



## ENVIRONMENTAL DAILY FIELD REPORT

**PROJECT NAME:** RA 11 Flowline Investigation

**DATE:** 6/10/2022

**SITE LOCATION:** RA 11 Pad

**PERSONNEL:** Jordan Veith

**PROJECT MANAGER:** Vince DeCianne

**WEATHER CONDITIONS:** Clear, sunny, winds <5mph, temps mid-60s, no recent precipitation.

**TIME ARRIVED:** 8:30AM

**TIME DEPARTED:** 11:30AM

**SUBCONTRACTOR:** None.

**NAME / FIRM:** None.

**SITE VISITORS:** Brett Middleton (Caerus).

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### PRIMARY ASSIGNMENTS:

Field screen and collect one point of release (POR) soil sample from hydrovac excavation and submit to Pace Analytical Laboratories for full COGCC Table 915-1 analytes. Collect two background samples from adjacent, undisturbed areas and submit to Pace Analytical Laboratories for analysis of arsenic, electrical conductivity (EC), pH, and sodium adsorption ratio (SAR). Collect photos and GPS points of sample locations.

### FIELD NOTES:

Jordan Veith of Kleinfelder arrived onsite at 8:30AM. Utility locate requests through Colorado 811 and Caerus Ground Disturbance Permits were not completed (as discussed with Caerus) since the samples will be collected from a hydrovac excavation for emergency spill cleanup. Began photoionization detector (PID) span calibration. PID and PID calibration gas is owned and maintained by Caerus. PID SN: 592-002621. Span calibration passed.

Upon arrival to the site, met with Brett Middleton of Caerus to complete a site walk and discuss sampling approach. One open hydrovac excavation was identified east of the southern most separator unit. The excavation measured approximately 7'L x 5'W x 5'D. Hydrocarbon odors and visible soil staining were observed within the excavation. All sidewalls of the excavation appear discolored. Water with an oily sheen was also observed within the base of the excavation. The source of the water observed in the base of the excavation is unknown. Per discussion with Brett, a water sample will not be collected at this time and only one POR soil sample from the base of the excavation will be collected. The POR sample (20220610\_RA11\_POR@5ft) was collected using an extended stainless-steel hand auger while remaining out of the excavation. The POR sample appeared darkly discolored (black/gray color) with a strong hydrocarbon smell detected. The PID reading for this sample was measured at 552.4 parts per million (PPM). See attached table for additional details on samples.

Began background sample collection in adjacent, undisturbed areas north and south sides of pad. Two background samples were collected and are to be analyzed for Arsenic, EC, pH, and SAR.

Jordan Veith

**KLEINFELDER REPRESENTATIVE PRINT NAME**

  
**KLEINFELDER REPRESENTATIVE SIGNATURE**



A PID measurement, GPS way point, and photos were collected at each sampling location. See the attached sample register, photo log, and sample location map log for additional details. All equipment was decontaminated per standard operating procedures for soil sampling prior to the collection of each sample.

Departed RA 11 at approximately 11:30AM en-route to to meet the Pace Analytical courier in Parachute.

Jordan Veith  
KLEINFELDER REPRESENTATIVE PRINT NAME

  
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## COGCC Soil Sampling

by **Jordan Veith** on **6/10/2022**  
for **Caerus RA 11**

Caerus - Sampling Support Services  
20221930.001A  
DeCianne, Vincent G. (Vince)

### Sample Register

| Sample ID                  | Sample Type | Date       | Time     | Depth  | PID (ppmv) | Odor | Staining | Comments   |
|----------------------------|-------------|------------|----------|--------|------------|------|----------|--|
| 20220610_RA<br>11_BG01@1ft | Background  | 06/10/2022 | 10:45 AM | 1 to 1 | 0          | N    | N        |  |
| 20220610_RA<br>11_BG02@1ft | Background  | 06/10/2022 | 11:10 AM | 1 to 1 | 0          | N    | N        | Soil is light red/orange color.  |
| 20220610_RA<br>11_POR@5ft  | Spill Area  | 06/10/2022 | 09:45 AM | 5 to 5 | 552.4      | Y    | Y        | Strong hydrocarbon odor detected around excavation. Small amount of unknown water source is pooled in base of excavation. Soil appears discolored. |

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## Photo Log

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**Fig. 1:** Facing north.



