



# REMEDIATION REPORT

## **Santa Fe Natural Resources Ridgeview 32-16-1 Pad**

NESW, Section 16, T6N R91W

Moffat County, Colorado

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GUP.CO.0586.01



December 14, 2022



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## **1 INTRODUCTION**

Gulfport Energy Corporation (GUP) is submitting this Remediation Report concerning the plugging and abandonment of the Ridgeview 32-16-1 well (API# 05-081-07747) and decommission of the Ridgeview Location (Facility ID# 480370) or Site. Santa Fe Natural Resources Inc. is the current owner and operator of the facility, but GPE has elected to proceed with decommissioning. Plugging and abandonment of the well and decommissioning of the site began in 4Q2021 and notification was provided to the Colorado Oil and Gas Conservation Commission (COGCC) via Form 6 (doc# 402854784), Form 42 (doc# 402886694) and Form 27 Initial (doc# 402862526) reports and a plugging and abandonment procedure (doc# 402857096). A Form 27 Supplemental Site Investigation & Remediation Plan (doc# 402977463) was submitted 3/18/2022. A separate Form 27 was submitted for the flare pit as requested by the COGCC.

The following report provides a summary of activities performed as part of the site investigation and remediation plan. Maps and other reference materials are also included as attachments.

## **2 SITE LOCATION**

The Ridgeview 32-16-1 pad is located approximately 4.30 miles south-southwest of the town of Craig, Colorado in Moffat County (**Attachment A – Figure 1**). The pad location may be accessed from Craig by traveling south on Colorado Highway 13 St for 3.50 miles then turn left (west) onto Co Rd 107. Drive on Co Rd 107 for approximately 0.08 miles and turn left (north) on the unnamed pad access road. Drive on the access road for approximately 0.04 miles in a north-westerly direction directly on to the site.

## **3 FIELD INVESTIGATION & REMEDIATION ACTIVITIES**

### **3.1 Initial Characterization**

On January 10, 2022, a total of 4 soil samples were field screened and collected from approximately 6 inches below ground surface (BGS) to identify impacted soil on the Site. Samples were also collected and analyzed to facilitate disposal at the Moffatt County Landfill. Two (2) samples were collected from stockpiles near the former wellhead location (R\_SP\_01 & R\_SP\_02) and 2 samples were collected from the former tank battery release area (R\_S\_01 & R\_S\_01). Each soil sample was analyzed in accordance with Table 915-1. All soil samples are evaluated utilizing the Protection of Groundwater Screening Level Concentrations (GSLC) as documented by COGCC. All characterization soil samples exceeded acceptable concentrations for COGCC Table 915-1 constituents of concern. Detailed information is provided in the Form 27 Supplemental - Site Investigation & Remediation Plan (doc# 402977463).

### **3.2 Investigation and Remediation**

Based on the initial sampling analytical data and exceedances for multiple Table 915-1 constituents, GUP excavated within and around the former tank battery on the southwest side of the pad. Soil was also screened and excavated below the former vertical separator location, onsite flowline risers at the wellhead, separator and tank battery. After any necessary excavations were completed, samples were

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collected in the bottom and sides to confirm all impacted soils are removed. Confirmation samples were analyzed for COGCC Table 915-1 analyses. A background sample was collected to establish baseline conditions and collected adjacent, upgradient northwest of the Site in non-impacted native soil (**Attachment A – Figure 2**).

### **3.2.1 Field Summary**

**7/27/2022**

TCO met AE2 personnel on Site with a backhoe and began excavated on the former separator location bottom, throughout the entire secondary containment area to ~ 1.5 feet BGS. The excavated bottom was screened using a PID readings (**Attachment B**) and all samples were < 100 ppm VOCs. A confirmation sample were collected from the excavation bottom (R\_SEP\_1@1.5').



TCO then excavated in the former tank battery working toward the southeast secondary containment. until the excavation was ~9 feet BGS. The excavated bottom and side walls were screened using a PID and all samples were > 100 ppm VOC. Further excavation was postponed until a track hoe could be transported on site. The excavation pit was covered with a tarp to avoid precipitation leaching contamination deeper in soil.



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TCO excavated around the former wellhead. Three soil stains were observed on the surface near the wellhead (R\_WH) and soil piles. Each stain location was excavated and the area around the wellhead was excavated too. The excavation bottom and side walls were screened with PID readings < 100 ppm. Four (4) confirmation samples were collected from the excavation bottom and side walls.





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**8/3/2022**

TCO further excavated the former tank battery until the excavated northwest, northeast, and southwest side walls were screened using a PID and all samples were < 100 ppm VOC.



Excavation continued southeast for ~30 feet, from ~9 feet BGS gradually decreasing in depth to ~6' BGS until the south side wall and entire excavation bottom were screened using a PID and all samples were < 100 ppm VOC. Eight (8) confirmation samples were collected from the excavation bottom and side walls.





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Excavated material was disposed of and hauled offsite to the Moffatt County Landfill located at 1806 C Rd 107, Craig, CO 81625. Waste manifests are provided in with this submittal (**Attachment E**). The excavation was backfilled with clean fill material upon completion.



### 3.3 Results and Discussion

Soil samples were submitted to Origins Labs for COGCC Table 915-1 analyses. A summary table of analytical results (**Attachment C**) and laboratory reports (**Attachment D**) are provided with this submittal.

All confirmation sample analyses for organic compounds were below Table 915-1 regulatory concentration limits. pH exceedances were found in all samples at depths below ~3 BGS, and also in the background sample collected at 1' BGS. Elevated pH is due to natural soil conditions and not from oil and gas activities. SAR exceedances were observed in most samples below ~6' BGS. Elevated SAR is also due to natural soil conditions since it was not observed in sample collected above 6' BGS. Further evidence that elevated pH and SAR is not from oil and gas activities is provided by Electrical Conductivity (EC) below regulatory concentration limits in all samples collected. Naturally occurring high SAR soil conditions will be below the root zone depth so impacts to revegetation is not anticipated and therefore a Reclamation plan (COGCC Rule 915.b.) would not apply. Arsenic concentrations are above regulatory concentration limits in all samples collected including the background sample and are also due to natural soil conditions.



