

Humble Yates Battery Closure  
March 30, 2020

Maverick Natural Resources  
Eddy County, New Mexico

**Maverick Natural Resources  
Humble Yates Battery  
NAB1912635236  
2RP-5384  
Closure Report  
Section 16, Township 18S, Range 28E  
Eddy County, New Mexico  
**Revised**  
March 30, 2020**



Prepared for:

**Maverick Natural Resources  
PO Box 678  
Andrews, TX**

By:

**Safety & Environmental Solutions, Inc.  
703 East Clinton  
Hobbs, New Mexico 88240  
(575) 397-0510**

**Humble Yates Battery Closure  
March 30, 2020****Maverick Natural Resources  
Eddy County, New Mexico****I. Company Contacts**

<b>Representative</b>	<b>Company</b>	<b>Telephone</b>	<b>E-mail</b>
Thomas Haigood	Maverick Natural Resources	432-701-7802	<a href="mailto:Thomas.haigood@mavresources.com">Thomas.haigood@mavresources.com</a>
Bob Allen	SESI	575-397-0510	<a href="mailto:ballen@sesi-nm.com">ballen@sesi-nm.com</a>

**II. Background**

Safety and Environmental Solutions, Inc. (SESI) was engaged by Maverick Natural Resources to perform site assessment of a release area at the Humble Yates Battery. The site is situated in Section 16, Township 18S, Range 28E.

According to the C-141: the cause of release was due to corrosion to the bottom of the crude oil storage tank spilling into the secondary containment. Approximately 10 bbls of oil began to leak under the containment (berm) wall where the plastic liner appeared to have a breach. The fluid leached under the containment berm traversing approximately 150 yards before being discovered by the relief pumper while making his daily rounds. The impacted area is approximately 1ft. to 2 ft. wide by 100 yards in length with a total release of 66 bbls of oil.

**III. Surface and Ground Water**

According to the NM Oil and Gas Hydrology map, there is no record of groundwater in the immediate vicinity of this location. The depth to groundwater for this location is 225 feet according to the USGS web interface map. The Office of the State Engineer records indicate depth to groundwater to be 300 feet at the nearest well. Furthermore, the trend map reveals depth to groundwater at 150-200 feet. Based on the information from these three sources, we believe depth to groundwater to be between 150 feet and 250 feet.

**V. Work Performed**

On January 08, 2019 SESI personnel met with personnel from Maverick Natural Resources in order to assess the release area. SESI field technician determined locations for advancing auger holes. Immediately south of the bermed area, auger hole one (1) was advanced to a depth of 10" bgs., whereby auger refusal was met.

On January 10, 2019 SESI personnel revisited the site, together with equipment and personnel from Phoenix Construction. The interior of the bermed area was hand excavated and all impacted soil stockpiled for disposal. Equipment began removal and stockpiling of all impacted soil from pasture area. All impacted soil was stockpiled on a 30 mil. liner for future removal and disposal.

On January 11, 2019 SESI personnel returned to the site in order to complete hand excavation of the interior bermed area, and to continue delineation. Five (5) sample points were designated in the pasture area, whereby samples were grabbed at surface and 1' bgs. intervals. Refusal was encountered at 1' bgs. A Test Trench was advanced to a depth of 3.5' bgs south of the bermed area where the fluids had pooled. The stock piled soil was transported to R360 for disposal. All of the soil samples were properly packaged, preserved, and transported to Cardinal Laboratories for analyses of Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX Method 8021B), Chloride (CI Method SM4500CI-B), and Total Petroleum Hydrocarbons (TPH 8015M). Below is a recap of the results.

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**Maverick Natural Resources**  
**Eddy County, New Mexico**

Sample Point ID	BTEX	Chloride	TPH	
			GRO	DRO
SP 1 Surface	.908	<16.0	21.3	450
SP 1 @ 1ft	125	32.	1730	930
SP 2 Surface	537	<16.0	4490	10500
SP 3 Surface	66	336	817	7740
SP 3 @ 1ft	3.63	<16.0	83.1	1580
SP 4 Surface	564	336	5790	21400
SP4 @ 1ft	112	240	1340	6980
Test Trench (TT) 1 Surface	510	208	4850	34100
TT 1 @ 1ft	668	48	7050	26100
TT 1 @ 2ft	4.80	16.	84.9	920

On March 27, 2019 SESI personnel, together with personnel and equipment from Custom Welding of Hobbs returned to the site in order to complete remediation efforts of the test trench area located immediately south of the bermed area where fluids had pooled. Due to the aforementioned soil screening levels; TPH was the constituency of concern. A line finder was utilized to better determine any lines that might be subsurface. Equipment encountered a line in the test trench area that was "unmarked", and was not located with the line finder. The excavation was halted for safety reasons, furthermore no additional excavation of the West Sidewall was advanced. All impacted soils were stockpiled on a 30 mil. liner for future removal. The compromised line was repaired. The excavated area was advanced to a depth of 5ft. bgs. The excavated area was fenced and flagged awaiting confirmation of soil analyses. All soil samples were properly packaged, preserved, and transported to Hall Laboratories for analyses of TPH (Total Petroleum Hydrocarbons) Method 8015M/D and 8015D respectively. For ease of reference the results have been recapped below.

Sample Point ID	TPH	
	GRO	DRO
East SW	ND	330
North SW	43	1700
South SW	51	1300
West SW	300	6300
Bottom	100	2300
SP-1 @ 2ft	ND	220
SP-2 @ 2ft	ND	940
SP-3 @ 3ft	ND	45
SP-4 @ 3ft	ND	34
SP-5 @ 3ft	ND	160

On April 04, 2019 the Remediation Plan-Work Plan was emailed to representatives of the NMOCD and NMSLO respectively. The representative for the NMSLO contacted the Environmental Coordinator with Safety and Environmental Solutions, Inc., regarding the seed mixture requirements for the pasture area, as well as desired soil screening levels for TPH. They requested that TPH levels in the pasture area be excavated to depths whereby TPH levels were <100 mg/kg., regardless of depth to water for the area.

On April 05, 2019, SESI personnel returned to the site, together with personnel and equipment from Custom Welding of Hobbs, NM. Sample points 1, 2, and 5 were located in the pasture area, and excavated further to the extent that field tests for TPH returned results of <100 mg/kg. All stockpiled soil was removed for disposal at Lea Landfill, and NMOCD approved facility. A total of 40 yards of impacted soil was disposed of on this date. The excavated areas were backfilled with like material and restored to grade. The pasture area was backfilled with topsoil and dunal material to support vegetation, and reseeded. All soil samples were packaged, properly preserved and transported to Hall Laboratories via Chain of Custody for analyses of Total Petroleum Hydrocarbons (TPH 8015M). Below is a tabular recap of the results for ease of reference.

Sample Point ID	BTEX	TPH	
		GRO	DRO
SP 1 West Wall	93.5	ND	19
SP 1 East Wall	ND	ND	26
SP 2 West Wall	ND	ND	ND
SP 2 East Wall	ND	ND	13
SP 5 West Wall	ND	ND	ND
SP 5 East Wall	ND	ND	ND

## VI. Initial Conclusions

Based on the number of lines and tanks inside the bermed area, it was requested that further remediation for the interior of the battery be deferred to such a point in time that the battery is decommissioned. Pursuant to email correspondence and at the request of Mr. Hamlet of the NMOCD; the interior of the bermed area was sampled for confirmation of soil constituencies left in place.

On July 12, 2019 SESI personnel, with the permission of the current operator were on site to extract soil samples from under the liner. Four (4) Auger holes were advanced. The liner integrity appears to be intact and backfilled with fresh like material. All soil was properly contained, preserved, and transported to Hall Environmental analysis Laboratory, Inc., and analyzed for TPH (Total Petroleum Hydrocarbons Method 8015M/D and 8015D), and BTEX (Benzene, toluene, Ethylbenzene, Xylenes, Method 8021B). Below is are the tabulated results (Appendix C):

Based on these results: The Chlorides are under the RL's for pad areas; therefore, the constituency of concern would be the Total Petroleum Hydrocarbons. Based on the depth to water for this area, the number of high-pressure lines, as well as the number of production tanks, remediation of this area would cause a major facility deconstruction, and halt to area production.

The pad area, as well as the pasture area were believed to have been remediated in accordance with NMOCD and NMSLO soil screening guidelines. All pasture areas mapped in the site plan have been reseeded with the required seed mixture, in order to facilitate native vegetation. Based upon the aforementioned soil screening levels, number of lines, and depth to groundwater for the area; no further remediation effort was recommended at that time.



**VII. Closure Denial**

Upon completion of the remediation, SESI personnel believed the site to be fully delineated and therefore requested closure/deferral in August of 2019. However, NMOCD disagreed with our assessment and requested full delineation.

**VIII. Work Performed to Fulfill Closure Denial Request**

On March 10, 2020 SESI personnel performed the requested delineation by advancing two holes to establish vertical delineation has been complete. As you can see based on the table below, full delineation was achieved.

Sample ID	DRO	MRO	GRO	Chlorides
BH-1 @ 2'	1100	430	59	ND
BH-1 @ 4'-6'	ND	ND	ND	2100
BH-1 @ 9'-11'	ND	ND	ND	160
BH-1 @ 14'-16'	ND	ND	ND	2200
BH-1 @ 19'-21'	ND	ND	ND	4000
BH-1 @ 24'-26'	ND	ND	ND	2500
BH-1 @ 29'-31'	ND	ND	ND	2100
BH-1 @ 34'-36'	ND	ND	ND	2100
BH-1 @ 39'-41'	ND	ND	ND	2100
BH-1 @ 44'-46'	ND	ND	ND	2100
BH-1 @ 49'-51'	ND	ND	ND	500
BH-2 @ 1'	4800	2100	210	270
BH-2 @ 2'-4'	ND	ND	ND	1600
BH-2 @ 4'-6'	ND	ND	ND	3500
BH-2 @ 9'-11'	ND	ND	ND	190
BH-2 @ 14'-16'	ND	ND	ND	86
BH-2 @ 19'-21'	ND	ND	ND	130
BH-2 @ 24'-26'	ND	ND	ND	190

**VII. Closure Request Revised**

Based on the results, SESI has fully delineated the site as requested by NMOCD in the closure denial (Email attached). Since all requests made in the closure denial email have been fulfilled, SESI respectfully request closure/deferral for this release.