**Fig. 2:** Facing east.



**Fig. 3:** Facing south.



**Fig. 4:** Facing west.



*Jordan Veith*

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## Photo Log

**Fig. 5:** Looking north towards pad from 20220610\_RA11\_BG01@1ft..



**Fig. 6:** Looking south towards pad from 20220610\_RA11\_BG02@1ft..



**Fig. 7:** 20220610\_RA11\_POR@5ft sample.



**Fig. 8:** Hydrovac excavation around south most separator unit. Orange safety net is around excavation.



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## Photo Log

**Fig. 9:** Hydrovac excavation. Dimensions are approximately 7'L x 5'W x 5'D.



**Fig. 10:** Discolored soil and sheen on water observed within excavation.



**Fig. 11:** Unknown water source pooled in base of excavation.



**Fig. 12:** All sidewalls within excavation appear discolored.



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## Photo Log

**Fig. 13:** Looking north from excavation.



**Fig. 14:** Looking east from excavation.



**Fig. 15:** Looking south from excavation.



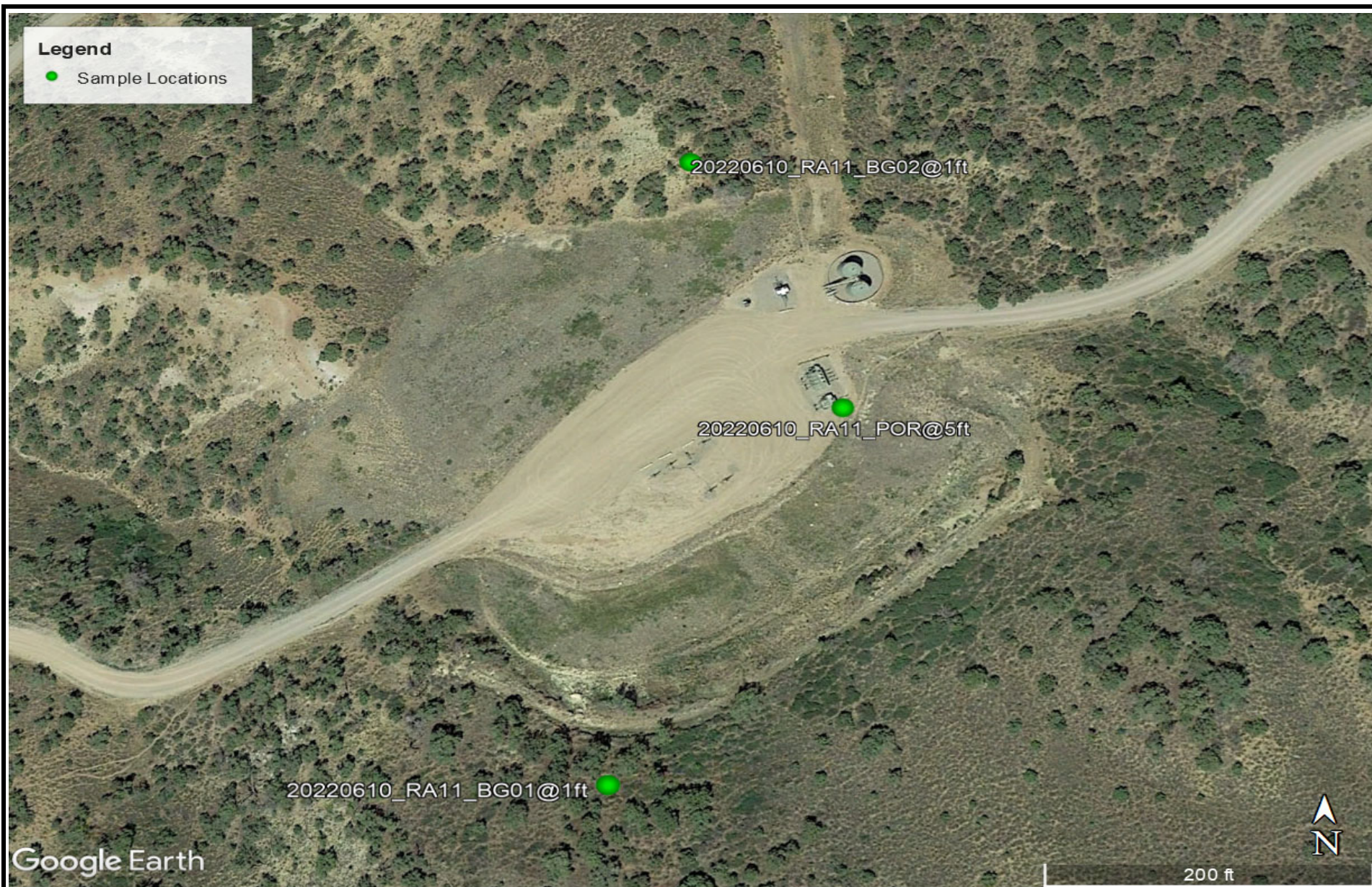
**Fig. 16:** Looking west from excavation.



*Jordan Veith*

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RA11 Flowline Investigation  
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NENE Sec. 11 T7S R94W  
Garfield County, Colorado

PN 20221930.001A

Figure

**1**