

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural  
Resources Department

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Incident ID	
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

**DENIED**

Responsible Party: <b>Enterprise Field Services, LLC</b>	OGRID: <b>151618</b>
Contact Name: <b>Thomas Long</b>	Contact Telephone: <b>505-599-2286</b>
Contact email: <b>tjlong@eprod.com</b>	Incident # (assigned by OCD): <b>NCS1904355294</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

### Location of Release Source

Latitude 36.651985 Longitude -107.671788 (NAD 83 in decimal degrees to 5 decimal places)

Site Name <b>Federal 13-22 #2</b>	Site Type <b>Natural Gas Gathering Pipeline</b>
Date Release Discovered: <b>1/10/2019</b>	Serial Number (if applicable): <b>NM 113113</b>

Unit Letter	Section	Township	Range	County
<b>C</b>	<b>22</b>	<b>28N</b>	<b>8W</b>	<b>San Juan</b>

Incorrect C-141 Type, Impacts still in place Operator must submit a Remediation Plan /Deferral Request and ask for a Deferral in the report Resubmit C-141 no later than July 27, 2020

Surface Owner:  State  Federal  Tribal  Private (Name: BLM)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): <b>15-20 bbls</b>	Volume Recovered (bbls): <b>None</b>
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf): <b>2.31 MCF</b>	Volume Recovered (Mcf): <b>None</b>
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units):	Volume/Weight Recovered (provide units)

**Cause of Release:** On January 10, 2019, an Enterprise technician discovered a release on the Federal 13-22 #2 pipeline. The pipeline was isolated, depressurized, locked out and tagged out. On February 5, 2019, Enterprise completed the repairs and initial remediation. The final excavation dimensions measured approximately 50 feet long by 15 feet wide ranging from approximately four (4) to 20 feet deep. Approximately 264 cubic yards of hydrocarbon impacted soil were excavated and transported to a New Mexico Oil Conservation Division approved land farm facility. Additional remediation by excavating was not possible do the presence for permanent structures. From April 15, 2019 to April 16, 2019, a site assessment was performed utilizing a hollow stem auger drilling rig. No subsurface contamination was identified from the site assessment activities. Enterprise requests a deferment of additional remediation activities until facility/well site decommissioning. A third party closure report is included with this "Final." C-141.

Incident ID	
District RP	
Facility ID	
Application ID	

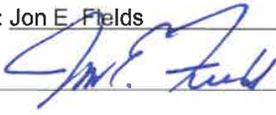
## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jon E. Fields Title: Director, Environmental  
 Signature:  Date: 12/18/19  
 email: jefields@eprod.com Telephone: (713) 381-6684

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: **DENIED** \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

# **Federal 13-22 #2 Well Tie Pipeline Release Closure Report**

Unit Letter C, Section 22, Township 28 North, Range 8 West  
Rio Arriba County, New Mexico

October 17, 2019

Prepared for:  
Enterprise Field Services, LLC  
614 Reilly Avenue  
Farmington, New Mexico 87401

Prepared by:  
Rule Engineering, LLC  
501 Airport Drive, Suite 205  
Farmington, New Mexico 87401

# **Enterprise Field Services, LLC Federal 13-22 #2 Well Tie Pipeline Release Closure Report**

Prepared for:

Enterprise Field Services, LLC  
614 Reilly Avenue  
Farmington, New Mexico 87401

Prepared by:

Rule Engineering, LLC  
501 Airport Drive, Suite 205  
Farmington, New Mexico 87401



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Heather M. Woods, P.G., Area Manager

October 17, 2019

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Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

## 1.0 Introduction

The Enterprise Field Services, LLC (Enterprise) Federal 13-22 #2 well tie pipeline release site is located in Unit Letter C, Section 22, Township 28 North, Range 8 West, in Rio Arriba County, New Mexico. The release was discovered on January 1, 2019, and the line was immediately isolated and depressurized.

A topographic map of the location reproduced from the United States Geological Society quadrangle map of the area is included as Figure 1 and an aerial image of the release location is included on Figures 1 and 2.

## 2.0 Release Summary

<b>Site Name</b>	Federal 13-22 #2 Well Tie Pipeline Release		
<b>Site Location Description</b>	Unit Letter C, Section 22, Township 28 North, Range 8 West (N36.65200, W107.67178)		
<b>Land Jurisdiction</b>	Bureau of Land Management (BLM)		
<b>Discovery Date</b>	January 1, 2019		
<b>Release Source</b>	Corrosion of well tie pipeline		
<b>Substance(s) Released</b>	Natural gas and pipeline liquids		
<b>Contractor</b>	West States Energy Contractor	<b>Remedial Excavation Dimensions</b>	50 feet by 15 feet by 4 feet in depth (north) and 20 feet in depth (south)
<b>Volume of Soil Transported for Disposal/Remediation</b>	Approximately 264 cubic yards	<b>Disposal Facility</b>	Envirotech Landfarm (Permit #NM-01-0011)

## 3.0 Remediation Standards Determination

The remediation standards for the release location are determined per 19.15.29 of the New Mexico Authority Code (NMAC) and are determined by depth to groundwater with a concentration of less than 10,000 milligrams per kilogram (mg/kg) total dissolved solids (TDS) and several factors outlined in 19.15.29.12(4)(e) NMAC.

Depth to groundwater at the site is anticipated to be greater than 100 feet below grade surface (bgs) based on the local well records and the area's geology and geomorphology. Supporting documents for this determination are included in Appendix A. These supporting documents were submitted to the New Mexico Energy, Minerals, and Natural Resources Department Oil Conservation Division (NMOCD) District 3 office for concurrence with the determination prior to confirmation sampling. Concurrence was granted by Mr. Cory Smith, Environmental Specialist, via email on January 15, 2019. A copy of this correspondence is included in Appendix B.

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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Closure criteria for the soils impacted at the release location are determined by the "greater than 100 feet" category of Table 1, 19.15.29.12 NMAC, which are as follows: 20,000 milligrams per kilogram (mg/kg) chloride per United States Environmental Protection Agency (USEPA) Method 300.0 or SM 4500-Cl B; 2,500 mg/kg total petroleum hydrocarbons (TPH) as gasoline range organics (GRO), diesel range organics (DRO), and mineral oil range organics (MRO) per USEPA Method 8015M; 1,000 mg/kg TPH as GRO and DRO per USEPA Method 8015M; 50 mg/kg total benzene, toluene, ethylbenzene, and xylenes (BTEX) per USEPA Method 8021B or 8260B; and 10 mg/kg benzene per USEPA Method 8021B or 8260B.

#### **4.0 Field Activities**

On January 24, 2019, Enterprise began repair and remediation activities at the location which included the replacement of approximately 40 feet of well tie pipeline. West State Energy Contractor provided heavy equipment operation and repair support. Rule Engineering, LLC (Rule) personnel provided excavation guidance and collected confirmation samples from the resultant excavation.

##### **Excavation**

Confirmation samples (SC-1 through SC-7) were collected from the excavation on January 29, 2019. Based on laboratory results, additional excavation of the southern portion of the base was performed extending that portion of the base to a depth of approximately 12 feet into hard sandstone where confirmation samples SC-9 through SC-11 were collected on January 31, 2019. Additionally, a sample from a stockpile (SC-8) was collected on the same day.

Laboratory results indicated that the southern base exceeded remediation standards and was advanced to a depth of approximately 20 feet into the hard sandstone. Having reached the limits of the equipment, sample TP-1 was collected from the base of the excavation. Due to the limits of the excavator, hardness of the rock, and proximity to other onsite equipment, it was determined that continued assessment of the site would be performed utilizing a drill rig to advance soil borings and the excavation was backfilled with clean, imported soil. The stockpile that had been sampled as SC-8 was removed to the landfarm with the remainder of the excavation spoils. Approximately 264 cubic yards of hydrocarbon impacted soils were removed from the remedial portion of the excavation measuring approximately 50 feet by 15 feet and 4 feet in depth in the north half of the excavation and up to 20 feet in depth in the south half.

A depiction of the excavation with sample locations is included as Figure 2. A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix C.

##### **Continued Assessment**

On March 15 and 16, 2019, Rule advanced five soil borings, SB-1 through SB-5, in the area of the prior excavation for the collection of soil samples utilizing a hollow-stem auger drill rig. The soil boring locations were hydro-excavated to approximately five feet bgs to ensure no underground facilities would be damaged during drilling. Sampling was

performed using split-spoon samplers at approximately 2.5 foot intervals to the total depths ranging from 25.5 feet to 30.5 feet bgs.

A depiction of the soil boring locations relative to the prior excavation location is included as Figure 3 and soil boring logs are included in as Appendix D.

## 5.0 Confirmation Soil Sampling

Rule collected confirmation soil samples (SC-1 through SC-11) from the sidewalls and bases of the remedial excavation and from the onsite stockpile on January 29 and 31, 2019. Each confirmation soil sample is a representative composite comprised of five equivalent aliquots of soil collected from the sampled area.

Samples were also collected from the soil borings (SB-1 through SB-5). A portion of each sample was field screened for volatile organic compounds (VOCs). Field screening for VOC vapors was conducted with a photoionization detector (PID). Before beginning field screening, the PID was calibrated with 100 parts per million (ppm) isobutylene gas. Laboratory samples were collected from the intervals exhibiting the highest VOC concentrations and from the deepest interval sampled.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. Samples were analyzed for BTEX per USEPA Method 8021B, TPH (GRO/DRO/MRO) per USEPA 8015M/D, and chlorides per USEPA Method 300.0, as appropriate.

A depiction of the excavation extents with sample locations is included as Figure 2 and a depiction of the soil boring locations relative to the excavation extents is included as Figure 3. Summaries of the laboratory results for excavation confirmation samples is included as Table 1 and soil borings is included as Table 2. A photograph log of the confirmation sampling areas is included in Appendix E.

## 6.0 Laboratory Analytical Results

Confirmation samples SC-1, SC-8, and SC-9, were removed by excavation and transported to the landfarm for remediation/disposal, and therefore not included in the following discussion. Laboratory analytical results for the excavation confirmation samples indicate that samples SC-3 through SC-7 and TP-1 exhibit benzene, total BTEX, and TPH, and chloride concentrations below the remediation standards. However, samples SC-2, SC-10, and SC-11 (southern base area) exhibit benzene, total BTEX, and/or TPH concentrations in excess of the remediation standards.

Additionally, laboratory analytical results for the samples collected from soil borings SB-1 through SB-5 indicate that benzene, total BTEX, and TPH are below the remediation standards, having established that chlorides were below remediation standards during excavation confirmation sampling.

Method detection limits for these constituents are below the remediation standards for all the constituents.

Laboratory analytical results are summarized in Tables 1 and 2, sample locations are illustrated on Figures 2 and 3, and the analytical laboratory reports are included in Appendix F.

## 7.0 Conclusions

Hydrocarbon impacted soils associated with the Federal 13-22 #2 release have been excavated and transported to an approved landfarm for disposal/remediation as site conditions will allow. A small volume of residual impacted rock may be present in the southern portion of the remediation excavation area as indicated by laboratory analytical results for confirmation samples SC-2, SC-10, and SC-11. Laboratory analytical results show that chloride is below remediation standards for the excavation. To delineate the potential volume of residual BTEX and TPH impact, soil borings SB-1 was advanced as near as possible to the release location without endangering the buried pipeline, and SB-2 through SB-5 were advanced near the perimeter of the prior excavation. Laboratory analytical results for the samples collected from the soil borings report benzene, total BTEX, and TPH concentrations below the closure criteria set forth for the release indicating a minimal volume of residual impacted material may be present. Therefore, no further work is recommended.

## 8.0 Closure and Limitations

This report has been prepared for the exclusive use of Enterprise and is subject to the terms, conditions, and limitations stated in Rule's report and Service Agreement with Enterprise. All work has been performed in accordance with generally accepted professional environmental consulting practices. No other warranty is expressed or implied.

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Tables

**Table 1. Summary of Excavation Confirmation Laboratory Analytical Results**  
**Enterprise Field Services**  
**Federal 13-22 #2 Well Tie Pipeline Release**  
**Rio Arriba County, New Mexico**

Sample Name	Date	Approximate Sample Depth (ft bgs)	Sample Location	Laboratory Analytical Results								
				Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)	Chloride (mg/kg)
<b>Remediation Standard*</b>				<b>10</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>50</b>	<b>1,000 as GRO+DRO / 2,500 Total</b>			<b>20,000</b>
<b>Removed by Excavation</b>												
SC-1	1/29/2019	5	South Base	<0.88	27	9.7	130	<b>167</b>	<b>2,000</b>	<b>740</b>	<48	<60
SC-8	1/31/2019	--	Stockpile	<b>14</b>	210	44	400	<b>668</b>	<b>9,800</b>	<b>220</b>	<47	--
SC-9	1/31/2019	10 - 12	South Base	<b>23</b>	310	64	560	<b>960</b>	<b>15,000</b>	<b>290</b>	<48	--
<b>Excavation Confirmation Samples</b>												
SC-2	1/29/2019	0 - 5	East Wall - South	1.3	42	11	140	<b>194</b>	<b>2,100</b>	<b>280</b>	<48	<60
SC-3	1/29/2019	0 - 5	West Wall - South	<0.13	1.6	0.91	13	16	170	92	<48	<60
SC-4	1/29/2019	0 - 5	South Wall	<0.11	<0.21	<0.21	0.46	0.46	<21	15	<48	<60
SC-5	1/29/2019	4	North Base	<0.019	0.082	<0.039	0.23	0.31	<3.9	<9.8	<49	<60
SC-6	1/29/2019	0 - 4	East Wall - North	<0.022	<0.044	<0.044	<0.087	ND	<4.4	<9.9	<49	<60
SC-7	1/29/2019	0 - 4	West Wall - North	<0.023	<0.046	<0.046	<0.092	ND	<4.6	24	<47	<60
SC-10	1/31/2019	6 - 12	West Wall - Mid/South	<b>13</b>	200	42	380	<b>635</b>	<b>8,800</b>	<b>210</b>	<47	--
SC-11	1/31/2019	6 - 12	East Wall - Mid/South	3.7	71	19	190	<b>284</b>	<b>4,600</b>	<b>330</b>	<49	--
TP-1	2/5/2019	20	South Base	<0.048	1.2	0.66	7.3	9.2	110	<9.8	<49	--

Notes: ft bgs - feet below grade surface  
mg/kg - milligrams per kilogram  
NE - not established  
ND - not detected above laboratory reporting limits  
\*Per Table 1 of 19.15.29.12 NMAC, based on category "greater than 100 feet" depth to groundwater

TPH - total petroleum hydrocarbons  
GRO - gasoline range organics  
DRO - diesel range organics  
MRO - mineral oil range organics

**Table 2. Summary of Soil Boring Laboratory Analytical Results**  
**Enterprise Field Services**  
**Federal 13-22 #2 Well Tie Pipeline Release**  
**Rio Arriba County, New Mexico**