**VII. Figures & Appendices**

Initial Remediation/ Delineation Map  
Map Addressing Closure Denial Concerns  
Groundwater information  
Original Remediation photos  
Closure denial emails  
C-141, pg. 6  
Lab Analysis



# Breitburn Humble Yates Battery

Battery Sample Positions

Legend

AH


 Berm



# Maverick Natural Resources, Humble Yates Battery

Eddy County, NM  
NAB1912635236  
2RP-5384

## Legend

 Boreholes for vertical delineation





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USGS Water Resources

Data Category:


Groundwater ▼

Geographic Area:

New Mexico ▼

GO

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- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for New Mexico

Click to hide state-specific text

## Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 324424104103901

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 324424104103901 18S.28E.21.21212

Available data for this site

Groundwater: Field measurements ▼

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°44'24", Longitude 104°10'39" NAD27

Land-surface elevation 3,580 feet above NGVD29

The depth of the well is 250.00 feet below land surface.

This well is completed in the Artesia Group (313ARTS) local aquifer.

### Output formats

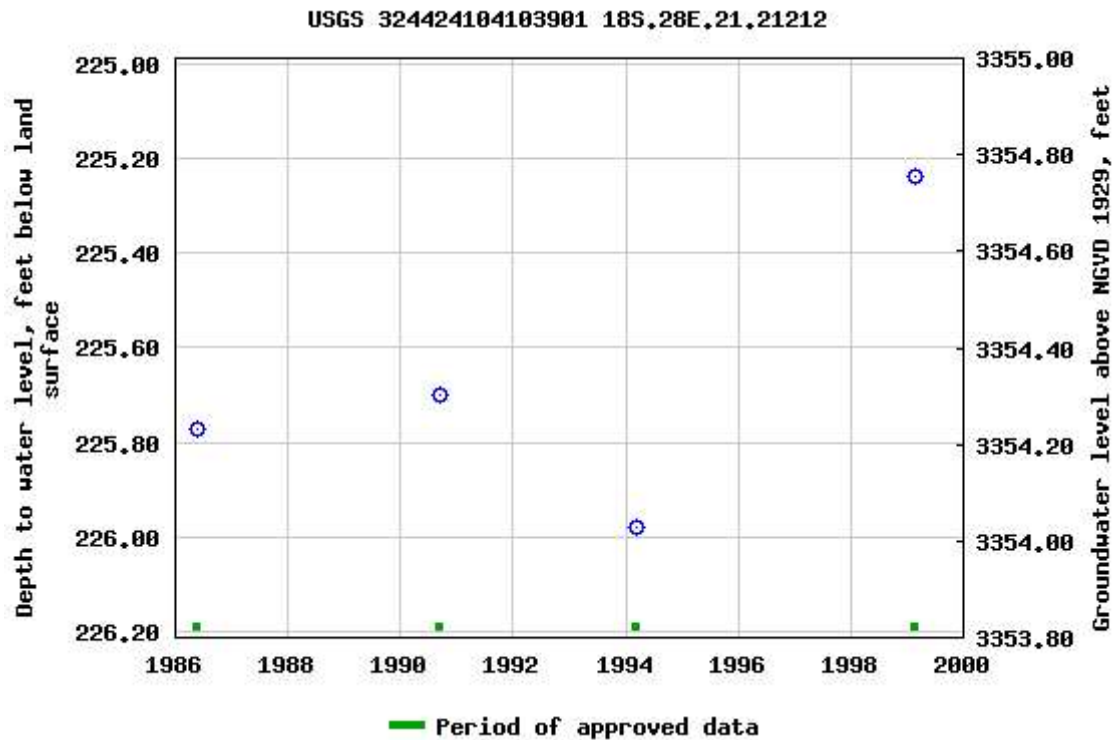
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**Title: Groundwater for New Mexico: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>**

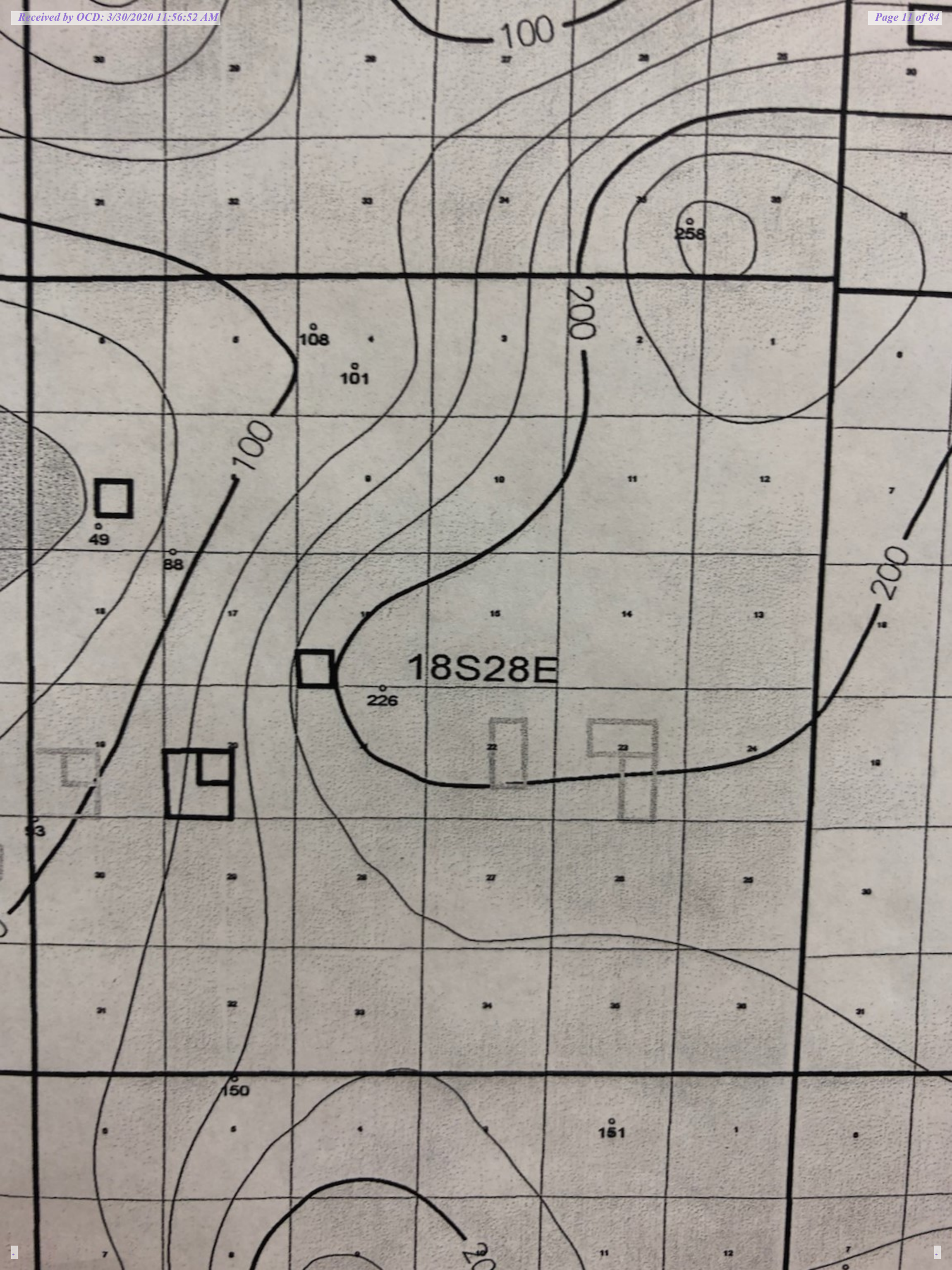


Page Contact Information: [New Mexico Water Data Maintainer](#)

