

**K9EPO-190821-C-1440**

**Maverick Natural Resources  
Humble Yates Battery  
2RP-5384  
Closure Report  
Section 16, Township 18S, Range 28E  
Lea County, New Mexico  
**Revised**  
August 21, 2019**



**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**

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**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 bbl. 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 (Figure 1).

**III. Surface and Ground Water**

According to the New Mexico Office of the State Engineer: there is no record of groundwater in the immediate vicinity of this location, however the well depth to water for this area is 300' bgs (Appendix A).

**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. The spill area was photographed and mapped utilizing a handheld Juno 3B for accuracy (Appendix B). The area was flagged for New Mexico One Call clearance.

On January 10, 2019 SESI personnel revisited the site, together with equipment and personnel from Phoenix Construction. The interior of the bermed area has 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 activity of the interior bermed area, and to conduction soil 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., to the 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 (Cl Method SM4500Cl-B), and Total Petroleum Hydrocarbons (TPH 8015M). Below is a tabular recap of the results for ease of reference (Appendix C).

| 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, on the pad where fluids had pooled. Due to the aforementioned soil screening levels; TPH was the constituency of concern. It was noted that there were a significant number of lines in this area that had not been previously marked by New Mexico One Call. 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 impaired 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. Conclusions

Based on the number of lines and tanks inside the bermed area that encompasses 1,689<sup>2</sup> ft in a compacted area. Therefore, it is 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):

| Sample ID | DRO   | MRO  | GRO | BTEX | Chlorides |
|-----------|-------|------|-----|------|-----------|
| AH-1 @ 1' | 8300  | 3600 | 100 | ND   | 6500      |
| AH-2 @1'  | 10000 | 3900 | 750 | 47   | 5200      |
| AH-3 @1'  | 73    | 97   | ND  | ND   | 150       |
| AH-4 @1'  | 9300  | 5600 | 920 | 51   | 2700      |

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 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 have been remediated in accordance with NMOCD and NMSLO soil screening guidelines (Appendix D). 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 is recommended at this time.

Remedial actions at this site have all been performed with the approval of, and in accordance with all New Mexico Oil Conservation Division (NMOCD) requirements. As a result, we respectfully submit this closure report for your consideration and approval.

**VII. Figures & Appendices**

Figure 1 – C-141  
Appendix A – Groundwater  
Appendix B – Site Map  
Appendix C – Laboratory Analyses  
Appendix D – Site Photograph Documentation

**Figure 1**  
**C-141**

|                |          |
|----------------|----------|
| 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 ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

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

Printed Name: Thomas Haigood Title: ~~EHS Coordinator~~ Remediation 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: \_\_\_\_\_

# **Appendix A Groundwater**



## New Mexico Office of the State Engineer

# Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

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

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

| POD Number               | Code | Sub-basin | County | Q 64 | Q 16 | Q 4 | Sec 33 | Tws 18S | Rng 28E | X 576976 | Y 3619384* | DepthWell | DepthWater | Water Column |
|--------------------------|------|-----------|--------|------|------|-----|--------|---------|---------|----------|------------|-----------|------------|--------------|
| <a href="#">RA 09588</a> |      | RA        | ED     | 1    | 2    | 33  |        | 18S     | 28E     |          |            | 300       |            |              |

Average Depth to Water: --  
 Minimum Depth: --  
 Maximum Depth: --

**Record Count:** 1

**PLSS Search:**

**Township:** 18S    **Range:** 28E

\*UTM location was derived from PLSS - see Help

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

4/2/19 1:32 PM

WATER COLUMN/ AVERAGE DEPTH  
TO WATER

# **Appendix B**

## **Site Plan-Map**

# Breitburn Humble Yates Battery

Battery Sample Positions

**Legend**

- AH
- ◻ Berm
- ⚡ HP Unmarked Line



Test Trench



# **Appendix C**

## **Laboratory Analyses**

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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 |

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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 |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>RAA</b> |
| 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

**Hall Environmental Analysis Laboratory, Inc.****CLIENT:** Safety & 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1903E22

Date Reported:

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>RAA</b> |
| 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.

|                    |     |   |    |   |
|--------------------|-----|---|----|---|
| <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 |



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', written in a cursive style.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1904494**

Date Reported: **4/15/2019**

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 |     |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1904494

Date Reported: 4/15/2019

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 |     |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1904494**

Date Reported: **4/15/2019**

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 |     |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1904494**

Date Reported: **4/15/2019**

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 |     |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1904494**

Date Reported: **4/15/2019**

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 |     |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1904494**

Date Reported: **4/15/2019**

**CLIENT:** Safety & 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: <b>Irm</b> |
| 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: <b>NSB</b> |
| 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: <b>NSB</b> |
| 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 &amp; 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  | 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-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  | 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 &amp; 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  | 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 |     |   |

