

December 28, 2015

NMOCD District II Attn. Heather Patterson 1301 W Grand Ave Artesia, NM 88210

SUBJECT: SOIL REMEDIATION WORK PLAN FOR INCIDENT 2RP-3386 JRS HORZ FEDERAL #1, EDDY COUNTY, NEW MEXICO

Dear Ms. Patterson:

On behalf of COG Operating (COG), Souder Miller & Associates (SMA) is pleased to submit the attached Work Plan summarizing the planned soil remediation of the release site located on the JRS HORZ Federal #1 in Eddy County, New Mexico. The purpose of the work plan is to obtain approval from the New Mexico Oil Conservation Division for remediation of the release that occurred on October 21, 2015.

At the request of COG, SMA responded to assess and delineate the production fluids release associated with the JRS HORZ Federal #1 Oil well location. The release was initially reported to NMOCD by COG Operating on November 4, 2015 and was a result of a Lighting Strike incident. The table below summarizes information regarding the release. Results of the assessment and delineation follow in the attached report.

| Table 1: Rele             | ase information and Site Ranking        |                  |                   |               |                      |  |  |  |  |
|---------------------------|---|------------------|-------------------|---------------|----------------------|--|--|--|--|
| Name                      | JRS HORZ Federal #1                     |                  |                   |               |                      |  |  |  |  |
| Location                  | Incident<br>Number                      | API<br>Number    | ion, Towns        | hip, Range    |                      |  |  |  |  |
| Location                  | 2RP-<br>3386                            | 30-015-<br>33066 | SW/NE<br>(Unit D) | Section<br>10 | T 26S, R 29E<br>NMPM |  |  |  |  |
| Estimated Date of Release | October 2                               | 21, 2015         |                   |               |                      |  |  |  |  |
| Date Reported to NMOCD    | November 4, 2015                        |                  |                   |               |                      |  |  |  |  |
| Reported by               | Amanda 7                                | Γrujillo Dav     | is                |               |                      |  |  |  |  |
| Land Owner                | Bureau of Land Management (BLM)         |                  |                   |               |                      |  |  |  |  |
| Reported To               | NM Oil Conservation Division (NMOCD)    |                  |                   |               |                      |  |  |  |  |
| Source of Release         | Lighting S                              | trike            |                   |               |                      |  |  |  |  |
| Released Material         | Produced                                | Water and        | l Oil             |               |                      |  |  |  |  |
| Released Volume           | 1310 bbls                               | Produced         | Water and         | 44 bbls Oi    | il                   |  |  |  |  |
| Recovered Volume          | 200 bbls Produced Water and 40 bbls Oil |                  |                   |               |                      |  |  |  |  |
| Net Release               | 1110 bbl Produced Water and 4 bbl Oil   |                  |                   |               |                      |  |  |  |  |
| Nearest Waterway          | 1,800 fee                               | t north of t     | he location       | 1.            |                      |  |  |  |  |



| Depth to Groundwater  | Estimated to be 102 feet                         |
|---|--|
| Nearest Domestic Water Source   | Greater than 1000 feet                           |
| NMOCD Ranking   | 0  |
| SMA Response Dates  | Initial: 12/16/15 Mitigation Activities: Unknown |
| Subcontractors  | TCS, MMX   |
| Disposal Facility   | Texas permitted R360 Red Bluff facility in Texas |
| Estimated Yd <sup>3</sup> Contaminated Soil<br>Excavated and Disposed | 1,400 yd <sup>3</sup>                            |

A copy of the C-141 Initial is located in Appendix B. For questions or comments pertaining to the release or the attached Work Plan, please feel free to contact either of us.

Submitted by:

SOUDER, MILLER & ASSOCIATES

Austin Weyant Project Scientist Reviewed by:

Cynthia Gray, CHMM Senior Scientist



# SOIL REMEDIATION WORK PLAN FOR INCIDENT 2RP-3386

# **COG OPERATING LLC**

JRS HORZ FEDERAL #1
API# 30-015-33066
SECTION 10, T26S R29E, NMPM
EDDY COUNTY, NM



Prepared for: COG Operating LLC 2407 Pecos Ave Artesia, NM 88210 Prepared by: Souder, Miller & Associates 201 S. Halagueno Carlsbad, NM 88221 575-689-7040

December 28, 2015 SMA Reference 5B23978 BG13



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#### 1.0 Introduction

On behalf of COG Operating LLC (COG), SMA has prepared this report that describes the assessment and initial delineation of a release associated with the JRS HORZ FEDERAL #1 Oil release site. The site is located in Section 1, T 26S, R 29 E NMPM, Eddy County, New Mexico, on land owned by the Bureau of Land Management (BLM). Figure 1 illustrates the vicinity and location of the site.