Page Last Modified: 2020-02-03 11:45:06 EST

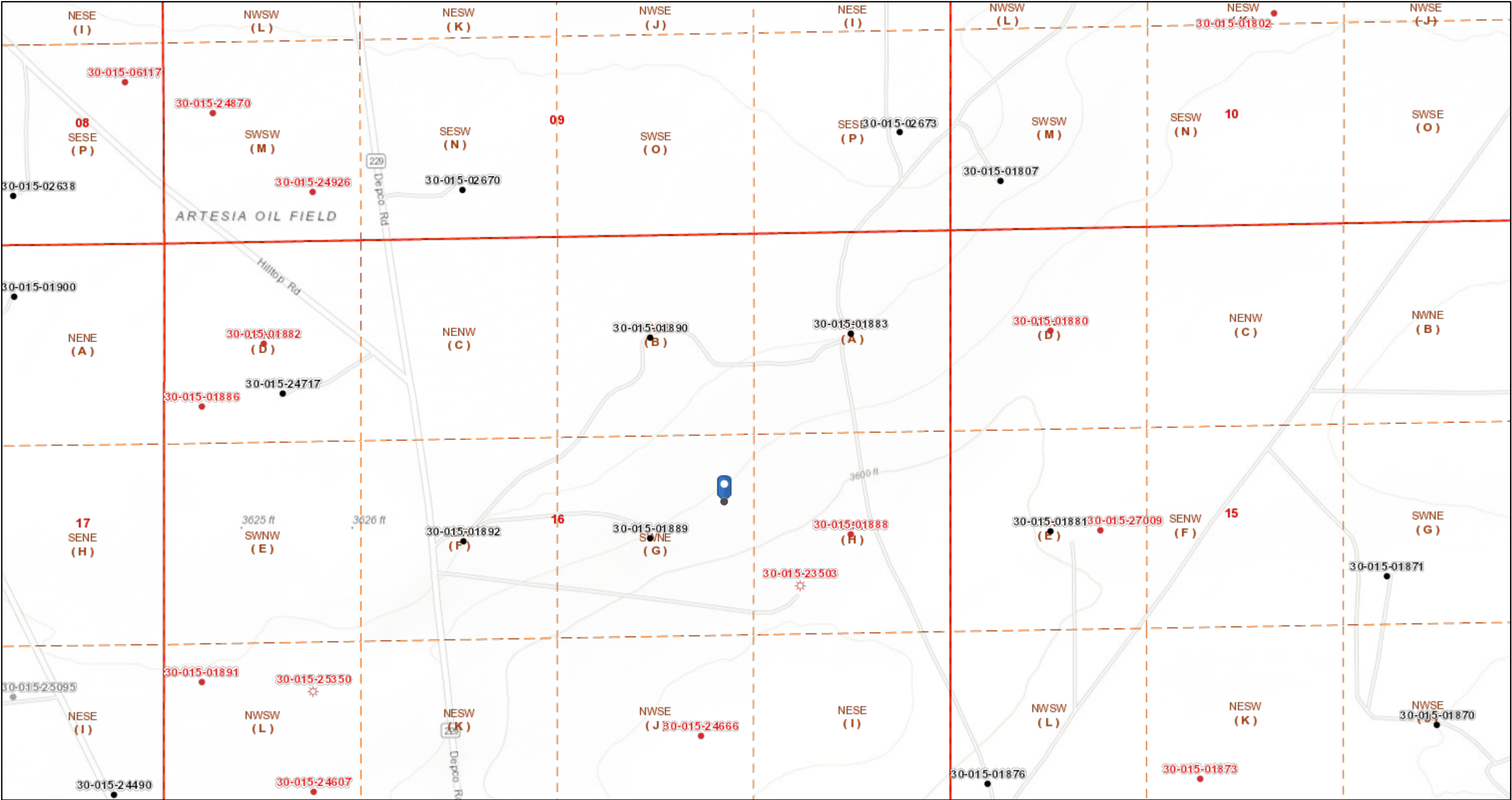
0.56 0.48 nadww01





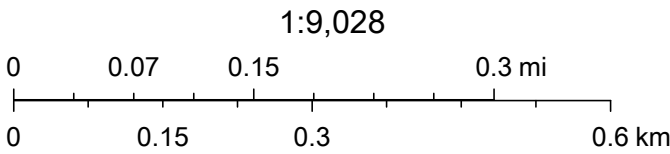


# Humble Yates Battery



2/3/2020, 11:23:51 AM

- |                     |                            |                                  |                                 |   |
|---------------------|----------------------------|----------------------------------|---------------------------------|---|
| Wells - Large Scale | CO2, Temporarily Abandoned | Injection, Active                | Oil, Cancelled                  | Salt Water Injection, New                   |
| undefined           | Gas, Active                | Injection, Cancelled             | Oil, New                        | Salt Water Injection, Plugged               |
| Miscellaneous       | Gas, Cancelled             | Injection, New                   | Oil, Plugged                    | Salt Water Injection, Temporarily Abandoned |
| CO2, Active         | Gas, New                   | Injection, Plugged               | Oil, Temporarily Abandoned      | Water, Active                               |
| CO2, Cancelled      | Gas, Plugged               | Injection, Temporarily Abandoned | Salt Water Injection, Active    | Water, Cancelled                            |
| CO2, New            | Gas, Temporarily Abandoned | Oil, Active                      | Salt Water Injection, Cancelled | Water, New                                  |
| CO2, Plugged        |                            |                                  |                                 |   |





Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI,



Untitled map

Write a description for your map.

**Legend**

-  Test Trench
-  Water well Identified in USGS Search





# Site Photographs

Humble Yates Battery  
Sec.16, TS 18S, R 28E



Fluid inside Berm



Spill Pool area locale of test trench



Removal of saturated pasture soil 1-10-19



Historical impact-abandoned line strike



Line Strike in Test Trench



Test Trench Excavation Line Repair





Lines East of Excavation & on pad



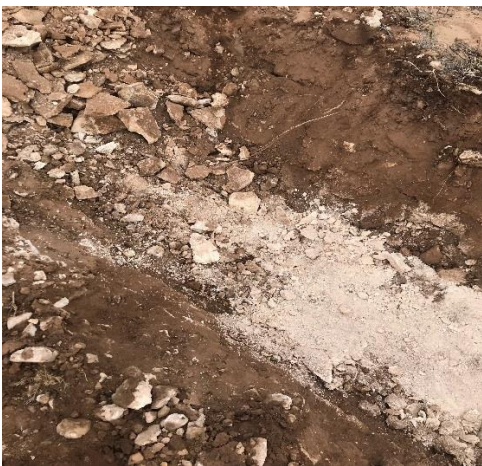
Sample Position 5 Refusal



Sample Position 4 Refusal



Sample Position 3 Refusal



Sample Position 2



Sample Position 1





Removal of |Stockpile



Restored Pad Area



Pad area looking south to SP1



Restored Pasture area looking South



Sample Point 5 looking North



Remediated area south of berm-buried line

**From:** [Venegas, Victoria, EMNRD](#)  
**To:** [Thomas Haigood](#); [Hamlet, Robert, EMNRD](#)  
**Cc:** [Bratcher, Mike, EMNRD](#); [Mann, Ryan](#); [rkasuboski@slo.state.nm.us](mailto:rkasuboski@slo.state.nm.us); [Bob Allen](#); [Rebecca Pons](#)  
**Subject:** RE: [EXT] Re: Closure - Humble Yates -Maverick Natural Resources - (2RP-5384) 1-17-2019  
**Date:** Friday, October 25, 2019 11:14:30 AM  
**Attachments:** [\(C-141 Final\) Closure Deferral DENIED Maverick Humble Yates 2RP-5384.pdf](#)

---

### **Humble Yates -Maverick Natural Resources - (2RP-5384) 1-17-2019**

Mr. Haigood,

OCD has received your closure request and final C-141 for Humble Yates -Maverick Natural Resources - (2RP-5384) 1-17-2019, thank you. This closure/deferral request is DENIED for the following:

- The release has not been fully delineated. By Rule NMAC 19.15.29.12.: *"The DEFERRAL may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment or ground water"*.
- The TPH concentration at sample points AH-1@1', AH-2@1', AH-3@1' and AH-4@1' are above the limit. By rule, for this site, samples must be delineated to 2500 mg/kg for TPH and 1000 mg/kg for GRO+DRO.

OCD had previously requested that the soil underneath the breached liner in the containment area, be fully delineated. This report does not meet the requirement of the rule to apply for a deferral. OCD requests, again, that this site be fully delineated to closure standards in Table I of 19.15.29. All samples must be under the limit to verify the spill has been vertically delineated before we can approve a deferral. Lab data needs to be provided as evidence of delineation efforts.

Regards,

Victoria Venegas  
 EMNRD  
 OCD-District II  
 Artesia NM  
[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)

*OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.*

---

**From:** Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>  
**Sent:** Monday, June 3, 2019 1:50 PM  
**To:** Rebecca Pons <office2@sesi-nm.com>  
**Cc:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>; rkasuboski@slo.state.nm.us; Bob Allen <ballen@sesi-nm.com>; Thomas Haigood <Thomas.Haigood@mavresources.com>  
**Subject:** RE: [EXT] Re: Closure - Humble Yates -Maverick Natural Resources - (2RP-5384) 1-17-2019

Rebecca,

The OCD is requesting that the soil underneath the breached liner in the containment area be sampled and delineated. If contaminants hit soil on the pad, containment area, or pasture, the spill area needs to be fully delineated and sampled before a deferral can be approved. Please specify which sample areas inside the containment you would like to apply for a deferral on.

Thanks,

Robert J Hamlet  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 840-5963  
[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)

---

**From:** Rebecca Pons <[office2@sesi-nm.com](mailto:office2@sesi-nm.com)>  
**Sent:** Thursday, May 30, 2019 8:38 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>  
**Subject:** [EXT] Re: Closure - Humble Yates -Maverick Natural Resources - (2RP-5384) 1-17-2019

Good morning ,  
The trenched-excavated area immediately behind berm was excavated to 4ft this are was pad area. We advanced no deeper due to unmarked lines and safety issues. The pasture area was excited to 100 mg/ kg for Tph or refusal. The impacted material inside liner was hand excavated abc the liner repaired, as well as clean material replacement. The remainder ( under tanks) is the part that Breitburn is requesting deferment until the Battery is decommissioned.  
Thank you  
Rebecca

Sent from my iPhone

On May 29, 2019, at 11:17 AM, Hamlet, Robert, EMNRD  
<[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)> wrote:

<image001.gif>  
Rebecca,

It sounds like the interior of the berm was hand excavated. Was this just the impacted soil on top of the liner? If the liner in the containment area was breached, the area

inside the containment area will need to be delineated and sampled underneath the liner. After looking at the Site Plan Map, all 5 of the points appear to be off pad and would require a minimum of 4 feet non-waste containing uncontaminated, earthen material (600 mg/kg Chloride, 100 mg/kg TPH, etc..). Samples weren't taken down to 4 feet on any of the sample points. Can we assume rock refusal was encountered where the sampling points ended? If this is the case we may need you to use a hydrovac to remove any remaining contaminated soil in place.