Sample Name	Date	Approximate Sample Depth (ft bgs)	Field Screening	Laboratory Analytical Results							
			VOCs by PID (ppm)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH as GRO (mg/kg)	TPH as DRO (mg/kg)	TPH as MRO (mg/kg)
Remediation Standard*			--	10	NE	NE	NE	50	1,000 as GRO+DRO / 2,500 Total		
SB-1	4/16/2019	20	1,322	<0.24	5.5	2.7	29	37	520	27	<49
		22.5	1,709	<0.050	0.11	<0.099	0.89	1.00	41	<9.6	<48
		25	596	--	--	--	--	--	--	--	--
		30	183	<0.024	<0.048	<0.048	<0.096	ND	<4.8	18	<49
SB-2	4/16/2019	7.5	147	--	--	--	--	--	--	--	--
		10	292	<0.024	<0.047	<0.047	<0.095	ND	<4.7	10	<46
		12.5	104	--	--	--	--	--	--	--	--
		15	162	<0.024	<0.048	<0.048	<0.095	ND	<4.8	<9.8	<49
		17.5	119	--	--	--	--	--	--	--	--
		20	13.3	--	--	--	--	--	--	--	--
SB-3	4/16/2019	25	36.2	<0.024	<0.048	<0.048	<0.095	ND	<4.8	<10	<50
		7.5	64.1	--	--	--	--	--	--	--	--
		10	172	--	--	--	--	--	--	--	--
		12.5	371	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.7	<49
		15	137	--	--	--	--	--	--	--	--
		17.5	125	--	--	--	--	--	--	--	--
		20	156	<0.024	<0.047	<0.047	<0.095	ND	<4.7	<9.8	<49
SB-4	4/15/2019	25	77.8	<0.023	<0.047	<0.047	<0.093	ND	<4.7	<9.6	<48
		7.5	59.2	--	--	--	--	--	--	--	--
		10	25.5	--	--	--	--	--	--	--	--
		12.5	274	<0.024	<0.048	<0.048	<0.097	ND	<4.8	<9.5	<47
		15	73.2	--	--	--	--	--	--	--	--
		17.5	131	--	--	--	--	--	--	--	--
		20	148	<0.025	<0.050	<0.050	<0.10	ND	<5.0	<9.1	<46
SB-5	4/15/2019	25	108	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.7	<48
		7.5	26.4	--	--	--	--	--	--	--	--
		10	94.3	--	--	--	--	--	--	--	--
		15	167	--	--	--	--	--	--	--	--
		17.5	252	<0.024	<0.048	<0.048	<0.096	ND	<4.8	<9.8	<49
		20	160	--	--	--	--	--	--	--	--
		22.5	216	--	--	--	--	--	--	--	--
		25	303	<0.025	<0.050	<0.050	<0.099	ND	<5.0	<9.6	<48
30	32.2	<0.025	<0.049	<0.049	<0.099	ND	<4.9	<9.5	<47		

Notes: ft bgs - feet below grade surface  
 mg/kg - milligrams per kilogram  
 NE - not established  
 ND - not detected above laboratory reporting limits  
 BTEX - total benzene, toluene, ethylbenzene, and xylenes  
 VOC - volatile organic compounds  
 \*Per Table 1 of 19.15.29.12 NMAC, based on category "greater than 100 feet" depth to groundwater

PID - photoionization detector  
 ppm - parts per million  
 TPH - total petroleum hydrocarbons  
 GRO - gasoline range organics  
 DRO - diesel range organics  
 MRO - mineral oil range organics

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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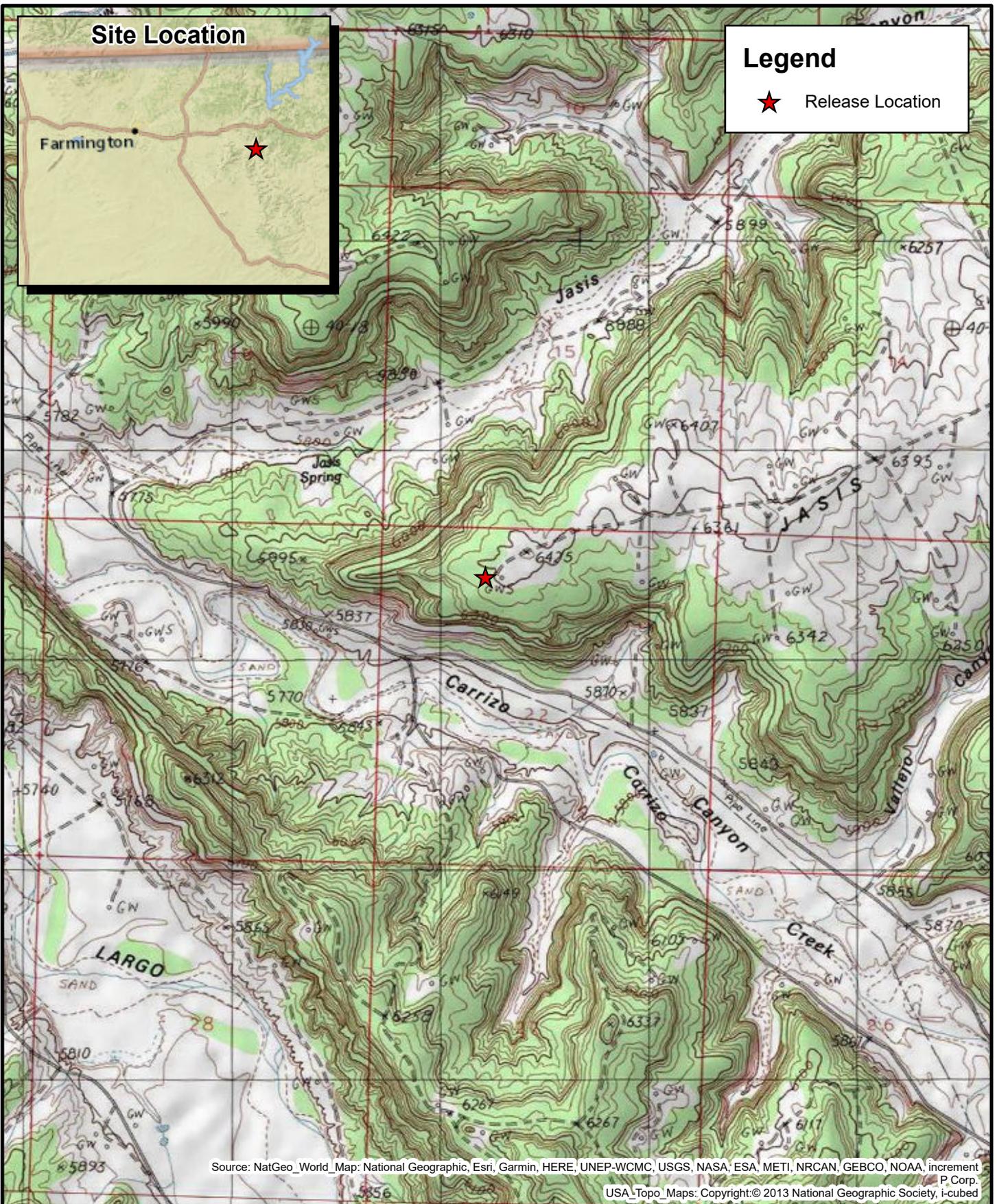
## Figures

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**Legend**

- ★ Release Location



Source: NatGeo\_World\_Map: National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.  
 USA\_Topo\_Maps: Copyright © 2013 National Geographic Society, i-cubed

**Rule Engineering, LLC**  
 Solutions to Regulations for Industry

0 1,000 2,000 4,000 Feet

Cutter Canyon Quadrangle  
 1:24,000



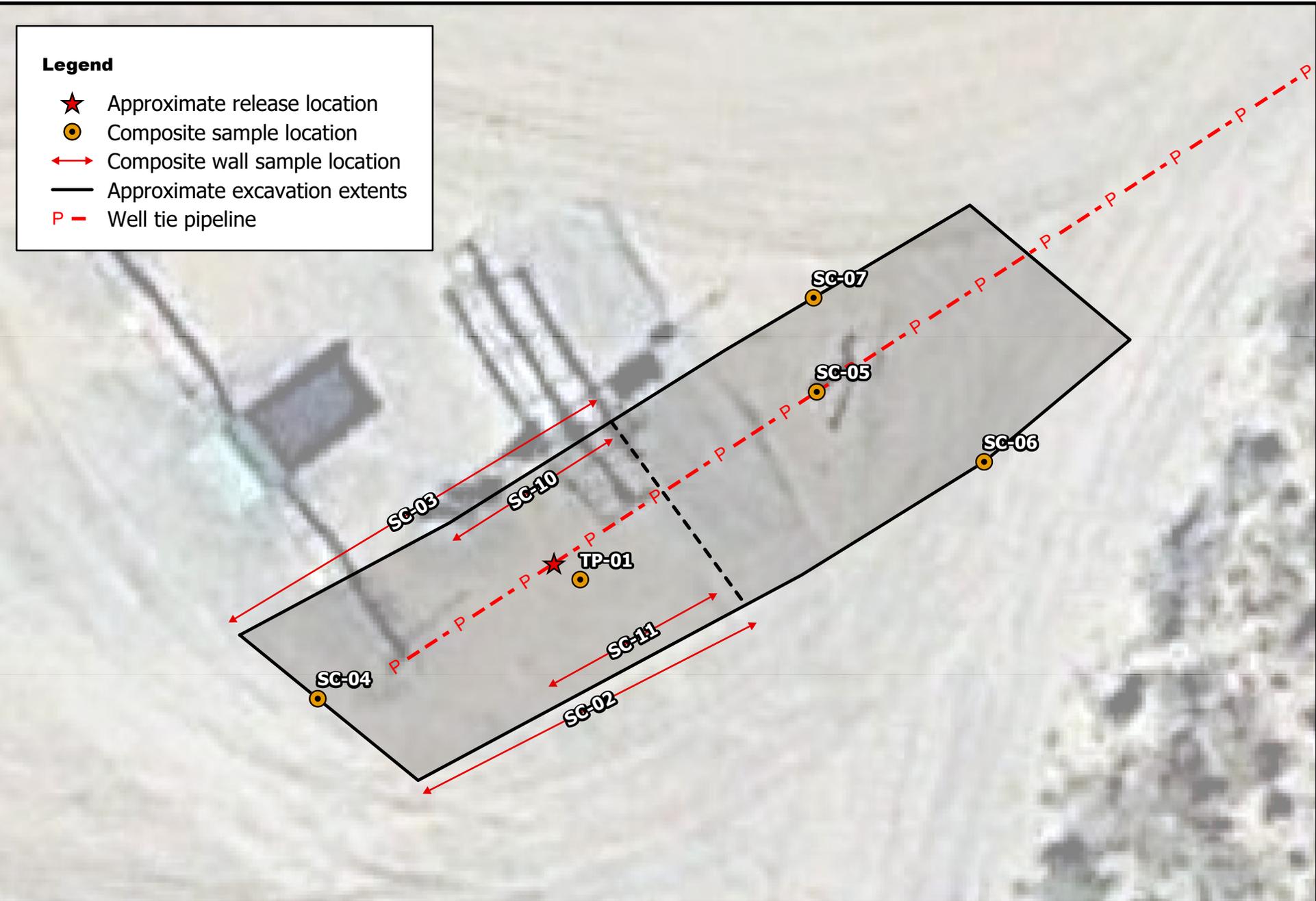
C-22-T28N-R8W  
 N36.65200, W107.67178  
 Rio Arriba County, NM

**Figure 1**  
**Topographic Site Map**  
 Federal 13-22 #2

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**Legend**

- ★ Approximate release location
- Composite sample location
- ↔ Composite wall sample location
- Approximate excavation extents
- P - Well tie pipeline

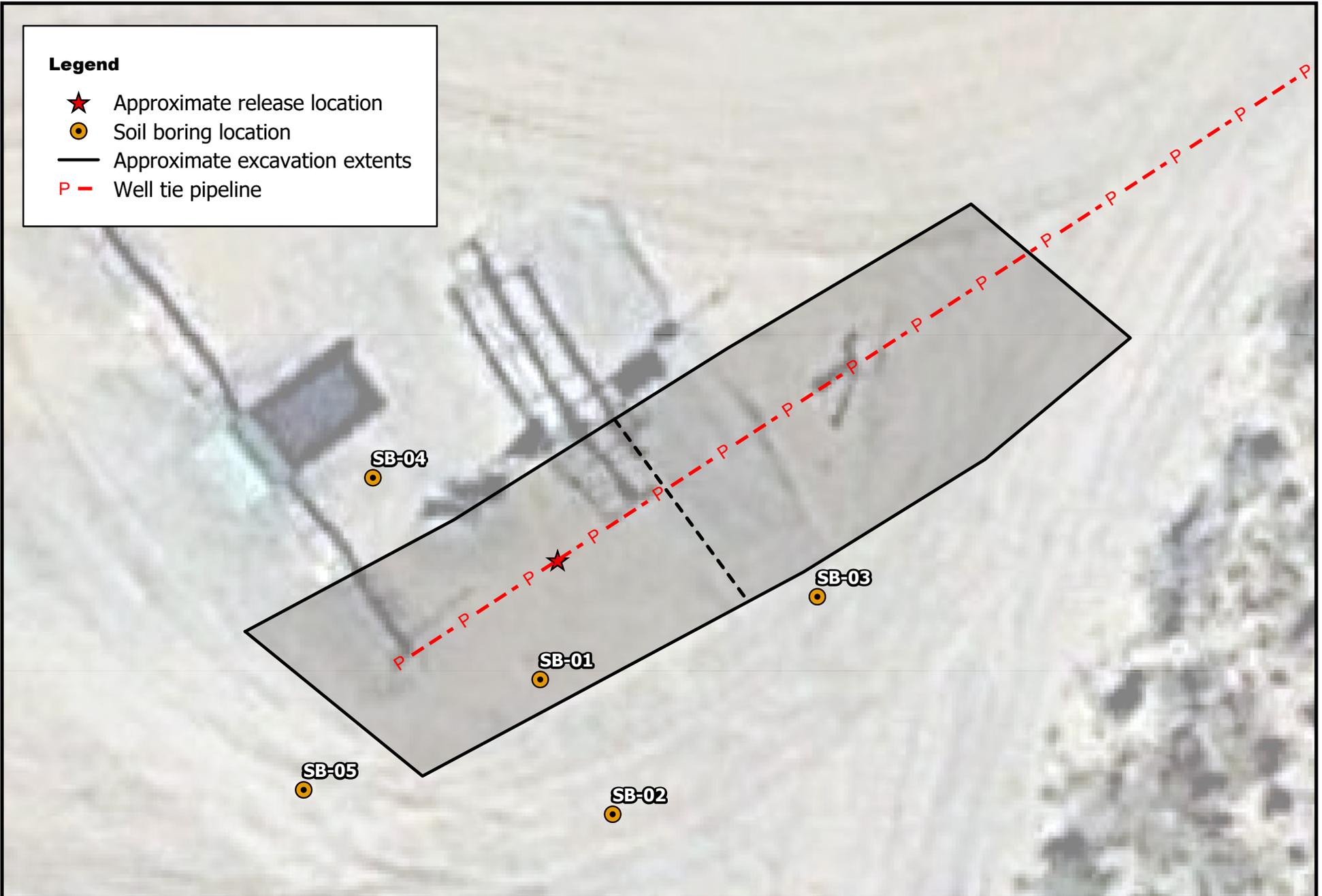


<p><b>Rule</b> Engineering, LLC Solutions to Regulations for Industry</p> <p>0 7.5 15 30 Feet</p> <p>N</p>		<p>C-22-T28N-R8W N36.65200, W107.67178 Rio Arriba County, NM</p>	<p><b>Figure 2</b> <b>Excavation Sample Location Map</b> Federal 13-22 #2</p>
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**Legend**

- ★ Approximate release location
- Soil boring location
- Approximate excavation extents
- P - Well tie pipeline



<p><b>Rule</b> Engineering, LLC Solutions to Regulations for Industry</p> <p>0 7.5 15 30 Feet</p>		<p>C-22-T28N-R8W N36.65200, W107.67178 Rio Arriba County, NM</p>	<p><b>Figure 3</b> <b>Soil Boring Location Map</b> Federal 13-22 #2</p>
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Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix A

### Closure Criteria Determination Documents

## Federal 13-22 #2 Well Tie Hydrogeologic Information

Depth to groundwater is anticipated to be greater than 100 feet below ground surface. This is based on the depth to groundwater of 480 feet reported for registered water well SJ 02283, located approximately 1.5 miles to the northeast and about 50 feet lower in elevation. Additionally, the Carrizo Wash located approximately 1,550 feet south of the release location is approximately 610 feet below the site in elevation.

