

## N23 spill response activities and sample collection details by date

### October 29<sup>th</sup>, 2020

Surficial soil samples were collected on October 29<sup>th</sup>, 2020 to delineate impacts found on the surface by fluid staining areas or where standing liquids and snow was removed. Samples collected on this date were focused on surficial delineation and therefore sampling depths ranged from 0 to 6 inches below ground surface. A breakdown of each sample is outlined below:

- 20201029-N23-POR 0-6" exceeded for TPH (DRO and GRO), total xylenes, and SAR
- 20201029-N23-MID 0-6" exceeded for TPH (DRO and GRO)
- 20201029-N23-SE 0-6" no exceedances to COGCC Table 910-1 standards
- 20201029-N23-SW 0-6" no exceedances to COGCC Table 910-1 standards
- 20201029-N23-NE 0-6" no exceedances to COGCC Table 910-1 standards
- 20201029-N23-SW DITCH 0-6" exceeded for SAR
  - The SW DITCH sample was collected from the stormwater ditch prior to it leaving the well pad. No staining or spill path was identified downgradient of the stormwater ditch.

### November 4<sup>th</sup>, 2020

Additional excavation to determine the extent of contamination associated with the point of release was conducted using a hydrovac at the site. Two samples were collected from the POR excavation due to large rocks preventing sample collection. Details of sample results are outlined below:

- 20201104-N23 POR 5' exceeds for TPH (DRO and GRO) and SAR
- 20201104-N23 W WALL 4' exceeds for TPH (DRO and GRO) and SAR

### November 20<sup>th</sup>, 2020

Additional excavation activities were conducted to remove approximately three feet of material from the area at the MID surface sample location from the October 29<sup>th</sup>, 2020 sampling event. Details of sample results are outlined below:

- 20201120-N23-MID 3' no exceedances to COGCC Table 910-1 standards

### December 11<sup>th</sup>, 2020

Additional excavation and investigation activities were conducted using a hydrovac at the point of release to remove impacted soil and delineate the extent of contamination from the spill. Hydrovac soil removal was completed at the SW Ditch area to remove any remaining impacts found in the area. Details of sample exceedances are outlined below:

- 20201211-N23 S WALL (8') no exceedances to COGCC Table 910-1 standards
- 20201211-N23 E WALL (8') exceeded for pH
- 20201211-N23 N WALL (8') exceeded for TPH (DRO and GRO)
- 20201211-N23 SW Ditch (1') no exceedances to COGCC Table 910-1 standards
- 20201211-N23 SW Ditch (2') no exceedances to COGCC Table 910-1 standards

Please note:

- All impacted soil removed during excavation activities was transported to Greenleaf Environmental Services near DeBeque, Colorado for offsite disposal.

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- All samples exceeded for COGCC Table 910-1 standard for arsenic. Caerus is including background sample information from soil samples collected from native background soil in the area of the Mesa 16 well pad (COGCC Location ID 335519). Caerus requests relief from COGCC Table 910-1 standards for arsenic based on the results from background samples collected in native soil near the Mesa 16 well pad.