We may be able to defer the clean-up of contaminated soil in the berm on the pad, but the contamination in the pasture will need to be fully remediated.

Please make an attempt using a back-hoe/track-hoe to remove the contaminated soil.

If the bottom sample is "hot" when you hit rock refusal, a hydrovac will need to be used to clean up the remaining contaminated soil on top of the rock. Additionally, a hydrovac may need to be used to remove soil around marked flow lines.

Let me know if you have any questions.

Thanks,

Robert J Hamlet  
State of New Mexico  
Energy, Minerals, and Natural Resources  
Oil Conservation Division  
811 S. First St., Artesia NM 88210  
(575) 840-5963  
[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)

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---

**From:** Rebecca Pons <[office2@sesi-nm.com](mailto:office2@sesi-nm.com)>

**Sent:** Thursday, May 9, 2019 8:19 AM

**To:** Venegas, Victoria, EMNRD <[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>

**Cc:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Mann, Ryan <[rmann@slo.state.nm.us](mailto:rmann@slo.state.nm.us)>; rkasuboski@slo.state.nm.us; Bob Allen <[ballen@sesi-nm.com](mailto:ballen@sesi-nm.com)>; Thomas Haigood <[Thomas.Haigood@mavresources.com](mailto:Thomas.Haigood@mavresources.com)>

**Subject:** RE: [EXT] Humble Yates -Maverick Natural Resources Work Plan

<image001.gif>

**Good Morning,**

All remedial activity for this site has been completed, and I have attached the closure documentation for your records. The "Closure" page of the C-141 is signed and in the body of the closure report. Please review and feel free to contact me with any questions. Thank you for all of your assistance.

Best Regards,

Rebecca Pons

<image002.png>

Environmental Coordinator  
Safety and Environmental Solutions, Inc.  
Office: (575)397-0510  
Cell: (575)441-0980

---

**From:** Venegas, Victoria, EMNRD [mailto:[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)]

**Sent:** Monday, May 06, 2019 10:39 AM

**To:** Rebecca Pons <[office2@sesi-nm.com](mailto:office2@sesi-nm.com)>; Hamlet, Robert, EMNRD  
<[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>

**Cc:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Mann, Ryan  
<[rmann@slo.state.nm.us](mailto:rmann@slo.state.nm.us)>; [rkasuboski@slo.state.nm.us](mailto:rkasuboski@slo.state.nm.us); [ballen@sesi-nm.com](mailto:ballen@sesi-nm.com); Thomas  
Haigood <[Thomas.Haigood@mavresources.com](mailto:Thomas.Haigood@mavresources.com)>

**Subject:** RE: [EXT] Humble Yates -Maverick Natural Resources Work Plan

**Humble Yates Battery -Maverick Natural Resources**

All,

The OCD tracking number for this release event is **2RP-5384**.

Thank you,

Victoria Venegas  
EMNRD  
OCD-District II  
811 S First St. Artesia  
NM 88210  
[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD



approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

---

**From:** Rebecca Pons <[office2@sesi-nm.com](mailto:office2@sesi-nm.com)>  
**Sent:** Monday, April 22, 2019 7:55 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>  
**Cc:** Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>; Venegas, Victoria, EMNRD <[Victoria.Venegas@state.nm.us](mailto:Victoria.Venegas@state.nm.us)>  
**Subject:** [EXT] Humble Yates -Maverick Natural Resources Work Plan

<image001.gif>

Good Morning,  
Has there been a permit (RP) Number assigned to this work plan? Please advise me, and I will include it in the closure report.

Thank you

Best Regards,

Rebecca Pons  
<image002.png>

Environmental Coordinator  
Safety and Environmental Solutions, Inc.  
Office: (575)397-0510  
Cell: (575)441-0980

**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Bob Allen](#)  
**Cc:** [Sergio Contreras](#); [Rebecca Pons](#); [thoms.haigood@mavresources.com](#); [Bratcher, Mike, EMNRD](#); [Venegas, Victoria, EMNRD](#); [Eads, Cristina, EMNRD](#)  
**Subject:** RE: [EXT] Maverick Resources Humble Yates  
**Date:** Wednesday, February 12, 2020 2:52:37 PM  
**Attachments:** [image001.png](#)

---

I discussed this spill with mike yesterday. If there is a well .76 miles away verifying that the depth to groundwater is over 200 feet, we would be in agreement with you. The trend map and the OSE records seem to back it up. Depth to water can be subjective at times, so the more sources that back up your claim, the better. Please include all of these attachments in your report to help in establishing depth to groundwater at the site.

Thanks

---

**From:** Bob Allen <ballen@sesi-nm.com>  
**Sent:** Monday, February 3, 2020 1:39 PM  
**To:** Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>  
**Cc:** Sergio Contreras <scontreras@sesi-nm.com>; Rebecca Pons <office2@sesi-nm.com>; thoms.haigood@mavresources.com  
**Subject:** [EXT] Maverick Resources Humble Yates

Robert,

According to the NM Oil and Gas Hydrology map, there is no record of groundwater in the immediate vicinity of this location. The depth to groundwater for this location is 225 feet according to the USGS web interface map. This well is located approximately .76 miles from the subject site. The Office of the State Engineer records indicate depth to groundwater to be 300 feet at the nearest well. Furthermore, the trend map reveals depth to groundwater at 200 feet. Based on the information from these three sources, we believe depth to groundwater to be between 200 feet and 225 feet.

After review of the groundwater data at this site, it is my opinion that there is sufficient information available to determine the groundwater is in excess of 200' bgs and most likely over 225' bgs. Therefore, any borehole advanced at the Humble Yates site will be installed in order to establish vertical extent rather than to prove groundwater is in excess of 50' bgs. During the advancement of the borehole, samples will be taken every 5' until two consecutive samples return <1000 ppm for TPH and <600 ppm for chlorides. Our telephone conversation this morning talked about unknown groundwater levels and I think these resources will establish DOW levels well over the 50' threshold for deferment.

On the point of horizontal extent, the four samples retrieved at a depth of 1' below the liner establishes that there is contamination under the majority of the area covered by the liner. However, while we are there, we will sample an additional 3 locations to further verify the horizontal extent of contamination

Bob Allen CSP, CHMM  
Office: (575) 397-0510  
Cell (575) 390-7063



Form C-141

Page 6

State of New Mexico  
Oil Conservation Division

Incident ID	2RP-5384
District RP	2
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 OCD 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: Thomas Haigood Title: EHS Coordinator *Permin HSE Specialist*  
 Signature:  Date: 05/07/2019  
 email: Thomas.haigood@maverickresources.com Telephone: (432) 701-7802

**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: \_\_\_\_\_ Date: \_\_\_\_\_

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: E-SW

Project: Humble Yates Battery

Collection Date: 3/27/2019 3:00:00 PM

Lab ID: 1903E22-001

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	330	9.9		mg/Kg	1	4/1/2019 9:36:05 AM	43976
Motor Oil Range Organics (MRO)	360	49		mg/Kg	1	4/1/2019 9:36:05 AM	43976
Surr: DNOP	90.5	70-130		%Rec	1	4/1/2019 9:36:05 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/1/2019 1:10:44 PM	43962
Surr: BFB	104	73.8-119		%Rec	1	4/1/2019 1:10:44 PM	43962

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 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: N-SW

Project: Humble Yates Battery

Collection Date: 3/27/2019 3:00:00 PM

Lab ID: 1903E22-002

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	1700	100		mg/Kg	10	3/30/2019 8:56:18 PM	43976
Motor Oil Range Organics (MRO)	890	510		mg/Kg	10	3/30/2019 8:56:18 PM	43976
Surr: DNOP	0	70-130	S	%Rec	10	3/30/2019 8:56:18 PM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	43	25		mg/Kg	5	4/1/2019 1:34:09 PM	43962
Surr: BFB	154	73.8-119	S	%Rec	5	4/1/2019 1:34:09 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: S-SW

Project: Humble Yates Battery

Collection Date: 3/27/2019 3:05:00 PM

Lab ID: 1903E22-003

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	1300	100		mg/Kg	10	3/30/2019 9:20:23 PM	43976
Motor Oil Range Organics (MRO)	640	500		mg/Kg	10	3/30/2019 9:20:23 PM	43976
Surr: DNOP	0	70-130	S	%Rec	10	3/30/2019 9:20:23 PM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	51	47		mg/Kg	10	4/1/2019 1:57:28 PM	43962
Surr: BFB	136	73.8-119	S	%Rec	10	4/1/2019 1:57:28 PM	43962

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 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: W-SW

Project: Humble Yates Battery

Collection Date: 3/27/2019 3:10:00 PM

Lab ID: 1903E22-004

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	6300	100		mg/Kg	10	3/30/2019 9:44:30 PM	43976
Motor Oil Range Organics (MRO)	2800	500		mg/Kg	10	3/30/2019 9:44:30 PM	43976
Surr: DNOP	0	70-130	S	%Rec	10	3/30/2019 9:44:30 PM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	300	48		mg/Kg	10	4/1/2019 2:20:52 PM	43962
Surr: BFB	264	73.8-119	S	%Rec	10	4/1/2019 2:20:52 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: Bottom

Project: Humble Yates Battery

Collection Date: 3/27/2019 3:20:00 PM

Lab ID: 1903E22-005

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	2300	100		mg/Kg	10	3/30/2019 10:56:29 PM	43976
Motor Oil Range Organics (MRO)	1100	500		mg/Kg	10	3/30/2019 10:56:29 PM	43976
Surr: DNOP	0	70-130	S	%Rec	10	3/30/2019 10:56:29 PM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	100	47		mg/Kg	10	4/1/2019 2:44:18 PM	43962
Surr: BFB	163	73.8-119	S	%Rec	10	4/1/2019 2:44:18 PM	43962

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



## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-1 @ 2 ft.