The Jasis Spring is located approximately 0.5 mile to the northwest of the location.

The nearest significant watercourse is the Carrizo Wash located approximately 1,550 feet south of the location.

There are no water wells registered within 0.5 mile of the location.

The site is not within 300 feet of a wetland and is not within a 100-year floodplain.

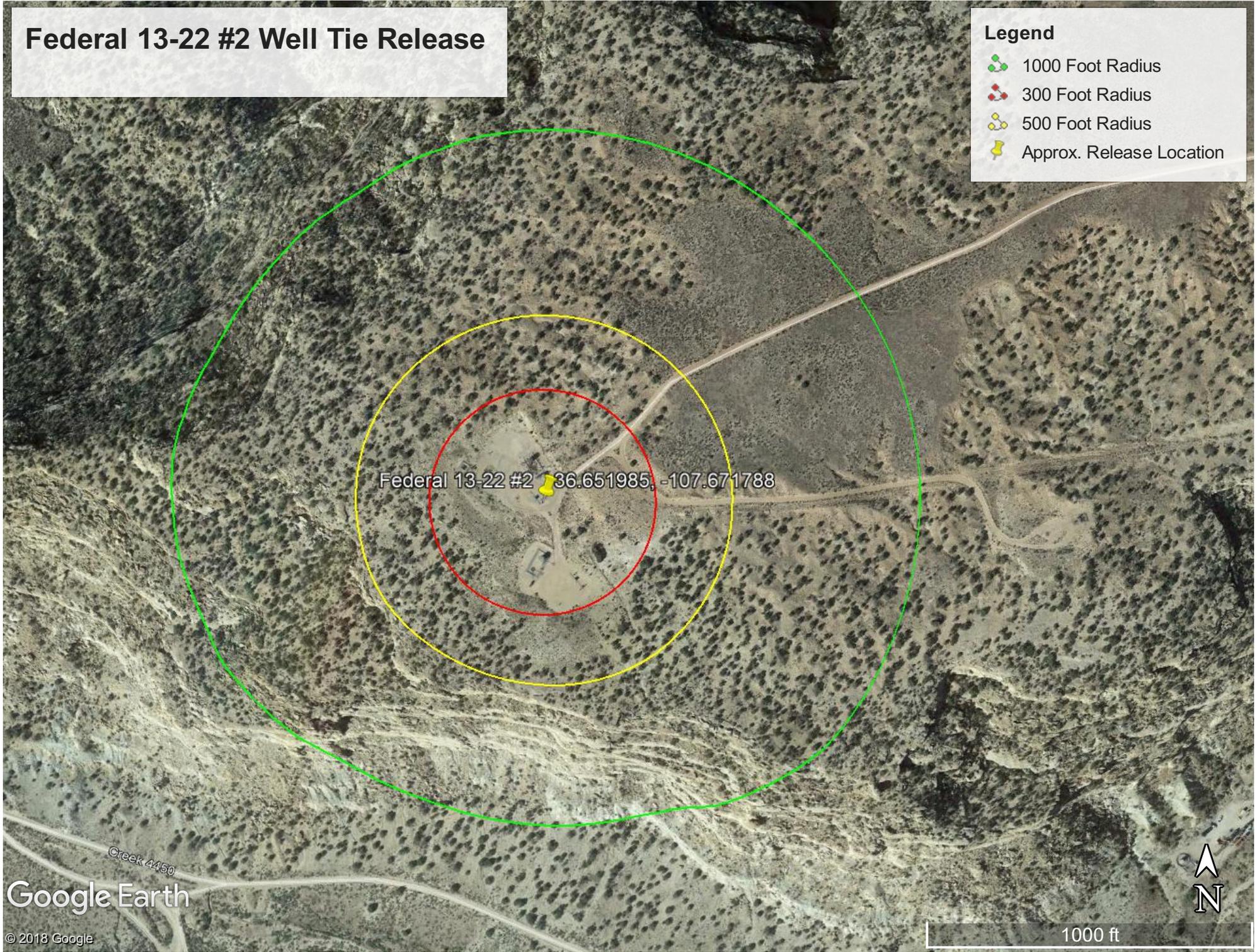
The site is underlain by the Tertiary San Jose Formation which does have karst features.



# Federal 13-22 #2 Well Tie Release

**Legend**

-  1000 Foot Radius
-  300 Foot Radius
-  500 Foot Radius
-  Approx. Release Location



Federal 13-22 #2 36.651985, -107.671788

Google Earth

© 2018 Google

Creek 4450

1000 ft





# New Mexico Office of the State Engineer Water Column/Average Depth to Water

No records found.

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 261169.68

**Northing (Y):** 4059594.58

**Radius:** 805

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



## New Mexico Office of the State Engineer Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
	SJ 02283	1	2	4	14	28N	08W	263604	4060474*

<b>Driller License:</b> 809	<b>Driller Company:</b> CHIVERS BRYCE J.		
<b>Driller Name:</b> CHIVERA DRILLING CO.			
<b>Drill Start Date:</b> 06/07/1990	<b>Drill Finish Date:</b> 06/10/1990	<b>Plug Date:</b>	
<b>Log File Date:</b> 06/25/1990	<b>PCW Rev Date:</b>	<b>Source:</b> Shallow	
<b>Pump Type:</b>	<b>Pipe Discharge Size:</b>	<b>Estimated Yield:</b> 5 GPM	
<b>Casing Size:</b>	<b>Depth Well:</b> 540 feet	<b>Depth Water:</b> 480 feet	

Water Bearing Stratifications:	Top	Bottom	Description
	510	512	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	510	530

\*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/14/19 3:55 PM

POINT OF DIVERSION SUMMARY

# National Flood Hazard Layer FIRMette



36°39'21.58"N

107°40'37.16"W



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
<b>OTHER AREAS</b>		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
<b>GENERAL STRUCTURES</b>		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
<b>OTHER FEATURES</b>		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
<b>MAP PANELS</b>		Digital Data Available
		No Digital Data Available
		Unmapped

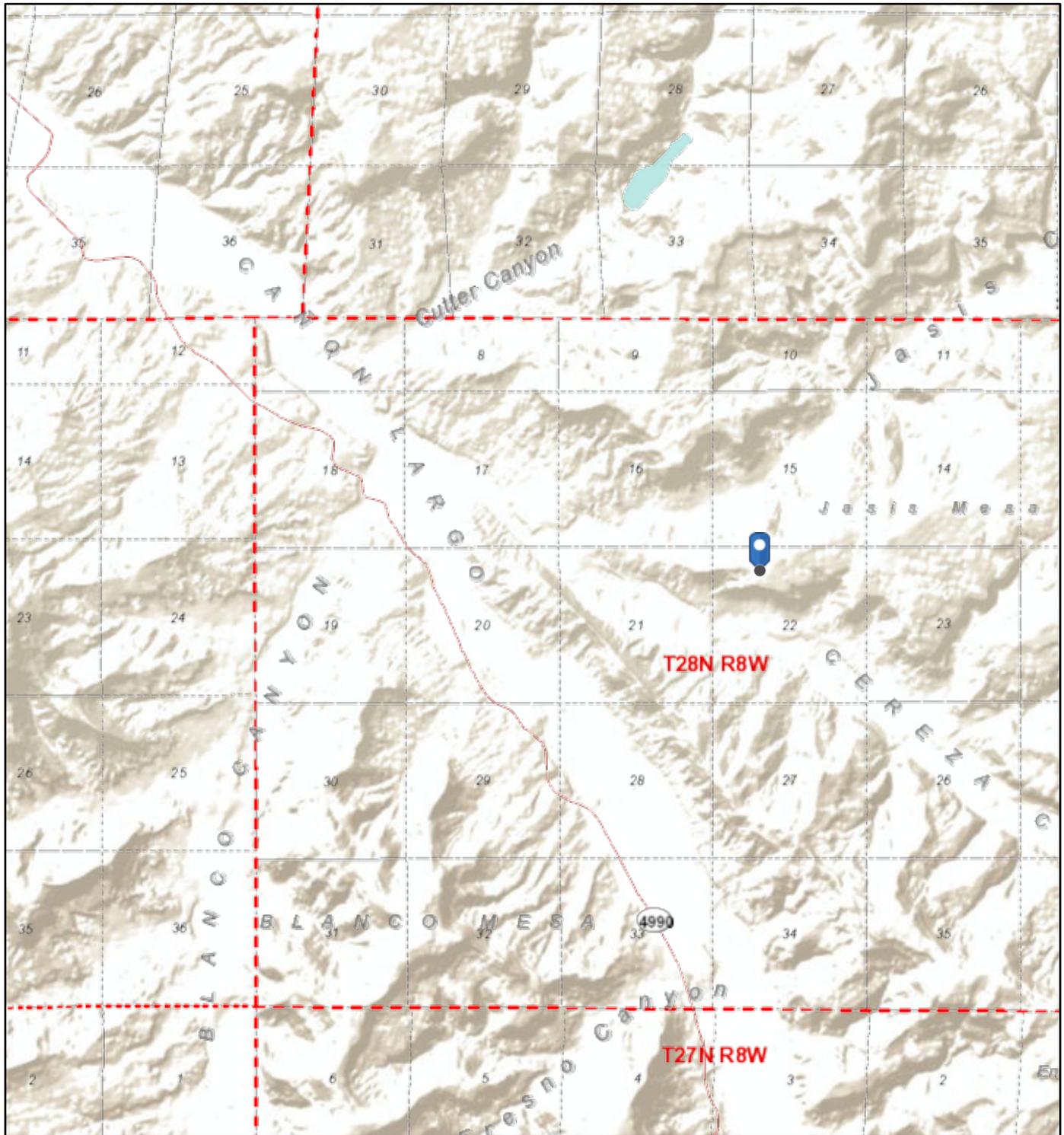
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/14/2019 at 5:59:27 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

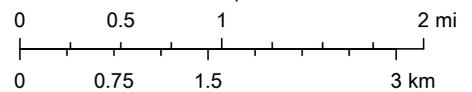
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

# Active Mines in New Mexico



1/14/2019, 4:02:55 PM

1:72,224



Bureau of Land Management Geographic Coordinate Database, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix B

### NMOCD Correspondence

## Heather Woods

---

**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Tuesday, January 15, 2019 8:20 AM  
**To:** Heather Woods  
**Subject:** FW: [EXT] RE: Federal 13-22#2 - UL C Section 22 T28N R8W; 36.651985, -107.671788

FYI

**Tom Long**  
**505-599-2286 (office)**  
**505-215-4727 (Cell)**  
[tjlong@eprod.com](mailto:tjlong@eprod.com)

---

**From:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Sent:** Tuesday, January 15, 2019 8:18 AM  
**To:** Long, Thomas <tjlong@eprod.com>; Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; 'l1thomas@blm.gov' <l1thomas@blm.gov>  
**Cc:** Stone, Brian <bmstone@eprod.com>  
**Subject:** RE: [EXT] RE: Federal 13-22#2 - UL C Section 22 T28N R8W; 36.651985, -107.671788

Tom,

I would concur based on the data Enterprise provided it appears the closure standards Enterprise determined is correct.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Tuesday, January 15, 2019 7:58 AM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; 'l1thomas@blm.gov' <[l1thomas@blm.gov](mailto:l1thomas@blm.gov)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXT] RE: Federal 13-22#2 - UL C Section 22 T28N R8W; 36.651985, -107.671788

Cory,

In the event that this release become reportable, please find the attached siting criteria package. Do you concur that this release site would fall under the Tier III remediation standards (Benzene = 10 ppm, BTEX = 50 ppm, TPH = 2,500 ppm, GRO+DRO = 1,000 ppm and Chloride = 20,000 ppm) where groundwater is greater than 100 feet below ground surface? Please let me know your thoughts.

Sincerely,

**Tom Long**  
**505-599-2286 (office)**  
**505-215-4727 (Cell)**  
[tjlong@eprod.com](mailto:tjlong@eprod.com)

---

**From:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>  
**Sent:** Friday, January 11, 2019 7:40 AM  
**To:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; 'l1thomas@blm.gov' <[l1thomas@blm.gov](mailto:l1thomas@blm.gov)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** RE: Federal 13-22#2 - UL C Section 22 T28N R8W; 36.651985, -107.671788

Tom,

Thank you for the notification, please respond to the release per [19.15.29.8](#) NMAC. If the release is reportable please let us know as soon as possible.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

---

**From:** Long, Thomas <[tjlong@eprod.com](mailto:tjlong@eprod.com)>  
**Sent:** Thursday, January 10, 2019 2:53 PM  
**To:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>; 'l1thomas@blm.gov' <[l1thomas@blm.gov](mailto:l1thomas@blm.gov)>  
**Cc:** Stone, Brian <[bmstone@eprod.com](mailto:bmstone@eprod.com)>  
**Subject:** [EXT] Federal 13-22#2 - UL C Section 22 T28N R8W; 36.651985, -107.671788

Cory/Whitney,

This email is a courtesy notification that Enterprise had a release of natural gas and natural gas liquids on the Federal 13-22#2 pipeline today. The pipeline was isolated, depressurized, locked out and tagged out. An area of approximately two feet in diameter was impacted by the released fluids. Enterprise has not yet determined this release reportable per NMOCD regulation. The release is located at UL C Section 22 T28N R8W; 36.651985, -107.671788. I will keep you informed as to the reporting status and the field work. If you have any questions, please call or email.

