 20-3 Soil Sampling Summary

Three soil samples were originally collected on March 26, 2023:

- i. One as a surface background sample off the well pad site.
- ii. One as a surface sample on the well pad near the well head.
- iii. One at the bottom of the excavation at 8 feet in depth by the well head. This sample exceeded the Soil TPH limit found on Table 915-1. The excavation was closed prior to receiving the analytical data as the surface owner was going to pasture cattle in the field prior to seeding for his summer crop.

Once the soils sample results were available, plans were made to further investigate the site for the Fall of 2023. The further site investigation was pushed into January and February, 2024 due to cattle being pastured in the field from when the crops were harvested until the end of 2023.

On January 4, 2024, the well head area was excavated to a depth of 10 feet where a concrete pad was encountered as the basement for the well head. A soil sample was collected from the top of the concrete and submitted for analysis. Additional excavation was placed on hold until the analytical results could be received. The results indicated that all Table 915-1 parameters were within compliance with the exception of pH indicating that the higher levels of TPH were above the 10-foot level.

Excavation of the well pad began again on February 22, 2024, and based on the estimated volume of contaminated soils excavated a historic spill or release was reported on a Form 19. The excavated soils were trucked to Pawnee Waste LLC for disposal. Manifests of the shipments have been submitted previously. Soil samples were collected and submitted for analysis around the perimeter of the excavation at 7 & 8 feet in depth based on this being the contaminated zone found by the initial floor sample. The analysis results for these samples were within the limits of Table 915-1 except for pH in three samples. The pH exceedance was less than 0.10 standard units for these samples.

On March 11, 2024, additional soil samples were collected at approximately one foot in depth at sample locations previously documented on February 22, 2024. Two of the excavation perimeter samples had elevated levels for TPH that were contradictory to field observations. Mr. Evans talked to the PACE Labs about these results and was told that the lab found carbon they did not feel that it was petroleum based, and the lab was requested to reanalyze the samples using a Silica Gel method, additional duplicate samples were subsampled from retained containers and submitted to ALS for analysis. While the results were different it was confirmed that excavation and sampling would be required in these two areas which were documented by GPS.

Additionally, on March 11, 2024, soils samples were collected from the area that was used to stockpile the contaminated soil prior to shipment for disposal. The initial results by PACE Labs found high TPH levels in these samples and they were also analyzed by the Silica Gel method, additional duplicate samples were subsampled from retained containers and submitted to ALS for analysis. PACE cleared the Well 20-3 Stockpile Pad West using the Silica Gel Method as did the ALS analysis. PACE analysis of the Well 20-3 Stockpile Pad East using the Silica Gel Method reduced the value by 39% while the ALS analysis indicated that their result was 1% of the original PACE value. The stockpile area samples being cleared coincided with the field observations of the soil samples collected in these areas.

On March 25, 2024, during excavation closure activities additional background samples were collected and submitted for analysis. The analytical results for these samples are within the Table 915-1 limits. The analysis did indicate that using the Silica Gel Method does have an impact in removing non-petroleum-based carbon from the samples.

October 27, 2024, moving forward:

Currently WOC proposes to resample the areas of the shallow sampling events in the areas of the East and West Wall sample locations. Small pots holes will be excavated, and samples will be collected based on field observations for staining, odors, and photo ionization (PID) readings. At least one additional sample will be collected and submitted from each pothole. The soil samples will be submitted for TPH analysis only C6 to C36 since this is the main parameter that exceeded the limit in these locations. Samples will be collected from the bottom and up to three sides of the pothole since at least one side of each sample location has been backfilled with import soils.

As confirmation in the vicinity of the stockpile, WOC will resample these areas and submit the samples for TPH analysis C6 to C36.

Once the analysis results are available, additional remediation will be started if necessary.