Project: Humble Yates Battery

Collection Date: 3/27/2019 4:00:00 PM

Lab ID: 1903E22-006

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	220	9.4		mg/Kg	1	4/1/2019 11:12:52 AM	43976
Motor Oil Range Organics (MRO)	150	47		mg/Kg	1	4/1/2019 11:12:52 AM	43976
Surr: DNOP	119	70-130		%Rec	1	4/1/2019 11:12:52 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/1/2019 3:07:44 PM	43962
Surr: BFB	95.0	73.8-119		%Rec	1	4/1/2019 3:07:44 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-2 @ 2 ft.

Project: Humble Yates Battery

Collection Date: 3/27/2019 4:02:00 PM

Lab ID: 1903E22-007

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	940	9.9		mg/Kg	1	4/1/2019 11:37:01 AM	43976
Motor Oil Range Organics (MRO)	510	50		mg/Kg	1	4/1/2019 11:37:01 AM	43976
Surr: DNOP	92.5	70-130		%Rec	1	4/1/2019 11:37:01 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/1/2019 3:31:19 PM	43962
Surr: BFB	92.0	73.8-119		%Rec	1	4/1/2019 3:31:19 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-3 @ 3 ft.

Project: Humble Yates Battery

Collection Date: 3/27/2019 4:05:00 PM

Lab ID: 1903E22-008

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	45	9.8		mg/Kg	1	3/31/2019 12:08:37 AM	43976
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/31/2019 12:08:37 AM	43976
Surr: DNOP	84.4	70-130		%Rec	1	3/31/2019 12:08:37 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/1/2019 6:17:02 PM	43962
Surr: BFB	94.3	73.8-119		%Rec	1	4/1/2019 6:17:02 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-4 @ 3 ft.

Project: Humble Yates Battery

Collection Date: 3/27/2019 4:10:00 PM

Lab ID: 1903E22-009

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	34	10		mg/Kg	1	3/31/2019 12:32:34 AM	43976
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/31/2019 12:32:34 AM	43976
Surr: DNOP	125	70-130		%Rec	1	3/31/2019 12:32:34 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/1/2019 6:40:37 PM	43962
Surr: BFB	90.2	73.8-119		%Rec	1	4/1/2019 6:40:37 PM	43962

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

## Analytical Report

Lab Order 1903E22

Date Reported:

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-5 @ 3 ft.

Project: Humble Yates Battery

Collection Date: 3/27/2019 4:15:00 PM

Lab ID: 1903E22-010

Matrix: SOIL

Received Date: 3/29/2019 8:40:00 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)	160	10		mg/Kg	1	3/31/2019 12:56:33 AM	43976
Motor Oil Range Organics (MRO)	140	50		mg/Kg	1	3/31/2019 12:56:33 AM	43976
Surr: DNOP	87.3	70-130		%Rec	1	3/31/2019 12:56:33 AM	43976
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: RAA
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/1/2019 7:04:15 PM	43962
Surr: BFB	91.5	73.8-119		%Rec	1	4/1/2019 7:04:15 PM	43962

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



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 15, 2019

Dave Boyer  
Safety & Environmental Solutions  
PO Box 1613  
Hobbs, NM 88241  
TEL: (575) 397-0510  
FAX: (575) 393-4388

RE: Maverick Humble Yates Batt

OrderNo.: 1904494

Dear Dave Boyer:

Hall Environmental Analysis Laboratory received 6 sample(s) on 4/9/2019 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-1 West Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 8:30:00 AM

Lab ID: 1904494-001

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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)	19	9.4		mg/Kg	1	4/13/2019 1:01:40 AM	44276
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/13/2019 1:01:40 AM	44276
Surr: DNOP	108	70-130		%Rec	1	4/13/2019 1:01:40 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/13/2019 10:16:16 PM	44253
Surr: BFB	93.4	73.8-119		%Rec	1	4/13/2019 10:16:16 PM	44253
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/13/2019 10:16:16 PM	44253
Toluene	ND	0.048		mg/Kg	1	4/13/2019 10:16:16 PM	44253
Ethylbenzene	ND	0.048		mg/Kg	1	4/13/2019 10:16:16 PM	44253
Xylenes, Total	ND	0.095		mg/Kg	1	4/13/2019 10:16:16 PM	44253
Surr: 4-Bromofluorobenzene	93.5	80-120		%Rec	1	4/13/2019 10:16:16 PM	44253

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

<b>Qualifiers:</b>	E	Value above quantitation range	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 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-1 East Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 8:45:00 AM

Lab ID: 1904494-002

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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)	26	9.7		mg/Kg	1	4/13/2019 1:25:45 AM	44276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/13/2019 1:25:45 AM	44276
Surr: DNOP	104	70-130		%Rec	1	4/13/2019 1:25:45 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/13/2019 10:39:39 PM	44253
Surr: BFB	91.0	73.8-119		%Rec	1	4/13/2019 10:39:39 PM	44253
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	4/13/2019 10:39:39 PM	44253
Toluene	ND	0.050		mg/Kg	1	4/13/2019 10:39:39 PM	44253
Ethylbenzene	ND	0.050		mg/Kg	1	4/13/2019 10:39:39 PM	44253
Xylenes, Total	ND	0.099		mg/Kg	1	4/13/2019 10:39:39 PM	44253
Surr: 4-Bromofluorobenzene	90.6	80-120		%Rec	1	4/13/2019 10:39:39 PM	44253

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

<b>Qualifiers:</b>	E	Value above quantitation range	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 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-2 West Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 9:20:00 AM

Lab ID: 1904494-003

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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)	12	9.8		mg/Kg	1	4/13/2019 1:49:54 AM	44276
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	4/13/2019 1:49:54 AM	44276
Surr: DNOP	113	70-130		%Rec	1	4/13/2019 1:49:54 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/13/2019 11:03:04 PM	44253
Surr: BFB	90.4	73.8-119		%Rec	1	4/13/2019 11:03:04 PM	44253
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/13/2019 11:03:04 PM	44253
Toluene	ND	0.047		mg/Kg	1	4/13/2019 11:03:04 PM	44253
Ethylbenzene	ND	0.047		mg/Kg	1	4/13/2019 11:03:04 PM	44253
Xylenes, Total	ND	0.094		mg/Kg	1	4/13/2019 11:03:04 PM	44253
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	4/13/2019 11:03:04 PM	44253

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

<b>Qualifiers:</b>	E	Value above quantitation range	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 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-2 East Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 9:45:00 AM

Lab ID: 1904494-004

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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)	13	9.9		mg/Kg	1	4/13/2019 2:13:51 AM	44276
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/13/2019 2:13:51 AM	44276
Surr: DNOP	105	70-130		%Rec	1	4/13/2019 2:13:51 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	4/13/2019 11:26:26 PM	44253
Surr: BFB	89.0	73.8-119		%Rec	1	4/13/2019 11:26:26 PM	44253
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/13/2019 11:26:26 PM	44253
Toluene	ND	0.046		mg/Kg	1	4/13/2019 11:26:26 PM	44253
Ethylbenzene	ND	0.046		mg/Kg	1	4/13/2019 11:26:26 PM	44253
Xylenes, Total	ND	0.093		mg/Kg	1	4/13/2019 11:26:26 PM	44253
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	4/13/2019 11:26:26 PM	44253

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

<b>Qualifiers:</b>	E	Value above quantitation range	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 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-5 West Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 10:15:00 AM

Lab ID: 1904494-005

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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	4/13/2019 2:37:54 AM	44276
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/13/2019 2:37:54 AM	44276
Surr: DNOP	104	70-130		%Rec	1	4/13/2019 2:37:54 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	4/14/2019 10:29:45 AM	44270
Surr: BFB	93.4	73.8-119		%Rec	1	4/14/2019 10:29:45 AM	44270
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	4/14/2019 10:29:45 AM	44270
Toluene	ND	0.048		mg/Kg	1	4/14/2019 10:29:45 AM	44270
Ethylbenzene	ND	0.048		mg/Kg	1	4/14/2019 10:29:45 AM	44270
Xylenes, Total	ND	0.096		mg/Kg	1	4/14/2019 10:29:45 AM	44270
Surr: 4-Bromofluorobenzene	94.9	80-120		%Rec	1	4/14/2019 10:29:45 AM	44270

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

<b>Qualifiers:</b>	E	Value above quantitation range	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 1904494

Date Reported: 4/15/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: SP-5 East Wall

Project: Maverick Humble Yates Batt

Collection Date: 4/5/2019 10:30:00 AM

Lab ID: 1904494-006

Matrix: SOIL

Received Date: 4/9/2019 9:15:00 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	4/13/2019 3:02:01 AM	44276
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/13/2019 3:02:01 AM	44276
Surr: DNOP	106	70-130		%Rec	1	4/13/2019 3:02:01 AM	44276
<b>EPA METHOD 8015D: GASOLINE RANGE</b>							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/14/2019 10:53:08 AM	44270
Surr: BFB	93.0	73.8-119		%Rec	1	4/14/2019 10:53:08 AM	44270
<b>EPA METHOD 8021B: VOLATILES</b>							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	4/14/2019 10:53:08 AM	44270
Toluene	ND	0.047		mg/Kg	1	4/14/2019 10:53:08 AM	44270
Ethylbenzene	ND	0.047		mg/Kg	1	4/14/2019 10:53:08 AM	44270
Xylenes, Total	ND	0.094		mg/Kg	1	4/14/2019 10:53:08 AM	44270
Surr: 4-Bromofluorobenzene	94.3	80-120		%Rec	1	4/14/2019 10:53:08 AM	44270

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

<b>Qualifiers:</b>	E	Value above quantitation range	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#: **1904494****15-Apr-19****Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates Batt

Sample ID: <b>MB-44276</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44276</b>	RunNo: <b>59065</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/11/2019</b>	SeqNo: <b>1988005</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	11		10.00		109	70	130			