Sincerely,

**Thomas J. Long**  
**Senior Environmental Scientist**  
**Enterprise Products Company**  
**614 Reilly Ave.**  
**Farmington, New Mexico 87401**

**505-599-2286 (office)**

**505-215-4727 (Cell)**

[tjlong@eprod.com](mailto:tjlong@eprod.com)



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This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix C

Executed C-138 Soil Waste Acceptance Form



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources **97057-0989**  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-138  
Revised August 1, 2011

\*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

**REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE**

1. Generator Name and Address: 2. Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401		Invoice Information: AFE: N40090 PM: Miles Moore Pay Key: RB21200
3. Originating Site: Federal 13-22#2		
4. Location of Material (Street Address, City, State or ULSTR): UL C Section 22 T28N R8W; 36.651985, -107.671788		Jan./Feb, 2019
4. Source and Description of Waste: Hydrocarbon/Methanol impacted soil from remediation activities associated with a natural gas meter tube release.		
5. Estimated Volume <u>20</u> (yd <sup>3</sup> ) bbls Known Volume (to be entered by the operator at the end of the haul) <u>264</u> (yd <sup>3</sup> ) bbls		
5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS		
I, <u>Thomas Long</u> representative or authorized agent for <u>Enterprise Field Services, LLC</u> do hereby PRINT & SIGN NAME COMPANY NAME certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)		
<input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load		
<input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)		
<input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4)		
GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS		
I, <u>Thomas Long</u> <u>1-14-19</u> , representative for <u>Enterprise Field Services, LLC</u> authorize Envirotech, Inc. to Generator Signature complete the required testing/sign the Generator Waste Testing Certification.		
I, <u>Greg Combtree</u> , representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.		
6. Transporter: TBD <u>Prado Farms, West States</u>		

OCD Permitted Surface Waste Management Facility  
Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility \* Permit #: NM 01-0011  
Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:  
 Evaporation  Injection  Treating Plant  Landfarm  Landfill  Other

Waste Acceptance Status:  
 APPROVED  DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Greg Combtree TITLE: Envirotech Manager DATE: 1/25/19  
SIGNATURE: [Signature] TELEPHONE NO.: 505-632-0615

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix D

### Photograph Log

**Photograph Log**  
**Federal 13-22 #2 Well Tie Pipeline Release**  
**Enterprise Field Services, LLC**



Photograph #1	
Client: Enterprise	
Site Name: Federal 13-22 #2 Well Tie Pipeline Release	
Date Photo Taken: January 29, 2019	
Release Location: N36.65200, W107.67178  C-22-28N-8W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing north, view of the excavation extents, repaired pipeline, and confirmation sampling areas on January 29, 2019.

Photograph #2	
Client: Enterprise	
Site Name: Federal 13-22 #2 Well Tie Pipeline Release	
Date Photo Taken: January 29, 2019	
Release Location: N36.65200, W107.67178  C-22-28N-8W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing south, view of the excavation extents, repaired pipeline, and confirmation sampling areas on January 29, 2019.

**Photograph Log**  
**Federal 13-22 #2 Well Tie Pipeline Release**  
**Enterprise Field Services, LLC**



Photograph #3	
Client: Enterprise	
Site Name: Federal 13-22 #2 Well Tie Pipeline Release	
Date Photo Taken: January 31, 2019	
Release Location: N36.65200, W107.67178  C-22-28N-8W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing south, view of the excavation extents and confirmation sampling areas on January 31, 2019.

Photograph #4	
Client: Enterprise	
Site Name: Federal 13-22 #2 Well Tie Pipeline Release	
Date Photo Taken: February 5, 2019	
Release Location: N36.65200, W107.67178  C-22-28N-8W Rio Arriba County, NM	
Photo Taken by: Heather Woods	Description: Facing north, view of the final excavation extents in the sample area TP-1. The base is approximately 20 feet below ground surface.

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix E

### Soil Boring Logs

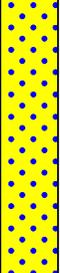
# Rule Engineering, LLC

Solutions to Regulations for Industry

BOREHOLE NO.: SB-01

Page 1 of 1

CLIENT:	Enterprise Products	PROJECT #:	368.038	NORTHING:	4059590.95
DRILLING CO.:	HRL Compliance Solutions	LOGGED BY:	H. Woods	EASTING:	261169.58
DATE DRILLED:	4/16/19	DRILLER:	K. Padilla	SURFACE ELEV:	NA ft
LOCATION:	Federal 13-22 #2	DRILLING METHOD:	HSA	CASING ELEV:	NA ft
SCREEN DIAM:	NA in	SCREEN:	NA ft	SLOT SIZE:	NA in
CASING DIAM:	NA in	CAS LENGTH:	NA ft	TYPE:	NA
BORING DEPTH:	30.5 ft	WELL DEPTH:	30.5 ft	BORING DIAM:	7.25 in
WELL TYPE:	NA	SAMPLING METHOD:	Splitspoon	DEPTH TO GW:	NA ft

DEPTH (ft BGS)	WELL LOG	SOIL LOG	BLOWS / ft.	PID ppm	% REC	SOIL DESCRIPTION
0						Removed by hydrovac. Excavation backfill.
6						SC: Excavation backfill, clayey silty sand (SC-SM), red brown, moist, very fine to fine grained, no odor, no staining.
18				1322		Sandstone: Orange brown, moist, fine to medium grained, slight odor, no staining.
22				1709		
26				596		
30				183		
32						

NOTES: Boring only

# Rule Engineering, LLC

Solutions to Regulations for Industry

BOREHOLE NO.: SB-02

Page 1 of 1

CLIENT:	Enterprise Products	PROJECT #:	368.038	NORTHING:	4059588.73
DRILLING CO.:	HRL Compliance Solutions	LOGGED BY:	H. Woods	EASTING:	261169.51
DATE DRILLED:	4/16/19	DRILLER:	K. Padilla	SURFACE ELEV:	NA ft
LOCATION:	Federal 13-22 #2	DRILLING METHOD:	HSA	CASING ELEV:	NA ft
SCREEN DIAM:	NA in	SCREEN:	NA ft	SLOT SIZE:	NA in
CASING DIAM:	NA in	CAS LENGTH:	NA ft	TYPE:	NA
BORING DEPTH:	25.5 ft	WELL DEPTH:	25.5 ft	BORING DIAM:	7.25 in
WELL TYPE:	NA	SAMPLING METHOD:	Splitspoon	DEPTH TO GW:	NA ft

DEPTH (ft BGS)	WELL LOG	SOIL LOG	BLOWS / ft.	PID ppm	% REC	SOIL DESCRIPTION
0						Removed by hydrovac.
6						Sandstone: light tan, slightly moist, very fine grained, slight odor, no staining.
8				147		
10				292		
12				104		
14				162		Sandstone: Orange brown, slightly moist, very fine to fine grained, slight odor, no staining.
16				119		
20				13.3		
22						
24						
26				36.2		

NOTES: Boring only

# Rule Engineering, LLC

Solutions to Regulations for Industry

BOREHOLE NO.: SB-03

Page 1 of 1

CLIENT:	Enterprise Products	PROJECT #:	368.038	NORTHING:	4059592.92
DRILLING CO.:	HRL Compliance Solutions	LOGGED BY:	H. Woods	EASTING:	261178.58
DATE DRILLED:	4/16/19	DRILLER:	K. Padilla	SURFACE ELEV:	NA ft
LOCATION:	Federal 13-22 #2	DRILLING METHOD:	HSA	CASING ELEV:	NA ft
SCREEN DIAM:	NA in	SCREEN:	NA ft	SLOT SIZE:	NA in
CASING DIAM:	NA in	CAS LENGTH:	NA ft	TYPE:	NA
BORING DEPTH:	25.5 ft	WELL DEPTH:	25.5 ft	BORING DIAM:	7.25 in
WELL TYPE:	NA	SAMPLING METHOD:	Splitspoon	DEPTH TO GW:	NA ft

DEPTH (ft BGS)	WELL LOG	SOIL LOG	BLOWS / ft.	PID ppm	% REC	SOIL DESCRIPTION
0						Removed by hydrovac.
6						Sandstone: light tan, slightly moist, very fine grained, no odor, no staining.
8				61.4		
10				172		
12				371		
14				137		
16				125		
18				156		
22						Sandstone: Orange brown, slightly moist, very fine to fine grained, no odor, no staining.
24						
26				77.8		

NOTES: Boring only

# Rule Engineering, LLC

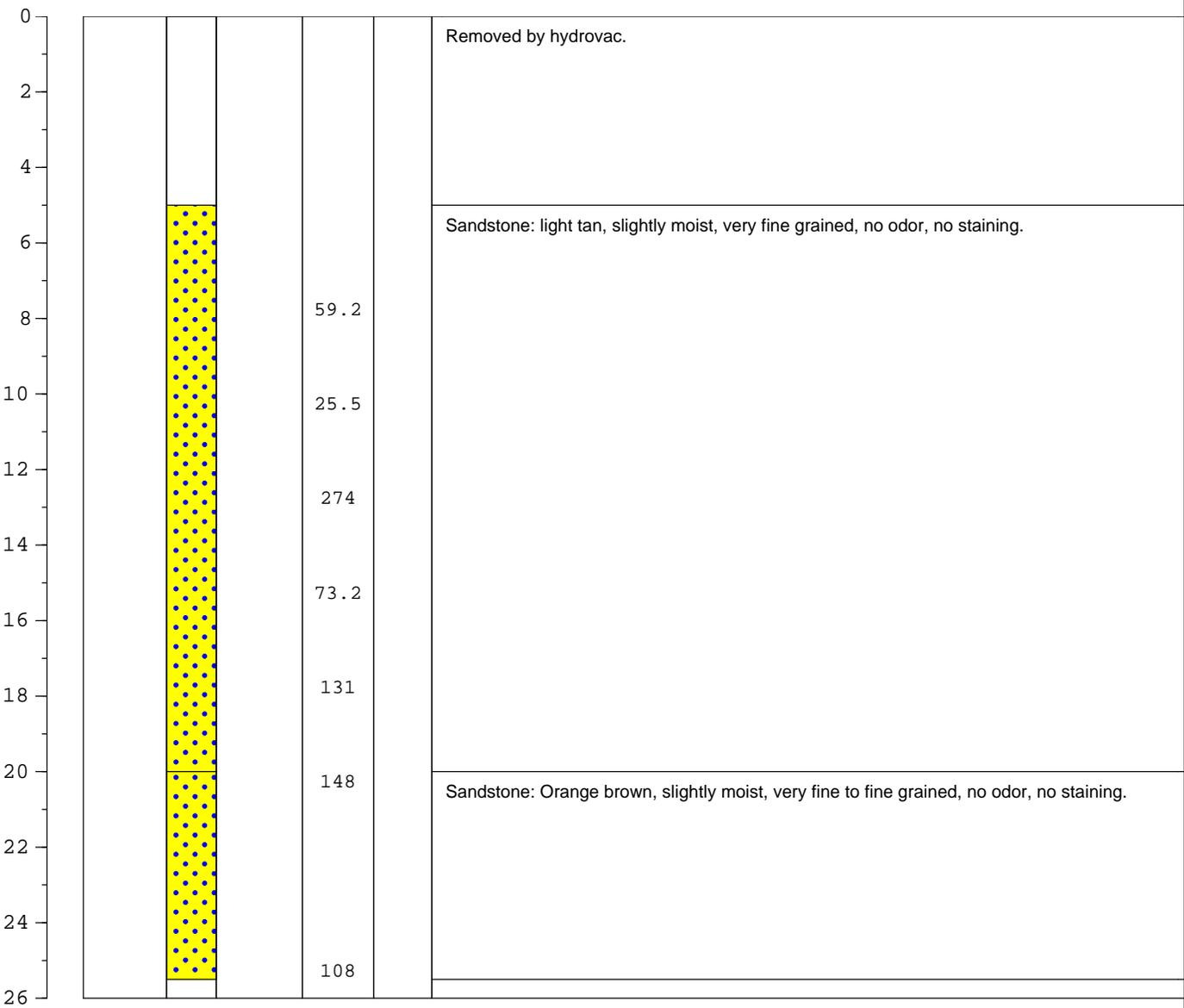
Solutions to Regulations for Industry

BOREHOLE NO.: SB-04

Page 1 of 1

CLIENT:	Enterprise Products	PROJECT #:	368.038	NORTHING:	4059596.50
DRILLING CO.:	HRL Compliance Solutions	LOGGED BY:	H. Woods	EASTING:	261169.73
DATE DRILLED:	4/15/19	DRILLER:	K. Padilla	SURFACE ELEV:	NA ft
LOCATION:	Federal 13-22 #2	DRILLING METHOD:	HSA	CASING ELEV:	NA ft
SCREEN DIAM:	NA in	SCREEN:	NA ft	SLOT SIZE:	NA in
CASING DIAM:	NA in	CAS LENGTH:	NA ft	TYPE:	NA
BORING DEPTH:	25.5 ft	WELL DEPTH:	25.5 ft	BORING DIAM:	7.25 in
WELL TYPE:	NA	SAMPLING METHOD:	Splitspoon	DEPTH TO GW:	NA ft

DEPTH (ft BGS)	WELL LOG	SOIL LOG	BLOWS / ft.	PID ppm	% REC	SOIL DESCRIPTION
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NOTES: Boring only

# Rule Engineering, LLC

Solutions to Regulations for Industry

BOREHOLE NO.: SB-05

Page 1 of 1

CLIENT:	Enterprise Products	PROJECT #:	368.038	NORTHING:	4059588.73
DRILLING CO.:	HRL Compliance Solutions	LOGGED BY:	H. Woods	EASTING:	261169.51
DATE DRILLED:	4/15/19	DRILLER:	K. Padilla	SURFACE ELEV:	NA ft
LOCATION:	Federal 13-22 #2	DRILLING METHOD:	HSA	CASING ELEV:	NA ft
SCREEN DIAM:	NA in	SCREEN:	NA ft	SLOT SIZE:	NA in
CASING DIAM:	NA in	CAS LENGTH:	NA ft	TYPE:	NA
BORING DEPTH:	30.5 ft	WELL DEPTH:	30.5 ft	BORING DIAM:	7.25 in
WELL TYPE:	NA	SAMPLING METHOD:	Splitspoon	DEPTH TO GW:	NA ft