**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 AM

Completed By: **Erin Melendrez** 4/9/2019 11:20:03 AM

Reviewed By: **YG 4/9/19**

**LB: DAD 4/9/19**

*Handwritten initials: ID, UAG*

**Chain of Custody**

1. Is Chain of Custody complete? Yes  No  Not Present

2. How was the sample delivered? Courier

**Log In**

3. Was an attempt made to cool the samples? Yes  No  NA

4. Were all samples received at a temperature of >0° C to 6.0°C Yes  No  NA

5. Sample(s) in proper container(s)? Yes  No

6. Sufficient sample volume for indicated test(s)? Yes  No

7. Are samples (except VOA and ONG) properly preserved? Yes  No

8. Was preservative added to bottles? Yes  No  NA

9. VOA vials have zero headspace? Yes  No  No VOA Vials

10. Were any sample containers received broken? Yes  No

11. Does paperwork match bottle labels? (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:     | <input type="text"/> | Date: | <input type="text"/>  |
| By Whom:             | <input type="text"/> | Via:  | <input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person |
| Regarding:           | <input type="text"/> |       |   |
| Client Instructions: | <input type="text"/> |       |   |

16. Additional remarks:

**17. Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 5.4     | Good      | Yes         |         |           |           |
| 2         | 2.2     | Good      | Yes         |         |           |           |

# Chain-of-Custody Record

Client: Safety & Environmental Solutions

Mailing Address: 703 E. Clinton Hobbs NM 88240

Phone #: 575-390-0570

email or Fax#: \_\_\_\_\_

QA/QC Package:  Standard  Level 4 (Full Validation)  Other \_\_\_\_\_

Accreditation:  NELAP  Other \_\_\_\_\_

EDD (Type) \_\_\_\_\_

Turn-Around Time: 5 Day Rush SPs

Standard  Rush

Project Name: MONERUC (DUMBLE YATES BATT.)

Project #: MAV-19-001

Project Manager: Allen, Bob

Sampler: Spencer

On Ice:  Yes  No

Sample Temperature: 5.4°C, 2.2°C

| Date  | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. |
|-------|------|--------|-------------------|----------------------|-------------------|----------|
| 04/05 | 830  | S      | SP-1 West         | 1                    | Freeze            | 1904494  |
| }     | 845  | S      | SP-1 East         | 1                    | Freeze            | -001     |
|       | 0920 | S      | SP-2 West         | 1                    | Freeze            | -002     |
| }     | 0945 | S      | SP-2 East         | 1                    | Freeze            | -003     |
|       | 1015 | S      | SP-5 West         | 1                    | Freeze            | -004     |
| }     | 1030 | S      | SP-5 East         | 1                    | Freeze            | -005     |
|       |      |        |                   |                      |                   | -006     |

Relinquished by: Spencer Date: 04/08/2000 Time: 1900

Received by: NZ Bay Date: 4/8/19 Time: 0730

Relinquished by: Spencer Date: 4/8/19 Time: 1900

Received by: DB courier Date: 4/9/19 Time: 9:15

# HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com  
 4901 Hawkins NE - Albuquerque, NM 87109  
 Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

| BTEX + MTBE + TMS (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> ) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | Air Bubbles (Y or N) |
|--------------------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|----------------------|
| X                        | X                            | X                           |                    |                    |                           |               |  |                              |             |                 |                      |
| X                        | X                            | X                           |                    |                    |                           |               |  |                              |             |                 |                      |
| X                        | X                            | X                           |                    |                    |                           |               |  |                              |             |                 |                      |
| X                        | X                            | X                           |                    |                    |                           |               |  |                              |             |                 |                      |
| X                        | X                            | X                           |                    |                    |                           |               |  |                              |             |                 |                      |

Remarks: \_\_\_\_\_

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



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

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", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order **1907671**

Date Reported: 7/23/2019

**CLIENT:** Safety & 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.

**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, Inc.

Analytical Report

Lab Order **1907671**

Date Reported: 7/23/2019

**CLIENT:** Safety & 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 |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907671

Date Reported: 7/23/2019

**CLIENT:** Safety & 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 |   |

# Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1907671

Date Reported: 7/23/2019

**CLIENT:** Safety & 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.

**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-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.              | 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-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.              | 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 |   |

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

# of preserved bottles checked for pH: \_\_\_\_\_  
 (<2 or >12 unless noted)  
 Adjusted? \_\_\_\_\_  
 Checked by: *DAD 7/15/19*

**Special Handling (if applicable)**

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

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

16. Additional remarks:

**17. Cooler Information**

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1         | 1.1     | Good      | Yes         |         |           |           |



# **Appendix D**

## **Photograph Documentation**

# 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