Sample ID: <b>LCS-44276</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44276</b>	RunNo: <b>59065</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/11/2019</b>	SeqNo: <b>1988539</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	10	50.00	0	85.4	63.9	124			
Surr: DNOP	4.7		5.000		94.5	70	130			

Sample ID: <b>MB-44296</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44296</b>	RunNo: <b>59115</b>								
Prep Date: <b>4/11/2019</b>	Analysis Date: <b>4/12/2019</b>	SeqNo: <b>1990924</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	10		10.00		105	70	130			

Sample ID: <b>LCS-44296</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44296</b>	RunNo: <b>59115</b>								
Prep Date: <b>4/11/2019</b>	Analysis Date: <b>4/12/2019</b>	SeqNo: <b>1990925</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.6		5.000		92.9	70	130			

**Qualifiers:**

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

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

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

WO#: 1904494

15-Apr-19

**Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates Batt

Sample ID: <b>MB-44253</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44253</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990394</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	910		1000		90.5	73.8	119			

Sample ID: <b>LCS-44253</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44253</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990395</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	104	80.1	123			
Surr: BFB	1000		1000		103	73.8	119			

Sample ID: <b>MB-44270</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44270</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990417</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		87.7	73.8	119			

Sample ID: <b>LCS-44270</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44270</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>	SeqNo: <b>1990418</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	94.2	80.1	123			
Surr: BFB	980		1000		97.7	73.8	119			

Sample ID: <b>MB-44274</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44274</b>	RunNo: <b>59134</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>	SeqNo: <b>1990660</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	940		1000		93.7	73.8	119			

Sample ID: <b>LCS-44274</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44274</b>	RunNo: <b>59134</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>	SeqNo: <b>1990661</b> Units: <b>%Rec</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1100		1000		107	73.8	119			

**Qualifiers:**

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

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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1904494**

15-Apr-19

**Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates Batt

Sample ID: <b>MB-44253</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44253</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990440</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	0.90		1.000		90.4	80	120			

Sample ID: <b>LCS-44253</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44253</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990441</b> Units: <b>mg/Kg</b>								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.93	0.025	1.000	0	92.8	80	120			
Toluene	0.97	0.050	1.000	0	97.1	80	120			
Ethylbenzene	0.96	0.050	1.000	0	96.5	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.6	80	120			
Surr: 4-Bromofluorobenzene	0.96		1.000		95.5	80	120			

Sample ID: <b>MB-44270</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44270</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/13/2019</b>	SeqNo: <b>1990477</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	0.89		1.000		88.6	80	120			

Sample ID: <b>LCS-44270</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44270</b>	RunNo: <b>59130</b>								
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>	SeqNo: <b>1990499</b> Units: <b>mg/Kg</b>								
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	0.96	0.050	1.000	0	95.5	80	120			
Ethylbenzene	0.95	0.050	1.000	0	95.4	80	120			
Xylenes, Total	2.9	0.10	3.000	0	96.2	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		90.7	80	120			

**Qualifiers:**

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

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

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1904494****15-Apr-19****Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates Batt

Sample ID: <b>MB-44274</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>PBS</b>	Batch ID: <b>44274</b>			RunNo: <b>59134</b>						
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>			SeqNo: <b>1990691</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.6	80	120			

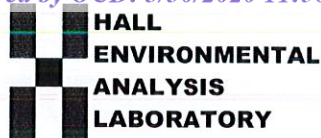
Sample ID: <b>LCS-44274</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8021B: Volatiles</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>44274</b>			RunNo: <b>59134</b>						
Prep Date: <b>4/10/2019</b>	Analysis Date: <b>4/14/2019</b>			SeqNo: <b>1990692</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	0.93		1.000		92.5	80	120			

**Qualifiers:**

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

H Holding times for preparation or analysis exceeded  
 PQL Practical Quantitative 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: **Safety Env Solutions**Work Order Number: **1904494**

RcptNo: 1

Received By: **Desiree Dominguez** 4/9/2019 9:15:00 AMCompleted By: **Erin Melendrez** 4/9/2019 11:20:03 AM

Reviewed By:

YG 4/9/19  
LB: DAD 4/9/19

ID  
uug

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
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?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 4/9/19

### 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.4	Good	Yes			
2	2.2	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)

July 23, 2019

Bob Allen  
Safety & Environmental Solutions  
PO Box 1613  
Hobbs, NM 88241  
TEL:  
FAX

RE: Maverick Humble Yates

OrderNo.: 1907671

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 4 sample(s) on 7/13/2019 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".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 1907671

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-1 1FT

Project: Maverick Humble Yates

Collection Date: 7/12/2019 10:30:00 AM

Lab ID: 1907671-001

Matrix: SOIL

Received Date: 7/13/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	8300	200		mg/Kg	20	7/22/2019 5:57:39 PM
Motor Oil Range Organics (MRO)	3600	1000		mg/Kg	20	7/22/2019 5:57:39 PM
Surr: DNOP	0	70-130	S	%Rec	20	7/22/2019 5:57:39 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	100	25		mg/Kg	5	7/16/2019 8:18:10 PM
Surr: BFB	326	73.8-119	S	%Rec	5	7/16/2019 8:18:10 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.12		mg/Kg	5	7/16/2019 8:18:10 PM
Toluene	ND	0.25		mg/Kg	5	7/16/2019 8:18:10 PM
Ethylbenzene	1.8	0.25		mg/Kg	5	7/16/2019 8:18:10 PM
Xylenes, Total	3.4	0.49		mg/Kg	5	7/16/2019 8:18:10 PM
Surr: 4-Bromofluorobenzene	118	80-120		%Rec	5	7/16/2019 8:18:10 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	6500	300		mg/Kg	100	7/19/2019 5:52:20 PM

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 1907671

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-2 1FT

Project: Maverick Humble Yates

Collection Date: 7/12/2019 10:35:00 AM

Lab ID: 1907671-002

Matrix: SOIL

Received Date: 7/13/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	10000	190		mg/Kg	20	7/22/2019 6:42:15 PM
Motor Oil Range Organics (MRO)	3900	940		mg/Kg	20	7/22/2019 6:42:15 PM
Surr: DNOP	0	70-130	S	%Rec	20	7/22/2019 6:42:15 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	750	24		mg/Kg	5	7/16/2019 9:03:32 PM
Surr: BFB	979	73.8-119	S	%Rec	5	7/16/2019 9:03:32 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	0.45	0.12		mg/Kg	5	7/16/2019 9:03:32 PM
Toluene	13	0.24		mg/Kg	5	7/16/2019 9:03:32 PM
Ethylbenzene	29	2.4		mg/Kg	50	7/17/2019 12:41:36 PM
Xylenes, Total	47	0.49		mg/Kg	5	7/16/2019 9:03:32 PM
Surr: 4-Bromofluorobenzene	213	80-120	S	%Rec	5	7/16/2019 9:03:32 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	5200	300		mg/Kg	100	7/19/2019 6:04:44 PM

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 1907671

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-3 1FT

Project: Maverick Humble Yates

Collection Date: 7/12/2019 10:50:00 AM

Lab ID: 1907671-003

Matrix: SOIL

Received Date: 7/13/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	73	9.8		mg/Kg	1	7/18/2019 8:50:27 PM
Motor Oil Range Organics (MRO)	97	49		mg/Kg	1	7/18/2019 8:50:27 PM
Surr: DNOP	114	70-130		%Rec	1	7/18/2019 8:50:27 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	7/16/2019 10:11:48 PM
Surr: BFB	107	73.8-119		%Rec	1	7/16/2019 10:11:48 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.024		mg/Kg	1	7/16/2019 10:11:48 PM
Toluene	ND	0.049		mg/Kg	1	7/16/2019 10:11:48 PM
Ethylbenzene	ND	0.049		mg/Kg	1	7/16/2019 10:11:48 PM
Xylenes, Total	ND	0.097		mg/Kg	1	7/16/2019 10:11:48 PM
Surr: 4-Bromofluorobenzene	91.5	80-120		%Rec	1	7/16/2019 10:11:48 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>smb</b>
Chloride	150	60		mg/Kg	20	7/18/2019 1:40:12 PM

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 1907671

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: AH-4 1FT

Project: Maverick Humble Yates

Collection Date: 7/12/2019 11:00:00 AM

Lab ID: 1907671-004

Matrix: SOIL

Received Date: 7/13/2019 8:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	9300	970		mg/Kg	100	7/18/2019 8:25:35 PM
Motor Oil Range Organics (MRO)	5600	4800		mg/Kg	100	7/18/2019 8:25:35 PM
Surr: DNOP	0	70-130	S	%Rec	100	7/18/2019 8:25:35 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	920	25		mg/Kg	5	7/16/2019 10:34:28 PM
Surr: BFB	1080	73.8-119	S	%Rec	5	7/16/2019 10:34:28 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	0.23	0.12		mg/Kg	5	7/16/2019 10:34:28 PM
Toluene	14	0.25		mg/Kg	5	7/16/2019 10:34:28 PM
Ethylbenzene	21	0.25		mg/Kg	5	7/16/2019 10:34:28 PM
Xylenes, Total	51	0.50		mg/Kg	5	7/16/2019 10:34:28 PM
Surr: 4-Bromofluorobenzene	198	80-120	S	%Rec	5	7/16/2019 10:34:28 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>MRA</b>
Chloride	2700	150		mg/Kg	50	7/19/2019 6:17:09 PM

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#: **1907671****23-Jul-19****Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates

Sample ID: <b>MB-46249</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46249</b>	RunNo: <b>61478</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2085062</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-46249</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46249</b>	RunNo: <b>61478</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2085063</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	94.8	90	110			