DEPTH (ft BGS)	WELL LOG	SOIL LOG	BLOWS / ft.	PID ppm	% REC	SOIL DESCRIPTION
0						Removed by hydrovac.
2						
4						
6						Sandstone: light tan, slightly moist, very fine grained, no odor, no staining.
8				26.4		
10				94.3		
12						
14						
16				167		
18				252		
20				160		Sandstone: Orange brown, slightly moist, very fine to fine grained, no odor, no staining.
22						
24				216		
26						
28				303		
30						
32				32.2		

NOTES: Boring only

Enterprise Field Services, LLC  
Federal 13-22 #2 Well Tie Pipeline Release Closure Report

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## Appendix F

### Analytical Laboratory Reports



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

February 01, 2019

Heather Woods  
Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Enterprise Federal 13 22 2

OrderNo.: 1901B10

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/30/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-1

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 10:40:00 AM

**Lab ID:** 1901B10-001

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 12:22:56 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	740	9.6		mg/Kg	1	1/30/2019 10:15:24 AM	42884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2019 10:15:24 AM	42884
Surr: DNOP	96.4	50.6-138		%Rec	1	1/30/2019 10:15:24 AM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	2000	180		mg/Kg	50	1/30/2019 11:35:09 AM	42861
Surr: BFB	304	73.8-119	S	%Rec	50	1/30/2019 11:35:09 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.88		mg/Kg	50	1/30/2019 11:35:09 AM	42861
Toluene	27	1.8		mg/Kg	50	1/30/2019 11:35:09 AM	42861
Ethylbenzene	9.7	1.8		mg/Kg	50	1/30/2019 11:35:09 AM	42861
Xylenes, Total	130	3.5		mg/Kg	50	1/30/2019 11:35:09 AM	42861
Surr: 4-Bromofluorobenzene	103	80-120		%Rec	50	1/30/2019 11:35:09 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-2

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 10:47:00 AM

**Lab ID:** 1901B10-002

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 12:35:21 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	280	9.7		mg/Kg	1	1/30/2019 10:39:52 AM	42884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2019 10:39:52 AM	42884
Surr: DNOP	97.4	50.6-138		%Rec	1	1/30/2019 10:39:52 AM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	2100	220		mg/Kg	50	1/30/2019 11:58:41 AM	42861
Surr: BFB	222	73.8-119	S	%Rec	50	1/30/2019 11:58:41 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	1.3	1.1		mg/Kg	50	1/30/2019 11:58:41 AM	42861
Toluene	42	2.2		mg/Kg	50	1/30/2019 11:58:41 AM	42861
Ethylbenzene	11	2.2		mg/Kg	50	1/30/2019 11:58:41 AM	42861
Xylenes, Total	140	4.4		mg/Kg	50	1/30/2019 11:58:41 AM	42861
Surr: 4-Bromofluorobenzene	102	80-120		%Rec	50	1/30/2019 11:58:41 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-3

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 10:53:00 AM

**Lab ID:** 1901B10-003

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 12:47:45 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	92	9.6		mg/Kg	1	1/30/2019 11:03:58 AM	42884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2019 11:03:58 AM	42884
Surr: DNOP	99.2	50.6-138		%Rec	1	1/30/2019 11:03:58 AM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	170	25		mg/Kg	5	1/30/2019 12:22:11 PM	42861
Surr: BFB	262	73.8-119	S	%Rec	5	1/30/2019 12:22:11 PM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.13		mg/Kg	5	1/30/2019 12:22:11 PM	42861
Toluene	1.6	0.25		mg/Kg	5	1/30/2019 12:22:11 PM	42861
Ethylbenzene	0.91	0.25		mg/Kg	5	1/30/2019 12:22:11 PM	42861
Xylenes, Total	13	0.51		mg/Kg	5	1/30/2019 12:22:11 PM	42861
Surr: 4-Bromofluorobenzene	98.8	80-120		%Rec	5	1/30/2019 12:22:11 PM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-4

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 11:00:00 AM

**Lab ID:** 1901B10-004

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 1:00:11 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	15	9.7		mg/Kg	1	1/30/2019 11:28:19 AM	42884
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/30/2019 11:28:19 AM	42884
Surr: DNOP	96.6	50.6-138		%Rec	1	1/30/2019 11:28:19 AM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	21		mg/Kg	5	1/30/2019 9:37:50 AM	42861
Surr: BFB	109	73.8-119		%Rec	5	1/30/2019 9:37:50 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.11		mg/Kg	5	1/30/2019 9:37:50 AM	42861
Toluene	ND	0.21		mg/Kg	5	1/30/2019 9:37:50 AM	42861
Ethylbenzene	ND	0.21		mg/Kg	5	1/30/2019 9:37:50 AM	42861
Xylenes, Total	0.46	0.43		mg/Kg	5	1/30/2019 9:37:50 AM	42861
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	5	1/30/2019 9:37:50 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-5

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 11:06:00 AM

**Lab ID:** 1901B10-005

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 1:12:36 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	1/30/2019 11:52:24 AM	42884
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/30/2019 11:52:24 AM	42884
Surr: DNOP	98.2	50.6-138		%Rec	1	1/30/2019 11:52:24 AM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	3.9		mg/Kg	1	1/30/2019 10:24:52 AM	42861
Surr: BFB	102	73.8-119		%Rec	1	1/30/2019 10:24:52 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.019		mg/Kg	1	1/30/2019 10:24:52 AM	42861
Toluene	0.082	0.039		mg/Kg	1	1/30/2019 10:24:52 AM	42861
Ethylbenzene	ND	0.039		mg/Kg	1	1/30/2019 10:24:52 AM	42861
Xylenes, Total	0.23	0.078		mg/Kg	1	1/30/2019 10:24:52 AM	42861
Surr: 4-Bromofluorobenzene	94.6	80-120		%Rec	1	1/30/2019 10:24:52 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-6

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 11:12:00 AM

**Lab ID:** 1901B10-006

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 1:25:00 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/30/2019 12:16:38 PM	42884
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/30/2019 12:16:38 PM	42884
Surr: DNOP	98.0	50.6-138		%Rec	1	1/30/2019 12:16:38 PM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.4		mg/Kg	1	1/30/2019 10:48:09 AM	42861
Surr: BFB	99.2	73.8-119		%Rec	1	1/30/2019 10:48:09 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.022		mg/Kg	1	1/30/2019 10:48:09 AM	42861
Toluene	ND	0.044		mg/Kg	1	1/30/2019 10:48:09 AM	42861
Ethylbenzene	ND	0.044		mg/Kg	1	1/30/2019 10:48:09 AM	42861
Xylenes, Total	ND	0.087		mg/Kg	1	1/30/2019 10:48:09 AM	42861
Surr: 4-Bromofluorobenzene	90.4	80-120		%Rec	1	1/30/2019 10:48:09 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1901B10**

Date Reported: 2/1/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-7

**Project:** Enterprise Federal 13 22 2

**Collection Date:** 1/29/2019 11:19:00 AM

**Lab ID:** 1901B10-007

**Matrix:** SOIL

**Received Date:** 1/30/2019 8:00:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>smb</b>
Chloride	ND	60		mg/Kg	20	1/30/2019 1:37:24 PM	42885
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	24	9.3		mg/Kg	1	1/30/2019 12:40:50 PM	42884
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/30/2019 12:40:50 PM	42884
Surr: DNOP	96.9	50.6-138		%Rec	1	1/30/2019 12:40:50 PM	42884
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/30/2019 11:11:37 AM	42861
Surr: BFB	96.8	73.8-119		%Rec	1	1/30/2019 11:11:37 AM	42861
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	1/30/2019 11:11:37 AM	42861
Toluene	ND	0.046		mg/Kg	1	1/30/2019 11:11:37 AM	42861
Ethylbenzene	ND	0.046		mg/Kg	1	1/30/2019 11:11:37 AM	42861
Xylenes, Total	ND	0.092		mg/Kg	1	1/30/2019 11:11:37 AM	42861
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	1/30/2019 11:11:37 AM	42861

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1901B10**  
01-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13 22 2

Sample ID <b>MB-42885</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>42885</b>	RunNo: <b>57374</b>								
Prep Date: <b>1/30/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919631</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID <b>LCS-42885</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>42885</b>	RunNo: <b>57374</b>								
Prep Date: <b>1/30/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919632</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**QC SUMMARY REPORT**WO#: **1901B10****Hall Environmental Analysis Laboratory, Inc.**

01-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13 22 2

Sample ID	<b>LCS-42884</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>42884</b>	RunNo:	<b>57338</b>					
Prep Date:	<b>1/30/2019</b>	Analysis Date:	<b>1/30/2019</b>	SeqNo:	<b>1918537</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	80.3	63.9	124			
Surr: DNOP	4.5		5.000		90.6	50.6	138			

Sample ID	<b>MB-42884</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>42884</b>	RunNo:	<b>57338</b>					
Prep Date:	<b>1/30/2019</b>	Analysis Date:	<b>1/30/2019</b>	SeqNo:	<b>1918538</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.7		10.00		96.8	50.6	138			

Sample ID	<b>1901B10-007AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-7</b>	Batch ID:	<b>42884</b>	RunNo:	<b>57338</b>					
Prep Date:	<b>1/30/2019</b>	Analysis Date:	<b>1/30/2019</b>	SeqNo:	<b>1919485</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.7	48.40	23.63	76.7	53.5	126			
Surr: DNOP	4.6		4.840		94.6	50.6	138			

Sample ID	<b>1901B10-007AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-7</b>	Batch ID:	<b>42884</b>	RunNo:	<b>57338</b>					
Prep Date:	<b>1/30/2019</b>	Analysis Date:	<b>1/30/2019</b>	SeqNo:	<b>1919486</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	61	9.6	48.12	23.63	78.4	53.5	126	0.999	21.7	
Surr: DNOP	4.6		4.812		96.3	50.6	138	0	0	

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT**WO#: **1901B10****Hall Environmental Analysis Laboratory, Inc.**

01-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13 22 2

Sample ID <b>MB-42861</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>42861</b>	RunNo: <b>57349</b>								
Prep Date: <b>1/29/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919324</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	73.8	119			

Sample ID <b>LCS-42861</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>42861</b>	RunNo: <b>57349</b>								
Prep Date: <b>1/29/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919325</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	5.0	25.00	0	111	80.1	123			
Surr: BFB	1100		1000		110	73.8	119			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: **1901B10**  
01-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13 22 2

Sample ID: <b>MB-42861</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>42861</b>	RunNo: <b>57349</b>								
Prep Date: <b>1/29/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919358</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.94		1.000		94.4	80	120			

Sample ID: <b>LCS-42861</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>42861</b>	RunNo: <b>57349</b>								
Prep Date: <b>1/29/2019</b>	Analysis Date: <b>1/30/2019</b>	SeqNo: <b>1919359</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.95	0.025	1.000	0	94.6	80	120			
Toluene	0.99	0.050	1.000	0	98.8	80	120			
Ethylbenzene	1.0	0.050	1.000	0	99.6	80	120			
Xylenes, Total	3.0	0.10	3.000	0	101	80	120			
Surr: 4-Bromofluorobenzene	0.98		1.000		98.4	80	120			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: **RULE ENGINEERING LL**      Work Order Number: **1901B10**      RcptNo: **1**

Received By: **Desiree Dominguez**      1/30/2019 8:00:00 AM      *DD*  
 Completed By: **Desiree Dominguez**      1/30/2019 8:08:48 AM      *DD*  
 Reviewed By: **ENM**      1/30/19

*LB TO 1/30/19*

**Chain of Custody**

1. Is Chain of Custody complete?      Yes       No       Not Present   
 2. How was the sample delivered?      Courier

**Log In**

3. Was an attempt made to cool the samples?      Yes       No       NA   
 4. Were all samples received at a temperature of >0° C to 6.0°C      Yes       No       NA   
 5. Sample(s) in proper container(s)?      Yes       No   
 6. Sufficient sample volume for indicated test(s)?      Yes       No   
 7. Are samples (except VOA and ONG) properly preserved?      Yes       No   
 8. Was preservative added to bottles?      Yes       No       NA   
 9. VOA vials have zero headspace?      Yes       No       No VOA Vials   
 10. Were any sample containers received broken?      Yes       No   
 11. Does paperwork match bottle labels?      Yes       No   
(Note discrepancies on chain of custody)  
 12. Are matrices correctly identified on Chain of Custody?      Yes       No   
 13. Is it clear what analyses were requested?      Yes       No   
 14. Were all holding times able to be met?      Yes       No   
(If no, notify customer for authorization.)