**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#: 1907671

23-Jul-19

**Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates

Sample ID: <b>MB-46237</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46237</b>	RunNo: <b>61479</b>								
Prep Date: <b>7/17/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2084881</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	12		10.00		115	70	130			

Sample ID: <b>LCS-46237</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46237</b>	RunNo: <b>61511</b>								
Prep Date: <b>7/17/2019</b>	Analysis Date: <b>7/19/2019</b>	SeqNo: <b>2085058</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	63	10	50.00	0	127	63.9	124			S
Surr: DNOP	5.0		5.000		100	70	130			

Sample ID: <b>LCS-46265</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46265</b>	RunNo: <b>61511</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/19/2019</b>	SeqNo: <b>2085370</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.0		5.000		80.9	70	130			

Sample ID: <b>MB-46265</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46265</b>	RunNo: <b>61511</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/19/2019</b>	SeqNo: <b>2085380</b>	Units: <b>%Rec</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.7		10.00		97.0	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#: 1907671

23-Jul-19

**Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates

Sample ID: <b>MB-46184</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46184</b>	RunNo: <b>61408</b>								
Prep Date: <b>7/15/2019</b>	Analysis Date: <b>7/16/2019</b>	SeqNo: <b>2081931</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	1100		1000		106	73.8	119			

Sample ID: <b>LCS-46184</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46184</b>	RunNo: <b>61408</b>								
Prep Date: <b>7/15/2019</b>	Analysis Date: <b>7/16/2019</b>	SeqNo: <b>2081932</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	95.5	80.1	123			
Surr: BFB	1200		1000		120	73.8	119			S

**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#: 1907671

23-Jul-19

**Client:** Safety & Environmental Solutions**Project:** Maverick Humble Yates

Sample ID: <b>MB-46184</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46184</b>	RunNo: <b>61408</b>								
Prep Date: <b>7/15/2019</b>	Analysis Date: <b>7/16/2019</b>	SeqNo: <b>2081946</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	0.92		1.000		92.3	80	120			

Sample ID: <b>LCS-46184</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46184</b>	RunNo: <b>61408</b>								
Prep Date: <b>7/15/2019</b>	Analysis Date: <b>7/16/2019</b>	SeqNo: <b>2081947</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.98	0.025	1.000	0	97.6	80	120			
Toluene	1.0	0.050	1.000	0	99.6	80	120			
Ethylbenzene	0.97	0.050	1.000	0	97.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.6	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		105	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 Limit



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: **Safety Env Solutions**Work Order Number: **1907671**RcptNo: **1**Received By: **Isaiah Ortiz**

7/13/2019 8:30:00 AM

I-Ox

Completed By: **Leah Baca**

7/15/2019 10:32:40 AM

Leah Baca

Reviewed By: **LB**

7/15/19

### 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
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?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: **DAD 7/15/19**

### 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	1.1	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)

March 23, 2020

Bob Allen  
Safety & Environmental Solutions  
PO Box 1613  
Hobbs, NM 88241  
TEL: (575) 397-0510  
FAX (575) 393-4388

RE: Humble Yates

OrderNo.: 2003550

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 18 sample(s) on 3/12/2020 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 horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 2'

Project: Humble Yates

Collection Date: 3/10/2020 10:05:00 AM

Lab ID: 2003550-001

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	ND	60		mg/Kg	20	3/16/2020 3:59:17 PM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	59	50		mg/Kg	10	3/14/2020 8:34:01 PM	51074
Surr: BFB	88.1	70-130		%Rec	10	3/14/2020 8:34:01 PM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	1100	45		mg/Kg	5	3/18/2020 3:17:57 PM	51086
Motor Oil Range Organics (MRO)	430	230		mg/Kg	5	3/18/2020 3:17:57 PM	51086
Surr: DNOP	99.8	55.1-146		%Rec	5	3/18/2020 3:17:57 PM	51086

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 4-6'

Project: Humble Yates

Collection Date: 3/10/2020 10:20:00 AM

Lab ID: 2003550-002

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: <b>CAS</b>
Chloride	2100	60		mg/Kg	20	3/16/2020 4:11:39 PM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: <b>DJF</b>
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/15/2020 12:01:28 AM	51074
Surr: BFB	100	70-130		%Rec	1	3/15/2020 12:01:28 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: <b>BRM</b>
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/17/2020 7:04:33 AM	51086
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/17/2020 7:04:33 AM	51086
Surr: DNOP	102	55.1-146		%Rec	1	3/17/2020 7:04:33 AM	51086

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 9-11'

Project: Humble Yates

Collection Date: 3/10/2020 10:30:00 AM

Lab ID: 2003550-003

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	160	60		mg/Kg	20	3/16/2020 4:24:00 PM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 12:31:05 AM	51074
Surr: BFB	97.5	70-130		%Rec	1	3/15/2020 12:31:05 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/17/2020 7:28:27 AM	51086
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/17/2020 7:28:27 AM	51086
Surr: DNOP	97.9	55.1-146		%Rec	1	3/17/2020 7:28:27 AM	51086

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 14-16'

Project: Humble Yates

Collection Date: 3/10/2020 10:43:00 AM

Lab ID: 2003550-004

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2200	150		mg/Kg	50	3/17/2020 11:51:43 PM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 1:00:42 AM	51074
Surr: BFB	100	70-130		%Rec	1	3/15/2020 1:00:42 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/17/2020 7:52:23 AM	51086
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/17/2020 7:52:23 AM	51086
Surr: DNOP	94.0	55.1-146		%Rec	1	3/17/2020 7:52:23 AM	51086

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 19-21'

Project: Humble Yates

Collection Date: 3/10/2020 10:50:00 AM

Lab ID: 2003550-005

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	4000	150		mg/Kg	50	3/18/2020 12:04:03 AM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/15/2020 1:30:16 AM	51074
Surr: BFB	96.5	70-130		%Rec	1	3/15/2020 1:30:16 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/16/2020 6:05:47 PM	51095
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/16/2020 6:05:47 PM	51095
Surr: DNOP	97.4	55.1-146		%Rec	1	3/16/2020 6:05:47 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 24-26'

Project: Humble Yates

Collection Date: 3/10/2020 11:15:00 AM

Lab ID: 2003550-006

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2500	150		mg/Kg	50	3/18/2020 12:16:24 AM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/15/2020 1:59:48 AM	51074
Surr: BFB	95.2	70-130		%Rec	1	3/15/2020 1:59:48 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/16/2020 6:29:54 PM	51095
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/16/2020 6:29:54 PM	51095
Surr: DNOP	97.7	55.1-146		%Rec	1	3/16/2020 6:29:54 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 29-31'

Project: Humble Yates

Collection Date: 3/10/2020 11:50:00 AM

Lab ID: 2003550-007

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2100	150		mg/Kg	50	3/18/2020 12:28:45 AM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 2:29:17 AM	51074
Surr: BFB	91.6	70-130		%Rec	1	3/15/2020 2:29:17 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/16/2020 6:54:01 PM	51095
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/16/2020 6:54:01 PM	51095
Surr: DNOP	95.9	55.1-146		%Rec	1	3/16/2020 6:54:01 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 34-36'

Project: Humble Yates

Collection Date: 3/10/2020 12:20:00 PM

Lab ID: 2003550-008

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2100	150		mg/Kg	50	3/18/2020 12:41:05 AM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/15/2020 2:58:42 AM	51074
Surr: BFB	99.7	70-130		%Rec	1	3/15/2020 2:58:42 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/16/2020 7:42:06 PM	51095
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/16/2020 7:42:06 PM	51095
Surr: DNOP	96.3	55.1-146		%Rec	1	3/16/2020 7:42:06 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 39-41'

Project: Humble Yates

Collection Date: 3/10/2020 12:35:00 PM

Lab ID: 2003550-009

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: CAS
Chloride	2100	60		mg/Kg	20	3/16/2020 6:02:45 PM	51120
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 3:28:06 AM	51074
Surr: BFB	99.8	70-130		%Rec	1	3/15/2020 3:28:06 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/16/2020 8:06:07 PM	51095
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/16/2020 8:06:07 PM	51095
Surr: DNOP	96.2	55.1-146		%Rec	1	3/16/2020 8:06:07 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 44-46'

Project: Humble Yates

Collection Date: 3/10/2020 1:05:00 PM

Lab ID: 2003550-010

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	2100	60		mg/Kg	20	3/17/2020 2:11:23 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 3:57:25 AM	51074
Surr: BFB	94.9	70-130		%Rec	1	3/15/2020 3:57:25 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/16/2020 8:30:05 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 8:30:05 PM	51095
Surr: DNOP	95.8	55.1-146		%Rec	1	3/16/2020 8:30:05 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-1 49-51'

Project: Humble Yates

Collection Date: 3/10/2020 1:20:00 PM

Lab ID: 2003550-011

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	500	60		mg/Kg	20	3/17/2020 2:48:24 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 4:26:43 AM	51074
Surr: BFB	97.7	70-130		%Rec	1	3/15/2020 4:26:43 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/16/2020 8:54:02 PM	51095
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/16/2020 8:54:02 PM	51095
Surr: DNOP	102	55.1-146		%Rec	1	3/16/2020 8:54:02 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 1ft

Project: Humble Yates

Collection Date: 3/10/2020 3:05:00 PM

Lab ID: 2003550-012

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	270	60		mg/Kg	20	3/17/2020 3:50:07 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	210	4.9		mg/Kg	1	3/15/2020 4:56:00 AM	51074
Surr: BFB	85.8	70-130		%Rec	1	3/15/2020 4:56:00 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	4800	190		mg/Kg	20	3/16/2020 9:17:58 PM	51095
Motor Oil Range Organics (MRO)	2100	970		mg/Kg	20	3/16/2020 9:17:58 PM	51095
Surr: DNOP	0	55.1-146	S	%Rec	20	3/16/2020 9:17:58 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 2-4'

Project: Humble Yates

Collection Date: 3/10/2020 3:20:00 PM

Lab ID: 2003550-013

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	1600	60		mg/Kg	20	3/17/2020 4:02:28 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/20/2020 1:26:26 AM	51074
Surr: BFB	103	70-130		%Rec	1	3/20/2020 1:26:26 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/16/2020 9:41:51 PM	51095
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/16/2020 9:41:51 PM	51095
Surr: DNOP	95.6	55.1-146		%Rec	1	3/16/2020 9:41:51 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 4-6'

Project: Humble Yates

Collection Date: 3/10/2020 3:25:00 PM

Lab ID: 2003550-014

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	3500	150		mg/Kg	50	3/19/2020 12:40:43 AM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 5:54:26 AM	51074
Surr: BFB	98.3	70-130		%Rec	1	3/15/2020 5:54:26 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/16/2020 10:05:45 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 10:05:45 PM	51095
Surr: DNOP	94.3	55.1-146		%Rec	1	3/16/2020 10:05:45 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 9-11'

Project: Humble Yates

Collection Date: 3/10/2020 3:40:00 PM

Lab ID: 2003550-015

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	190	60		mg/Kg	20	3/17/2020 4:27:10 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 6:23:44 AM	51074
Surr: BFB	93.8	70-130		%Rec	1	3/15/2020 6:23:44 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/16/2020 10:29:35 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 10:29:35 PM	51095
Surr: DNOP	94.2	55.1-146		%Rec	1	3/16/2020 10:29:35 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 14-16'

Project: Humble Yates

Collection Date: 3/10/2020 3:50:00 PM

Lab ID: 2003550-016

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	86	60		mg/Kg	20	3/17/2020 4:39:32 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/15/2020 6:52:47 AM	51074
Surr: BFB	92.5	70-130		%Rec	1	3/15/2020 6:52:47 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/16/2020 10:53:25 PM	51095
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/16/2020 10:53:25 PM	51095
Surr: DNOP	91.2	55.1-146		%Rec	1	3/16/2020 10:53:25 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 19-21'

Project: Humble Yates

Collection Date: 3/10/2020 4:05:00 PM

Lab ID: 2003550-017

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	130	60		mg/Kg	20	3/17/2020 4:51:52 PM	51138
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 7:21:55 AM	51074
Surr: BFB	90.1	70-130		%Rec	1	3/15/2020 7:21:55 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/16/2020 11:17:15 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 11:17:15 PM	51095
Surr: DNOP	91.1	55.1-146		%Rec	1	3/16/2020 11:17:15 PM	51095

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 2003550

Date Reported: 3/23/2020

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety &amp; Environmental Solutions

Client Sample ID: BH-2 24-26'

Project: Humble Yates

Collection Date: 3/10/2020 4:30:00 PM

Lab ID: 2003550-018

Matrix: SOIL

Received Date: 3/12/2020 8:20:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: JMT
Chloride	190	59		mg/Kg	20	3/17/2020 5:28:55 PM	51169
<b>EPA METHOD 8015D MOD: GASOLINE RANGE</b>							Analyst: DJF
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/15/2020 7:51:01 AM	51074
Surr: BFB	99.0	70-130		%Rec	1	3/15/2020 7:51:01 AM	51074
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/16/2020 11:41:04 PM	51095
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/16/2020 11:41:04 PM	51095
Surr: DNOP	89.2	55.1-146		%Rec	1	3/16/2020 11:41:04 PM	51095

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#: 2003550

23-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Humble Yates

Sample ID: <b>MB-51120</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51120</b>	RunNo: <b>67353</b>								
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2321543</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-51120</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51120</b>	RunNo: <b>67353</b>								
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2321544</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	93.0	90	110			

Sample ID: <b>MB-51138</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51138</b>	RunNo: <b>67352</b>								
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/17/2020</b>	SeqNo: <b>2323300</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-51138</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51138</b>	RunNo: <b>67352</b>								
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/17/2020</b>	SeqNo: <b>2323301</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	92.4	90	110			

Sample ID: <b>MB-51169</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51169</b>	RunNo: <b>67352</b>								
Prep Date: <b>3/17/2020</b>	Analysis Date: <b>3/17/2020</b>	SeqNo: <b>2323330</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-51169</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51169</b>	RunNo: <b>67352</b>								
Prep Date: <b>3/17/2020</b>	Analysis Date: <b>3/17/2020</b>	SeqNo: <b>2323331</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	93.6	90	110			

**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#: 2003550

23-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Humble Yates

Sample ID: <b>LCS-51086</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51086</b>	RunNo: <b>67313</b>								
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2320643</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	10	50.00	0	107	70	130			
Surr: DNOP	5.2		5.000		105	55.1	146			

Sample ID: <b>MB-51086</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51086</b>	RunNo: <b>67313</b>								
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2320644</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	11		10.00		109	55.1	146			

Sample ID: <b>MB-51095</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51095</b>	RunNo: <b>67317</b>								
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2321359</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	11		10.00		109	55.1	146			

Sample ID: <b>LCS-51095</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51095</b>	RunNo: <b>67317</b>								
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/16/2020</b>	SeqNo: <b>2321360</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	10	50.00	0	100	70	130			
Surr: DNOP	5.1		5.000		101	55.1	146			

Sample ID: <b>MB-51096</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51096</b>	RunNo: <b>67317</b>								
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/17/2020</b>	SeqNo: <b>2321383</b>			Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		95.5	55.1	146			

**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#: 2003550

23-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Humble Yates

Sample ID: <b>LCS-51096</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>51096</b>			RunNo: <b>67317</b>						
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/17/2020</b>			SeqNo: <b>2321384</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		88.2	55.1	146			

Sample ID: <b>LCS-51100</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>51100</b>			RunNo: <b>67313</b>						
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/17/2020</b>			SeqNo: <b>2321410</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		84.7	55.1	146			

Sample ID: <b>MB-51100</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>51100</b>			RunNo: <b>67313</b>						
Prep Date: <b>3/13/2020</b>	Analysis Date: <b>3/17/2020</b>			SeqNo: <b>2321412</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.0		10.00		90.4	55.1	146			

Sample ID: <b>LCS-51123</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>51123</b>			RunNo: <b>67313</b>						
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/18/2020</b>			SeqNo: <b>2323089</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		82.0	55.1	146			

Sample ID: <b>MB-51123</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>51123</b>			RunNo: <b>67313</b>						
Prep Date: <b>3/16/2020</b>	Analysis Date: <b>3/18/2020</b>			SeqNo: <b>2323090</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		96.2	55.1	146			

Sample ID: <b>LCS-51152</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>51152</b>			RunNo: <b>67313</b>						
Prep Date: <b>3/17/2020</b>	Analysis Date: <b>3/19/2020</b>			SeqNo: <b>2325138</b>	Units: <b>%Rec</b>					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.4	55.1	146			

**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#: 2003550

23-Mar-20

Client: Safety & Environmental Solutions

Project: Humble Yates

Sample ID: MB-51152	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 51152	RunNo: 67313								
Prep Date: 3/17/2020	Analysis Date: 3/19/2020	SeqNo: 2325139	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.2		10.00		91.7	55.1	146			

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#: 2003550

23-Mar-20

**Client:** Safety & Environmental Solutions**Project:** Humble Yates

Sample ID: <b>mb-51074</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>51074</b>	RunNo: <b>67308</b>								
Prep Date: <b>3/12/2020</b>	Analysis Date: <b>3/14/2020</b>	SeqNo: <b>2319949</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	470		500.0		93.3	70	130			

Sample ID: <b>lcs-51074</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D Mod: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>51074</b>	RunNo: <b>67308</b>								
Prep Date: <b>3/12/2020</b>	Analysis Date: <b>3/14/2020</b>	SeqNo: <b>2319950</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.2	70	130			
Surr: BFB	470		500.0		93.1	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



## Sample Log-In Check List

Client Name: Safety Env Solutions

Work Order Number: 2003550

RcptNo: 1

Received By: Yazmine Garduno

3/12/2020 8:20:00 AM

Completed By: Yazmine Garduno

3/12/2020 10:55:29 AM

Reviewed By: ENM

3/12/20

Chain of Custody

1. Is Chain of Custody sufficiently 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  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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. Received at least 1 vial with headspace  $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
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?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by:

Y6 3/12/20

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:

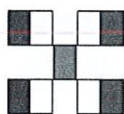
17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.5	Good				
2	5.6	Good				
3	4.1	Good				



Chain-of-Custody Record			
Client: <u>Seafly &amp; Environmental Solutions</u>			
Mailing Address: <u>PO Box 1613 Hobbs NM 88241</u>			
Phone #: <u>575 397-0510</u>			
email or Fax#: <u>dghoyer@seal-nm.com</u>			
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other			
Turn-Around Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush			
Project Name: <u>Wumble-Yates</u>			
Project #: <u>NAV-19-001</u>			
Project Manager: <u>Bob Allen</u>			
Sampler: <u>DAVID ROYER</u>			
On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>40°F = 41</u>			
# of Coolers: <u>3</u> <u>5.5 to 1 = 5V</u>			
Cooler Temp (including CF): <u>5.4 to 1 = 5.5 (°C)</u>			
Container Type and #			
Preservative Type			
HEAL No.			
Date			
Time			
Sample Name			
Matrix			
Date			
Time			
Relinquished by: <u>David Royer</u>			
Relinquished by: <u>David Royer</u>			
Date			
Time			
Received by: <u>David Royer</u>			
Received by: <u>David Royer</u>			
Date			
Time			

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

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109


Tel. 505-345-3975  
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
## Analysis Request

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Remarks:

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		3/11/20	1600

Received by: 	Via:	Date	Time
	runner	3/12/20	0820



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