*IO*  
 # of preserved bottles checked for pH: 01/30/19  
(<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: \_\_\_\_\_

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order?      Yes       No       NA

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

### Chain-of-Custody Record

Client: Rule Engineering  
 Mailing Address: 501 Airport Dr, Ste 205  
Farmington, NM 87401  
 Phone #: (505) 716-2787  
 email or Fax#: hwood@ruleengineering.com  
 QA/QC Packages: tlong@eprod.com  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other  
 EDD (Type)

Turn-Around Time:  
 Standard  Rush Same Day  
 Project Name:  
Enterprise Federal 13-22 # 2  
 Project #:

Project Manager:  
Heather Woods  
 Sampler: Heather Woods  
 On Ice:  Yes  No  
 # of Coolers:  
 Cooler Temp. (including off): 2.8°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
1/29/19	1040	Soil	SC-1	(1) 4oz Gies	Non	-001
1/29/19	1047	Soil	SC-2			-002
1/29/19	1053	Soil	SC-3			-003
1/29/19	1100	Soil	SC-4			-004
1/29/19	1106	Soil	SC-5			-005
1/29/19	1112	Soil	SC-6			-006
1/29/19	1119	Soil	SC-7			-007

Date: 1/29/19 Time: 1640 Relinquished by: Heather M. Woods  
 Date: 1/29/19 Time: 1740 Relinquished by: Christie Weber  
 Received by: M. Weber Date: 1/29/19 Time: 1640  
 Received by: DB Date: 1/30/19 Time: 8:00  
 Via: Courier



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**  
 www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

**Analysis Request**

BTEX / PCBs / DMBS (8021)	X
TPH 8015D (GRO / DRO / MRO)	X
8081 Pesticides/8082 PCBs	
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
(Cl) <sup>-</sup> , Br <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>	X
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: Direct Bill to Enterprise  
Attn: Tom Long  
Non-AFE: N40090

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

February 04, 2019

Heather Woods

Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Enterprise Federal 13-22 2

OrderNo.: 1902001

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

**Analytical Report**

Lab Order **1902001**

Date Reported: 2/4/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-8

**Project:** Enterprise Federal 13-22 2

**Collection Date:** 1/31/2019 2:05:00 PM

**Lab ID:** 1902001-001

**Matrix:** SOIL

**Received Date:** 2/1/2019 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>irm</b>
Diesel Range Organics (DRO)	220	9.3		mg/Kg	1	2/1/2019 10:27:06 AM	42931
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/1/2019 10:27:06 AM	42931
Surr: DNOP	95.6	50.6-138		%Rec	1	2/1/2019 10:27:06 AM	42931
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	9800	180		mg/Kg	50	2/1/2019 9:33:34 AM	G57420
Surr: BFB	434	73.8-119	S	%Rec	50	2/1/2019 9:33:34 AM	G57420
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	14	0.90		mg/Kg	50	2/1/2019 9:33:34 AM	B57420
Toluene	210	7.2		mg/Kg	200	2/1/2019 2:51:29 PM	B57420
Ethylbenzene	44	1.8		mg/Kg	50	2/1/2019 9:33:34 AM	B57420
Xylenes, Total	400	3.6		mg/Kg	50	2/1/2019 9:33:34 AM	B57420
Surr: 4-Bromofluorobenzene	132	80-120	S	%Rec	50	2/1/2019 9:33:34 AM	B57420

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

## Analytical Report

Lab Order 1902001

Date Reported: 2/4/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Rule Engineering LLC

Client Sample ID: SC- 9

Project: Enterprise Federal 13-22 2

Collection Date: 1/31/2019 2:10:00 PM

Lab ID: 1902001-002

Matrix: SOIL

Received Date: 2/1/2019 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	290	9.6		mg/Kg	1	2/1/2019 10:49:08 AM	42931
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	2/1/2019 10:49:08 AM	42931
Surr: DNOP	102	50.6-138		%Rec	1	2/1/2019 10:49:08 AM	42931
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	15000	230		mg/Kg	50	2/1/2019 9:56:22 AM	G57420
Surr: BFB	486	73.8-119	S	%Rec	50	2/1/2019 9:56:22 AM	G57420
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	26	1.1		mg/Kg	50	2/1/2019 9:56:22 AM	B57420
Toluene	310	9.0		mg/Kg	200	2/1/2019 3:14:08 PM	B57420
Ethylbenzene	64	2.3		mg/Kg	50	2/1/2019 9:56:22 AM	B57420
Xylenes, Total	560	18		mg/Kg	200	2/1/2019 3:14:08 PM	B57420
Surr: 4-Bromofluorobenzene	113	80-120		%Rec	200	2/1/2019 3:14:08 PM	B57420

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1902001**

Date Reported: 2/4/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-10

**Project:** Enterprise Federal 13-22 2

**Collection Date:** 1/31/2019 2:15:00 PM

**Lab ID:** 1902001-003

**Matrix:** SOIL

**Received Date:** 2/1/2019 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>lrm</b>
Diesel Range Organics (DRO)	210	9.3		mg/Kg	1	2/1/2019 11:11:11 AM	42931
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	2/1/2019 11:11:11 AM	42931
Surr: DNOP	104	50.6-138		%Rec	1	2/1/2019 11:11:11 AM	42931
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	8800	200		mg/Kg	50	2/1/2019 10:19:08 AM	G57420
Surr: BFB	381	73.8-119	S	%Rec	50	2/1/2019 10:19:08 AM	G57420
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	13	1.0		mg/Kg	50	2/1/2019 10:19:08 AM	B57420
Toluene	200	8.0		mg/Kg	200	2/1/2019 5:08:10 PM	B57420
Ethylbenzene	42	2.0		mg/Kg	50	2/1/2019 10:19:08 AM	B57420
Xylenes, Total	380	4.0		mg/Kg	50	2/1/2019 10:19:08 AM	B57420
Surr: 4-Bromofluorobenzene	127	80-120	S	%Rec	50	2/1/2019 10:19:08 AM	B57420

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**Analytical Report**

Lab Order **1902001**

Date Reported: 2/4/2019

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SC-11

**Project:** Enterprise Federal 13-22 2

**Collection Date:** 1/31/2019 2:20:00 PM

**Lab ID:** 1902001-004

**Matrix:** SOIL

**Received Date:** 2/1/2019 7:55:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>irm</b>
Diesel Range Organics (DRO)	330	9.9		mg/Kg	1	2/1/2019 11:33:07 AM	42931
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/1/2019 11:33:07 AM	42931
Surr: DNOP	102	50.6-138		%Rec	1	2/1/2019 11:33:07 AM	42931
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	4600	85		mg/Kg	20	2/1/2019 10:41:56 AM	G57420
Surr: BFB	1010	73.8-119	S	%Rec	20	2/1/2019 10:41:56 AM	G57420
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	3.7	0.42		mg/Kg	20	2/1/2019 10:41:56 AM	B57420
Toluene	71	0.85		mg/Kg	20	2/1/2019 10:41:56 AM	B57420
Ethylbenzene	19	0.85		mg/Kg	20	2/1/2019 10:41:56 AM	B57420
Xylenes, Total	190	1.7		mg/Kg	20	2/1/2019 10:41:56 AM	B57420
Surr: 4-Bromofluorobenzene	152	80-120	S	%Rec	20	2/1/2019 10:41:56 AM	B57420

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1902001

04-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID	<b>LCS-42931</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>42931</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>2/1/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1920947</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	63.9	124			
Surr: DNOP	4.6		5.000		91.1	50.6	138			

Sample ID	<b>MB-42931</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>42931</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>2/1/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1920948</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.4		10.00		94.0	50.6	138			

Sample ID	<b>1902001-004AMS</b>	SampType:	<b>MS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-11</b>	Batch ID:	<b>42931</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>2/1/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1921007</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	350	9.9	49.36	330.8	32.4	53.5	126			S
Surr: DNOP	4.9		4.936		99.1	50.6	138			

Sample ID	<b>1902001-004AMSD</b>	SampType:	<b>MSD</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>SC-11</b>	Batch ID:	<b>42931</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>2/1/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1921008</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	340	9.8	48.78	330.8	19.9	53.5	126	1.84	21.7	S
Surr: DNOP	4.8		4.878		98.8	50.6	138	0	0	

Sample ID	<b>LCS-42920</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>42920</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>1/31/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1921491</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.4		5.000		107	50.6	138			

Sample ID	<b>MB-42920</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>42920</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>1/31/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1921492</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902001

04-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID	<b>MB-42920</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8015M/D: Diesel Range Organics</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>42920</b>	RunNo:	<b>57413</b>					
Prep Date:	<b>1/31/2019</b>	Analysis Date:	<b>2/1/2019</b>	SeqNo:	<b>1921492</b>	Units:	<b>%Rec</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	12		10.00		121	50.6	138			

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank           |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                            |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits                |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                                    |
| PQL Practical Quantitative Limit                        | RL Reporting Detection Limit                                |
| S % Recovery outside of range due to dilution or matrix | W Sample container temperature is out of limit as specified |

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1902001**

04-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID <b>RB</b>	SampType: <b>MBLK</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>PBS</b>	Batch ID: <b>G57420</b>		RunNo: <b>57420</b>							
Prep Date:	Analysis Date: <b>2/1/2019</b>		SeqNo: <b>1921164</b>				Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	950		1000		95.1	73.8	119			

Sample ID <b>2.5UG GRO LCS</b>	SampType: <b>LCS</b>		TestCode: <b>EPA Method 8015D: Gasoline Range</b>							
Client ID: <b>LCSS</b>	Batch ID: <b>G57420</b>		RunNo: <b>57420</b>							
Prep Date:	Analysis Date: <b>2/1/2019</b>		SeqNo: <b>1921165</b>				Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	80.1	123			
Surr: BFB	1100		1000		112	73.8	119			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT**WO#: **1902001****Hall Environmental Analysis Laboratory, Inc.**

04-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID	RB	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	B57420	RunNo:	57420					
Prep Date:		Analysis Date:	2/1/2019	SeqNo:	1921178	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		98.3	80	120			

Sample ID	100NG BTEX LCS	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	B57420	RunNo:	57420					
Prep Date:		Analysis Date:	2/1/2019	SeqNo:	1921179	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.8	80	120			
Toluene	0.94	0.050	1.000	0	94.0	80	120			
Ethylbenzene	0.95	0.050	1.000	0	94.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.0	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

### Sample Log-In Check List

Client Name: RULE ENGINEERING LL

Work Order Number: 1902001

RcptNo: 1

Received By: Anne Thorne 2/1/2019 7:55:00 AM

*Anne Thorne*

Completed By: Anne Thorne 2/1/2019 8:09:14 AM

*Anne Thorne*

Reviewed By: ENM 2/1/19

*Labelled by: AT 02/01/19*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present
2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA
4. Were all samples received at a temperature of >0° C to 6.0° C? Yes  No  NA
5. Sample(s) in proper container(s)? Yes  No
6. Sufficient sample volume for indicated test(s)? Yes  No
7. Are samples (except VOA and ONG) properly preserved? Yes  No
8. Was preservative added to bottles? Yes  No  NA
9. VOA vials have zero headspace? Yes  No  No VOA Vials
10. Were any sample containers received broken? Yes  No
11. Does paperwork match bottle labels? Yes  No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes  No
13. Is it clear what analyses were requested? Yes  No
14. Were all holding times able to be met? Yes  No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH:	_____
(<2 or >12 unless noted)	
Adjusted?	_____
Checked by:	_____

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order? Yes  No  NA

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

### Chain-of-Custody Record

Client: Rule Engineering  
 Mailing Address: 501 Airport Dr. Ste 205  
Farmington, NM 87401  
 Phone #: (505) 716-2767  
 email or Fax#: hward@ruleengineering.com

QA/QC Package:  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other  
 EDD (Type)

Turn-Around Time:  
 Standard  Rush Same Day  
 Project Name: Enterprise Federal 13-22 #2  
 Project #:

Project Manager: Heather Woods  
 Sampler: Heather Woods  
 On Ice:  Yes  No  
 # of Coolers: 1  
 Cooler Temp (indicating CF): 10

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No
1/31/19	1405	Soil	SC-8	(1) 4oz Glass	Non	1902001
1/31/19	1410	Soil	SC-9	I	I	202
1/31/19	1415	Soil	SC-10	I	I	203
1/31/19	1420	Soil	SC-11	I	I	204

Date: 1/31/19 Time: 1710 Relinquished by: Heather M. Woods  
 Date: 1/31/19 Time: 1812 Relinquished by: Chad Walls  
 Received by: Chad Walls Date: 1/31/19 Time: 1710  
 Received by: Chad Walls Date: 02/10/19 Time: 0755



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**  
 www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

Analysis Request	
TPH:8015D(GRO / DRG / MRO)	X
8081 Pesticides/8082 PCBs	X
EDB (Method 504.1)	
PAHs by 8310 or 8270SIMS	
RCRA 8 Metals	
Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	
8260 (VOA)	
8270 (Semi-VOA)	
Total Coliform (Present/Absent)	

Remarks: Direct Bill to Enterprise  
c/o Tom Long  
Non-AFE: N40090

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

February 08, 2019

Heather Woods

Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Enterprise Federal 13-22 2

OrderNo.: 1902168

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/6/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1902168

Date Reported: 2/8/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Rule Engineering LLC

Client Sample ID: TP-1 @20

Project: Enterprise Federal 13-22 2

Collection Date: 2/5/2019 1:30:00 PM

Lab ID: 1902168-001

Matrix: SOIL

Received Date: 2/6/2019 8:18:00 AM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: lrm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	2/7/2019 3:31:26 PM	43011
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	2/7/2019 3:31:26 PM	43011
Surr: DNOP	116	50.6-138		%Rec	1	2/7/2019 3:31:26 PM	43011
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	110	9.6		mg/Kg	2	2/7/2019 1:08:02 PM	42999
Surr: BFB	321	73.8-119	S	%Rec	2	2/7/2019 1:08:02 PM	42999
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.048		mg/Kg	2	2/7/2019 1:08:02 PM	42999
Toluene	1.2	0.096		mg/Kg	2	2/7/2019 1:08:02 PM	42999
Ethylbenzene	0.66	0.096		mg/Kg	2	2/7/2019 1:08:02 PM	42999
Xylenes, Total	7.3	0.19		mg/Kg	2	2/7/2019 1:08:02 PM	42999
Surr: 4-Bromofluorobenzene	107	80-120		%Rec	2	2/7/2019 1:08:02 PM	42999

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1902168

08-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID: <b>MB-42999</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>42999</b>	RunNo: <b>57556</b>								
Prep Date: <b>2/6/2019</b>	Analysis Date: <b>2/7/2019</b>	SeqNo: <b>1925138</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	980		1000		98.1	73.8	119			

Sample ID: <b>LCS-42999</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>42999</b>	RunNo: <b>57556</b>								
Prep Date: <b>2/6/2019</b>	Analysis Date: <b>2/7/2019</b>	SeqNo: <b>1925139</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	27	5.0	25.00	0	109	80.1	123			
Surr: BFB	1100		1000		114	73.8	119			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit
- W Sample container temperature is out of limit as specified

**QC SUMMARY REPORT**WO#: **1902168****Hall Environmental Analysis Laboratory, Inc.**

08-Feb-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID	<b>MB-42999</b>	SampType:	<b>MBLK</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>PBS</b>	Batch ID:	<b>42999</b>	RunNo:	<b>57556</b>					
Prep Date:	<b>2/6/2019</b>	Analysis Date:	<b>2/7/2019</b>	SeqNo:	<b>1925161</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.98		1.000		97.7	80	120			

Sample ID	<b>LCS-42999</b>	SampType:	<b>LCS</b>	TestCode:	<b>EPA Method 8021B: Volatiles</b>					
Client ID:	<b>LCSS</b>	Batch ID:	<b>42999</b>	RunNo:	<b>57556</b>					
Prep Date:	<b>2/6/2019</b>	Analysis Date:	<b>2/7/2019</b>	SeqNo:	<b>1925162</b>	Units:	<b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.1	80	120			
Toluene	0.94	0.050	1.000	0	94.1	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.9	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		104	80	120			

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Detection Limit
S % Recovery outside of range due to dilution or matrix	W Sample container temperature is out of limit as specified



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL Work Order Number: 1902168 RcptNo: 1

Received By: Desiree Dominguez 2/6/2019 8:18:00 AM

Completed By: Isaiah Ortiz 2/6/2019 8:48:39 AM

Reviewed By: [Signature] 2/6/19

Handwritten initials: IDZ, I-Ort

LB: DAD 2/6/19

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [ ] NA [ ]
5. Sample(s) in proper container(s)? Yes [checked] No [ ]
6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]
8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]
9. VOA vials have zero headspace? Yes [ ] No [ ] No VOA Vials [checked]
10. Were any sample containers received broken? Yes [ ] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No [ ]
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]
13. Is it clear what analyses were requested? Yes [checked] No [ ]
14. Were all holding times able to be met? Yes [checked] No [ ]

# of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? Checked by: DAD 2/6/19

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: [ ] Date: [ ]
By Whom: [ ] Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person [ ]
Regarding: [ ]
Client Instructions: [ ]

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 1.7, Good, Yes, [ ], [ ], [ ]





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 26, 2019

Heather Woods

Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Enterprise Federal 13-22 #2

OrderNo.: 1904839

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 9 sample(s) on 4/17/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-1 @ 20

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 11:13:00 AM

Lab ID: 1904839-001

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	27	9.9		mg/Kg	1	4/23/2019 6:17:53 PM	44446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2019 6:17:53 PM	44446
Surr: DNOP	97.0	70-130		%Rec	1	4/23/2019 6:17:53 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	520	48		mg/Kg	10	4/19/2019 6:04:12 PM	44392
Surr: BFB	221	73.8-119	S	%Rec	10	4/19/2019 6:04:12 PM	44392
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.24		mg/Kg	10	4/19/2019 6:04:12 PM	44392
Toluene	5.5	0.48		mg/Kg	10	4/19/2019 6:04:12 PM	44392
Ethylbenzene	2.7	0.48		mg/Kg	10	4/19/2019 6:04:12 PM	44392
Xylenes, Total	29	0.96		mg/Kg	10	4/19/2019 6:04:12 PM	44392
Surr: 4-Bromofluorobenzene	96.8	80-120		%Rec	10	4/19/2019 6:04:12 PM	44392

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Rule Engineering LLC

Client Sample ID: SB-1 @ 22.5

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 11:23:00 AM

Lab ID: 1904839-002

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/23/2019 6:42:21 PM	44446
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/23/2019 6:42:21 PM	44446
Surr: DNOP	86.9	70-130		%Rec	1	4/23/2019 6:42:21 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	41	9.9		mg/Kg	2	4/19/2019 6:27:29 PM	44392
Surr: BFB	131	73.8-119	S	%Rec	2	4/19/2019 6:27:29 PM	44392
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.050		mg/Kg	2	4/19/2019 6:27:29 PM	44392
Toluene	0.11	0.099		mg/Kg	2	4/19/2019 6:27:29 PM	44392
Ethylbenzene	ND	0.099		mg/Kg	2	4/19/2019 6:27:29 PM	44392
Xylenes, Total	0.89	0.20		mg/Kg	2	4/19/2019 6:27:29 PM	44392
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	2	4/19/2019 6:27:29 PM	44392

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

**Analytical Report**

Lab Order **1904839**

Date Reported: **4/26/2019**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SB-1 @ 30

**Project:** Enterprise Federal 13-22 #2

**Collection Date:** 4/16/2019 11:43:00 AM

**Lab ID:** 1904839-003

**Matrix:** SOIL

**Received Date:** 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	18	9.8		mg/Kg	1	4/23/2019 7:06:40 PM	44446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2019 7:06:40 PM	44446
Surr: DNOP	91.0	70-130		%Rec	1	4/23/2019 7:06:40 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/19/2019 9:35:38 PM	44413
Surr: BFB	86.8	73.8-119		%Rec	1	4/19/2019 9:35:38 PM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/19/2019 9:35:38 PM	44413
Toluene	ND	0.048		mg/Kg	1	4/19/2019 9:35:38 PM	44413
Ethylbenzene	ND	0.048		mg/Kg	1	4/19/2019 9:35:38 PM	44413
Xylenes, Total	ND	0.096		mg/Kg	1	4/19/2019 9:35:38 PM	44413
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	4/19/2019 9:35:38 PM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-2 @ 10

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 9:45:00 AM

Lab ID: 1904839-004

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	10	9.3		mg/Kg	1	4/23/2019 7:31:01 PM	44446
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/23/2019 7:31:01 PM	44446
Surr: DNOP	99.5	70-130		%Rec	1	4/23/2019 7:31:01 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/19/2019 10:46:15 PM	44413
Surr: BFB	87.6	73.8-119		%Rec	1	4/19/2019 10:46:15 PM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/19/2019 10:46:15 PM	44413
Toluene	ND	0.047		mg/Kg	1	4/19/2019 10:46:15 PM	44413
Ethylbenzene	ND	0.047		mg/Kg	1	4/19/2019 10:46:15 PM	44413
Xylenes, Total	ND	0.095		mg/Kg	1	4/19/2019 10:46:15 PM	44413
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	4/19/2019 10:46:15 PM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-2 @ 15

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 9:58:00 AM

Lab ID: 1904839-005

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/23/2019 7:55:23 PM	44446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2019 7:55:23 PM	44446
Surr: DNOP	91.8	70-130		%Rec	1	4/23/2019 7:55:23 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/19/2019 11:56:32 PM	44413
Surr: BFB	87.0	73.8-119		%Rec	1	4/19/2019 11:56:32 PM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/19/2019 11:56:32 PM	44413
Toluene	ND	0.048		mg/Kg	1	4/19/2019 11:56:32 PM	44413
Ethylbenzene	ND	0.048		mg/Kg	1	4/19/2019 11:56:32 PM	44413
Xylenes, Total	ND	0.095		mg/Kg	1	4/19/2019 11:56:32 PM	44413
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	4/19/2019 11:56:32 PM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-2 @ 25

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 10:20:00 AM

Lab ID: 1904839-006

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/23/2019 8:19:46 PM	44446
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/23/2019 8:19:46 PM	44446
Surr: DNOP	91.4	70-130		%Rec	1	4/23/2019 8:19:46 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/20/2019 12:20:06 AM	44413
Surr: BFB	87.4	73.8-119		%Rec	1	4/20/2019 12:20:06 AM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/20/2019 12:20:06 AM	44413
Toluene	ND	0.048		mg/Kg	1	4/20/2019 12:20:06 AM	44413
Ethylbenzene	ND	0.048		mg/Kg	1	4/20/2019 12:20:06 AM	44413
Xylenes, Total	ND	0.095		mg/Kg	1	4/20/2019 12:20:06 AM	44413
Surr: 4-Bromofluorobenzene	86.4	80-120		%Rec	1	4/20/2019 12:20:06 AM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

## Analytical Report

Lab Order 1904839

Date Reported: 4/26/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Rule Engineering LLC

Client Sample ID: SB-3 @ 12.5

Project: Enterprise Federal 13-22 #2

Collection Date: 4/16/2019 12:47:00 PM

Lab ID: 1904839-007

Matrix: SOIL

Received Date: 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/23/2019 8:44:00 PM	44446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2019 8:44:00 PM	44446
Surr: DNOP	89.0	70-130		%Rec	1	4/23/2019 8:44:00 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/20/2019 12:43:43 AM	44413
Surr: BFB	87.9	73.8-119		%Rec	1	4/20/2019 12:43:43 AM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	4/20/2019 12:43:43 AM	44413
Toluene	ND	0.050		mg/Kg	1	4/20/2019 12:43:43 AM	44413
Ethylbenzene	ND	0.050		mg/Kg	1	4/20/2019 12:43:43 AM	44413
Xylenes, Total	ND	0.10		mg/Kg	1	4/20/2019 12:43:43 AM	44413
Surr: 4-Bromofluorobenzene	88.3	80-120		%Rec	1	4/20/2019 12:43:43 AM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:		
*	Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E Value above quantitation range
H	Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL	Practical Quantitative Limit	RL Reporting Limit
S	% Recovery outside of range due to dilution or matrix	

**Analytical Report**

Lab Order **1904839**

Date Reported: **4/26/2019**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SB-3 @ 20

**Project:** Enterprise Federal 13-22 #2

**Collection Date:** 4/16/2019 1:08:00 PM

**Lab ID:** 1904839-008

**Matrix:** SOIL

**Received Date:** 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/23/2019 9:08:19 PM	44446
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/23/2019 9:08:19 PM	44446
Surr: DNOP	94.2	70-130		%Rec	1	4/23/2019 9:08:19 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/20/2019 1:07:11 AM	44413
Surr: BFB	86.2	73.8-119		%Rec	1	4/20/2019 1:07:11 AM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/20/2019 1:07:11 AM	44413
Toluene	ND	0.047		mg/Kg	1	4/20/2019 1:07:11 AM	44413
Ethylbenzene	ND	0.047		mg/Kg	1	4/20/2019 1:07:11 AM	44413
Xylenes, Total	ND	0.095		mg/Kg	1	4/20/2019 1:07:11 AM	44413
Surr: 4-Bromofluorobenzene	86.0	80-120		%Rec	1	4/20/2019 1:07:11 AM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

**Analytical Report**

Lab Order **1904839**

Date Reported: **4/26/2019**

**Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** Rule Engineering LLC

**Client Sample ID:** SB-3 @ 25

**Project:** Enterprise Federal 13-22 #2

**Collection Date:** 4/16/2019 1:19:00 PM

**Lab ID:** 1904839-009

**Matrix:** SOIL

**Received Date:** 4/17/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/23/2019 9:32:31 PM	44446
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/23/2019 9:32:31 PM	44446
Surr: DNOP	89.5	70-130		%Rec	1	4/23/2019 9:32:31 PM	44446
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/20/2019 1:30:42 AM	44413
Surr: BFB	85.8	73.8-119		%Rec	1	4/20/2019 1:30:42 AM	44413
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/20/2019 1:30:42 AM	44413
Toluene	ND	0.047		mg/Kg	1	4/20/2019 1:30:42 AM	44413
Ethylbenzene	ND	0.047		mg/Kg	1	4/20/2019 1:30:42 AM	44413
Xylenes, Total	ND	0.093		mg/Kg	1	4/20/2019 1:30:42 AM	44413
Surr: 4-Bromofluorobenzene	85.8	80-120		%Rec	1	4/20/2019 1:30:42 AM	44413

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1904839

26-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 #2

Sample ID: <b>MB-44446</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44446</b>	RunNo: <b>59340</b>								
Prep Date: <b>4/19/2019</b>	Analysis Date: <b>4/23/2019</b>	SeqNo: <b>1998807</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.0		10.00		90.4	70	130			

Sample ID: <b>LCS-44446</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44446</b>	RunNo: <b>59340</b>								
Prep Date: <b>4/19/2019</b>	Analysis Date: <b>4/23/2019</b>	SeqNo: <b>1998808</b>			Units: <b>mg/Kg</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	95.0	63.9	124			
Surr: DNOP	4.4		5.000		87.2	70	130			

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904839

26-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 #2

Sample ID: <b>MB-44392</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44392</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/17/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996962</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	880		1000		88.2	73.8	119			

Sample ID: <b>LCS-44392</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44392</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/17/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996963</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.2	80.1	123			
Surr: BFB	990		1000		99.3	73.8	119			

Sample ID: <b>MB-44413</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996985</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	850		1000		85.4	73.8	119			

Sample ID: <b>LCS-44413</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996986</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.6	80.1	123			
Surr: BFB	980		1000		97.8	73.8	119			

Sample ID: <b>1904839-003AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 @ 30</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996990</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	4.8	24.02	0	97.1	69.1	142			
Surr: BFB	920		960.6		96.3	73.8	119			

Sample ID: <b>1904839-003AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 @ 30</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996991</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

**Qualifiers:**

* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
D Sample Diluted Due to Matrix	E Value above quantitation range
H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit	P Sample pH Not In Range
PQL Practical Quantitative Limit	RL Reporting Limit
S % Recovery outside of range due to dilution or matrix	

# QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1904839

26-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 #2

Sample ID: <b>1904839-003AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>SB-1 @ 30</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1996991</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	4.9	24.56	0	97.8	69.1	142	2.89	20	
Surr: BFB	970		982.3		98.9	73.8	119	0	0	

**Qualifiers:**

- |   |   |
|---|---|
| * Value exceeds Maximum Contaminant Level.              | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix                          | E Value above quantitation range                  |
| H Holding times for preparation or analysis exceeded    | J Analyte detected below quantitation limits      |
| ND Not Detected at the Reporting Limit                  | P Sample pH Not In Range                          |
| PQL Practical Quantitative Limit                        | RL Reporting Limit                                |
| S % Recovery outside of range due to dilution or matrix |   |

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904839

26-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 #2

Sample ID: <b>MB-44392</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44392</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/17/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1997004</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.4	80	120			

Sample ID: <b>LCS-44392</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44392</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/17/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1997005</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.91	0.025	1.000	0	90.6	80	120			
Toluene	0.96	0.050	1.000	0	95.8	80	120			
Ethylbenzene	0.96	0.050	1.000	0	95.8	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.4	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		89.6	80	120			

Sample ID: <b>MB-44413</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1997021</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.86		1.000		86.1	80	120			

Sample ID: <b>LCS-44413</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44413</b>	RunNo: <b>59305</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/19/2019</b>	SeqNo: <b>1997022</b>							Units: <b>mg/Kg</b>	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	89.0	80	120			
Toluene	0.94	0.050	1.000	0	94.0	80	120			
Ethylbenzene	0.93	0.050	1.000	0	93.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.2	80	120			
Surr: 4-Bromofluorobenzene	0.86		1.000		86.2	80	120			

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1904839**

26-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 #2

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: <b>1904839-004AMS</b> SampType: <b>MS</b> TestCode: <b>EPA Method 8021B: Volatiles</b>										
Client ID: <b>SB-2 @ 10</b> Batch ID: <b>44413</b> RunNo: <b>59305</b>										
Prep Date: <b>4/18/2019</b> Analysis Date: <b>4/19/2019</b> SeqNo: <b>1997027</b> Units: <b>mg/Kg</b>										
Benzene	0.84	0.023	0.9372	0	89.3	63.9	127			
Toluene	0.89	0.047	0.9372	0.01206	94.1	69.9	131			
Ethylbenzene	0.89	0.047	0.9372	0	95.5	71	132			
Xylenes, Total	2.7	0.094	2.812	0.01462	96.3	71.8	131			
Surr: 4-Bromofluorobenzene	0.83		0.9372		88.2	80	120			

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Sample ID: <b>1904839-004AMSD</b> SampType: <b>MSD</b> TestCode: <b>EPA Method 8021B: Volatiles</b>										
Client ID: <b>SB-2 @ 10</b> Batch ID: <b>44413</b> RunNo: <b>59305</b>										
Prep Date: <b>4/18/2019</b> Analysis Date: <b>4/19/2019</b> SeqNo: <b>1997028</b> Units: <b>mg/Kg</b>										
Benzene	0.84	0.023	0.9390	0	90.0	63.9	127	0.946	20	
Toluene	0.90	0.047	0.9390	0.01206	94.9	69.9	131	0.960	20	
Ethylbenzene	0.91	0.047	0.9390	0	97.0	71	132	1.78	20	
Xylenes, Total	2.8	0.094	2.817	0.01462	97.8	71.8	131	1.73	20	
Surr: 4-Bromofluorobenzene	0.83		0.9390		88.6	80	120	0	0	

**Qualifiers:**

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quantitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: RULE ENGINEERING LL Work Order Number: 1904839 RcptNo: 1

Received By: Victoria Zellar 4/17/2019 8:30:00 AM

Victoria Zellar

Completed By: Erin Melendrez 4/17/2019 8:45:40 AM

EM

Reviewed By: ENM 4/17/19

LB: DAD 4/17/19

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [ ] Not Present [ ]
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [ ] NA [ ]
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [ ] NA [ ]
5. Sample(s) in proper container(s)? Yes [checked] No [ ]
6. Sufficient sample volume for indicated test(s)? Yes [checked] No [ ]
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No [ ]
8. Was preservative added to bottles? Yes [ ] No [checked] NA [ ]
9. VOA vials have zero headspace? Yes [ ] No [ ] No VOA Vials [checked]
10. Were any sample containers received broken? Yes [ ] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No [ ]
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No [ ]
13. Is it clear what analyses were requested? Yes [checked] No [ ]
14. Were all holding times able to be met? Yes [checked] No [ ]

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: DAD 4/17/19

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [ ] No [ ] NA [checked]

Person Notified: Date:
By Whom: Via: [ ] eMail [ ] Phone [ ] Fax [ ] In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 3.1, Good, Yes, , ,





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

April 19, 2019

Heather Woods

Rule Engineering LLC  
501 Airport Dr., Ste 205  
Farmington, NM 87401  
TEL: (505) 325-1055  
FAX

RE: Enterprise Federal 13-22 2

OrderNo.: 1904756

Dear Heather Woods:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/16/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-4 @12.5'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 2:49:00 PM

Lab ID: 1904756-001

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/17/2019 9:06:52 PM	44365
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/17/2019 9:06:52 PM	44365
Surr: DNOP	96.9	70-130		%Rec	1	4/17/2019 9:06:52 PM	44365
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/17/2019 5:05:29 PM	44350
Surr: BFB	88.7	73.8-119		%Rec	1	4/17/2019 5:05:29 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	4/17/2019 5:05:29 PM	44350
Toluene	ND	0.048		mg/Kg	1	4/17/2019 5:05:29 PM	44350
Ethylbenzene	ND	0.048		mg/Kg	1	4/17/2019 5:05:29 PM	44350
Xylenes, Total	ND	0.097		mg/Kg	1	4/17/2019 5:05:29 PM	44350
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	4/17/2019 5:05:29 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-4@20'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 3:15:00 PM

Lab ID: 1904756-002

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	4/17/2019 9:30:46 PM	44365
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	4/17/2019 9:30:46 PM	44365
Surr: DNOP	99.6	70-130		%Rec	1	4/17/2019 9:30:46 PM	44365
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/17/2019 5:28:54 PM	44350
Surr: BFB	92.0	73.8-119		%Rec	1	4/17/2019 5:28:54 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: <b>NSB</b>
Benzene	ND	0.025		mg/Kg	1	4/17/2019 5:28:54 PM	44350
Toluene	ND	0.050		mg/Kg	1	4/17/2019 5:28:54 PM	44350
Ethylbenzene	ND	0.050		mg/Kg	1	4/17/2019 5:28:54 PM	44350
Xylenes, Total	ND	0.10		mg/Kg	1	4/17/2019 5:28:54 PM	44350
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	4/17/2019 5:28:54 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-4@25'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 3:25:00 PM

Lab ID: 1904756-003

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/17/2019 5:28:40 PM	44375
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/17/2019 5:28:40 PM	44375
Surr: DNOP	101	70-130		%Rec	1	4/17/2019 5:28:40 PM	44375
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/17/2019 5:52:23 PM	44350
Surr: BFB	88.3	73.8-119		%Rec	1	4/17/2019 5:52:23 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/17/2019 5:52:23 PM	44350
Toluene	ND	0.050		mg/Kg	1	4/17/2019 5:52:23 PM	44350
Ethylbenzene	ND	0.050		mg/Kg	1	4/17/2019 5:52:23 PM	44350
Xylenes, Total	ND	0.099		mg/Kg	1	4/17/2019 5:52:23 PM	44350
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	4/17/2019 5:52:23 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

**Hall Environmental Analysis Laboratory, Inc.**

CLIENT: Rule Engineering LLC

Client Sample ID: SB-5@17.5'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 12:45:00 PM

Lab ID: 1904756-004

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	4/17/2019 6:34:57 PM	44375
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/17/2019 6:34:57 PM	44375
Surr: DNOP	92.7	70-130		%Rec	1	4/17/2019 6:34:57 PM	44375
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/17/2019 7:02:56 PM	44350
Surr: BFB	92.3	73.8-119		%Rec	1	4/17/2019 7:02:56 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/17/2019 7:02:56 PM	44350
Toluene	ND	0.048		mg/Kg	1	4/17/2019 7:02:56 PM	44350
Ethylbenzene	ND	0.048		mg/Kg	1	4/17/2019 7:02:56 PM	44350
Xylenes, Total	ND	0.096		mg/Kg	1	4/17/2019 7:02:56 PM	44350
Surr: 4-Bromofluorobenzene	91.6	80-120		%Rec	1	4/17/2019 7:02:56 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-5@25'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 1:23:00 PM

Lab ID: 1904756-005

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	4/17/2019 6:56:55 PM	44375
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/17/2019 6:56:55 PM	44375
Surr: DNOP	100	70-130		%Rec	1	4/17/2019 6:56:55 PM	44375
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/17/2019 7:26:22 PM	44350
Surr: BFB	90.0	73.8-119		%Rec	1	4/17/2019 7:26:22 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/17/2019 7:26:22 PM	44350
Toluene	ND	0.050		mg/Kg	1	4/17/2019 7:26:22 PM	44350
Ethylbenzene	ND	0.050		mg/Kg	1	4/17/2019 7:26:22 PM	44350
Xylenes, Total	ND	0.099		mg/Kg	1	4/17/2019 7:26:22 PM	44350
Surr: 4-Bromofluorobenzene	90.3	80-120		%Rec	1	4/17/2019 7:26:22 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

## Analytical Report

Lab Order 1904756

Date Reported: 4/19/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SB-5@30'

Project: Enterprise Federal 13-22 2

Collection Date: 4/15/2019 1:39:00 PM

Lab ID: 1904756-006

Matrix: SOIL

Received Date: 4/16/2019 8:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: Irm
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	4/17/2019 7:18:58 PM	44375
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/17/2019 7:18:58 PM	44375
Surr: DNOP	97.5	70-130		%Rec	1	4/17/2019 7:18:58 PM	44375
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/17/2019 7:49:54 PM	44350
Surr: BFB	90.8	73.8-119		%Rec	1	4/17/2019 7:49:54 PM	44350
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/17/2019 7:49:54 PM	44350
Toluene	ND	0.049		mg/Kg	1	4/17/2019 7:49:54 PM	44350
Ethylbenzene	ND	0.049		mg/Kg	1	4/17/2019 7:49:54 PM	44350
Xylenes, Total	ND	0.099		mg/Kg	1	4/17/2019 7:49:54 PM	44350
Surr: 4-Bromofluorobenzene	90.8	80-120		%Rec	1	4/17/2019 7:49:54 PM	44350

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
	PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904756

19-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID: <b>MB-44365</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44365</b>	RunNo: <b>59217</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1993697</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.8		10.00		97.6	70	130			

Sample ID: <b>LCS-44365</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44365</b>	RunNo: <b>59217</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1993698</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	10	50.00	0	96.0	63.9	124			
Surr: DNOP	4.9		5.000		98.0	70	130			

Sample ID: <b>LCS-44375</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44375</b>	RunNo: <b>59198</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994878</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	53	10	50.00	0	106	63.9	124			
Surr: DNOP	4.8		5.000		96.2	70	130			

Sample ID: <b>MB-44375</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44375</b>	RunNo: <b>59198</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994879</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	70	130			

Sample ID: <b>1904756-003AMS</b>	SampType: <b>MS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SB-4@25'</b>	Batch ID: <b>44375</b>	RunNo: <b>59198</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994881</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	9.8	48.88	2.874	105	53.5	126			
Surr: DNOP	4.8		4.888		98.9	70	130			

**Qualifiers:**

H Holding times for preparation or analysis exceeded  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

ND Not Detected at the Reporting Limit  
RL Reporting Detection Limit  
W Sample container temperature is out of limit as specified at testcode

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1904756**

19-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID: <b>1904756-003AMSD</b>	SampType: <b>MSD</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>SB-4@25'</b>	Batch ID: <b>44375</b>	RunNo: <b>59198</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994882</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.3	46.69	2.874	101	53.5	126	7.37	21.7	
Surr: DNOP	4.7		4.669		100	70	130	0	0	

Sample ID: <b>LCS-44417</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44417</b>	RunNo: <b>59244</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/18/2019</b>	SeqNo: <b>1995026</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.8		5.000		96.1	70	130			

Sample ID: <b>MB-44417</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44417</b>	RunNo: <b>59244</b>								
Prep Date: <b>4/18/2019</b>	Analysis Date: <b>4/18/2019</b>	SeqNo: <b>1995028</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		96.0	70	130			

**Qualifiers:**

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904756

19-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID: <b>MB-44350</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44350</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994106</b>						Units: <b>mg/Kg</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		89.3	73.8	119			

Sample ID: <b>LCS-44350</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44350</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994107</b>						Units: <b>mg/Kg</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.7	80.1	123			
Surr: BFB	1100		1000		108	73.8	119			

Sample ID: <b>MB-44371</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44371</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994130</b>						Units: <b>%Rec</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	910		1000		91.2	73.8	119			

Sample ID: <b>LCS-44371</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44371</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994131</b>						Units: <b>%Rec</b>		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		103	73.8	119			

**Qualifiers:**

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1904756

19-Apr-19

**Client:** Rule Engineering LLC  
**Project:** Enterprise Federal 13-22 2

Sample ID: <b>MB-44350</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44350</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994155</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	80	120			

Sample ID: <b>LCS-44350</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44350</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994156</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	90.3	80	120			
Toluene	0.95	0.050	1.000	0	95.3	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.0	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.5	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.5	80	120			

Sample ID: <b>MB-44371</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44371</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994173</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.0	80	120			

Sample ID: <b>LCS-44371</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44371</b>	RunNo: <b>59231</b>								
Prep Date: <b>4/16/2019</b>	Analysis Date: <b>4/17/2019</b>	SeqNo: <b>1994174</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.91		1.000		91.3	80	120			

**Qualifiers:**

H	Holding times for preparation or analysis exceeded	ND	Not Detected at the Reporting Limit
PQL	Practical Quantitative Limit	RL	Reporting Detection Limit
S	% Recovery outside of range due to dilution or matrix	W	Sample container temperature is out of limit as specified at testcode



Hall Environmental Analysis Laboratory  
 4901 Hawkins NE  
 Albuquerque, NM 87109  
 TEL: 505-345-3975 FAX: 505-345-4107  
 Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **RULE ENGINEERING LL**      Work Order Number: **1904756**      RcptNo: 1

Received By: **Desiree Dominguez**      4/16/2019 8:15:00 AM

Completed By: **Leah Baca**      4/16/2019 8:46:01 AM

Reviewed By: **YG 4/14/19**  
 Labeled by **DAD 4/16/19**

*Handwritten initials/signatures: IDZ, Leah Baca*

**Chain of Custody**

1. Is Chain of Custody complete?      Yes       No       Not Present
2. How was the sample delivered?      Courier

**Log In**

3. Was an attempt made to cool the samples?      Yes       No       NA
4. Were all samples received at a temperature of >0° C to 6.0°C      Yes       No       NA
5. Sample(s) in proper container(s)?      Yes       No
6. Sufficient sample volume for indicated test(s)?      Yes       No
7. Are samples (except VOA and ONG) properly preserved?      Yes       No
8. Was preservative added to bottles?      Yes       No       NA
9. VOA vials have zero headspace?      Yes       No       No VOA Vials
10. Were any sample containers received broken?      Yes       No
11. Does paperwork match bottle labels?      Yes       No   
 (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody?      Yes       No
13. Is it clear what analyses were requested?      Yes       No
14. Were all holding times able to be met?      Yes       No   
 (If no, notify customer for authorization.)

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: **DAD 4/16/19**

**Special Handling (if applicable)**

15. Was client notified of all discrepancies with this order?      Yes       No       NA

Person Notified: \_\_\_\_\_ Date \_\_\_\_\_  
 By Whom: \_\_\_\_\_ Via:  eMail  Phone  Fax  In Person  
 Regarding: \_\_\_\_\_  
 Client Instructions: \_\_\_\_\_

16. Additional remarks:

**17. Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Yes			
2	3.7	Good	Yes			

### Chain-of-Custody Record

Client: Rule Engineering  
 Mailing Address: 501 Airport Dr, Ste 205  
 Phone #: (505) 716-2767  
 email or Fax#: hwoods@ruleengineering.com  
 QA/QC Package: tjlong@ceprod.com  
 Standard  Level 4 (Full Validation)  
 Accreditation:  Az Compliance  
 NELAC  Other  
 EDD (Type) \_\_\_\_\_

Turn-Around Time:  
 Standard  Rush  
 Project Name:  
Enterprise Federal 13-22 #2  
 Project #:  
 \_\_\_\_\_

Project Manager:  
Heather Woods  
 Sampler: Heather Woods  
 On Ice:  Yes  No  
 # of Coolers: 2  
 Cooler Temp (including CF): 3.3°C, 3.7°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.
4/15/19	1449	Soil	SB-4 @ 12.5'	(1) 4oz Glass	Non	1904756-001
4/15/19	1515	Soil	SB-4 @ 20'	(1) 4oz Glass	Non	-002
4/15/19	1525	Soil	SB-4 @ 25'	(1) 4oz Glass	Non	-003
4/15/19	1245	Soil	SB-5 @ 17.5'	(1) 4oz Glass	Non	-004
4/15/19	1323	Soil	SB-5 @ 25'	(1) 4oz Glass	Non	-005
4/15/19	1339	Soil	SB-5 @ 30'	(1) 4oz Glass	Non	-006
<del>_____</del>						

Date: 4/15/19 Time: 1738 Relinquished by: Heather M. Wood  
 Date: 4/15/19 Time: 1821 Relinquished by: Heather Woods  
 Received by: Chris Wood Via: courier Date: 4/16/19 Time: 8:15  
 Received by: \_\_\_\_\_ Via: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_



**HALL ENVIRONMENTAL ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

#### Analysis Request

BTEX / MTBE / TMB's (8021)	X
TPH:8015D(GRO / DRO / MRO)	X
8081 Pesticides/8082 PCB's	X
EDB (Method 504.1)	X
PAHs by 8310 or 8270SIMS	X
RCRA 8 Metals	X
Cl, F, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	X
8260 (VOA)	X
8270 (Semi-VOA)	X
Total Coliform (Present/Absent)	X

Remarks:  
Direct Bill to Enterprise