#### 2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 1.2 miles (> 1,000 feet) east of Pecos River, on federal BLM Land with an elevation of approximately 2,970 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be greater than 100 feet below ground surface (bgs) using the Pecos River as groundwater level. Figure 1 depicts the site vicinity and Figure 2 depicts the site details and sample locations.

SMA searched the New Mexico State Engineer's Office online water well database for water wells in the vicinity of the release. No well is located within a 1000 foot radius of the site. Figure 1 depicts the site vicinity and Figure 2 shows the site itself. The physical location of this release is within the jurisdiction of NMOCD.

This release location has been assigned a NMOCD ranking of 0 which requires a soil remediation standard of 10 parts per million (ppm) benzene, 50 ppm combined benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and 5000 ppm total petroleum hydrocarbons (TPH). Table 1 illustrates site ranking rationale.

#### 3.0 Assessment and Initial Results

On December 16, 2015, after receiving 811 clearance, SMA field personnel assessed the release area onsite with a auger, a Photo Ionization Detector (PID), and a mobile chlorides titration kit. The affected area was found to be 130 feet long and 40 feet wide on the well pad. The spill moved north off of pad in to the draw for 1,580 feet long and less than a foot wide. The area north of pad and draw there is a pipeline right-of-way where no sampling occurred due to safety concerns. Delineation samples were taken to depths of 16 feet bgs on pad and 3 foot bgs in draw. Samples results displayed in Table 2 shows that the contaminated soil are within 2 feet bgs on the pad. The draw area shows elevated chloride levels on surface. Samples taken in pad area at 4 foot bgs found to exhibit background levels of chloride. The draw area samples at 2.5 foot bgs found to exhibit background levels of chloride. Sample locations are noted on Figure 2 Site Details and Sample Location Map. All samples were collected and processed according to NMOCD soil sampling procedures. The samples were sent under chain-of-custody protocols to Hall Environmental Analysis Laboratory for analysis for Benzene and Total BTEX using EPA Method 8021B, DRO and GRO by EPA Method 8015D, and total Chlorides using EPA Method 300.0.

#### 4.0 Soil Remediation Work Plan

SMA will begin the excavation of affected soils in and around the locations pad, with approval from area utilities owners via 811 and NMOCD. SMA will continuously guide the excavation activities by collecting composite soil samples for field screening with a mobile titration unit

(EPA 4500) and a calibrated PID. Excavation will occur on pad and off pad. No excavation will occur due to safety concerns in the area north of the well pad and draw where the pipeline right-of-way exists. Excavation will occur to depths to sufficient to delineate the plume by NMOCD Division 1 standards. Final samples will be collected at final depth of excavation. Approximately 1,400 cubic yards of contaminated soil will be removed and replaced with clean backfill material to bring the contours to surface grade. The contaminated soil will be transported for proper disposal at Texas permitted R360 Red Bluff facility in Texas.

SMA will attempt to delineate the rest of the affected draw not accomplished on the December 16, 2015 assessment to gain a more complete picture of the extent on the chloride impact. As of 1/11/15 the draw is too saturated with precipitation to allow for ATV access.

## 5.0 Conclusions and Recommendations

NMOCD Guidelines for Remediation of Leaks, Spills, and Releases have established the following action levels for contaminants of concern with a site ranking of 0: 10 ppm (mg/kg) Benzene, 50 ppm total BTEX, and 5000 ppm TPH. The release consisted of produced and associated petroleum found during the initial assessment and delineation.

After the soil remediation work plan is approved by NMOCD, SMA will begin soil remediation activities on site.

Soil contaminant concentrations found during the initial delineation are illustrated in Figure 2. A summary of the laboratory analyses is included in Table 2. Laboratory reports are included in Appendix A.

#### 6.0 Closure and Limitations

The scope of our services consisted of the performance of a preliminary spill assessment, verification of release stabilization, regulatory liaison, and preparation of this Remediation Work Plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact either Austin Weyant at 575-689-7040 or Cindy Gray at 505-325-7535.

Submitted by: Reviewed by:

SOUDER, MILLER & ASSOCIATES

Austin Weyant Cynthia Gray, CHMM Project Scientist Senior Scientist

# Figures:

Figure 1: Vicinity Map

Figure 2: Site Details and Sample Locations Map

### Tables:

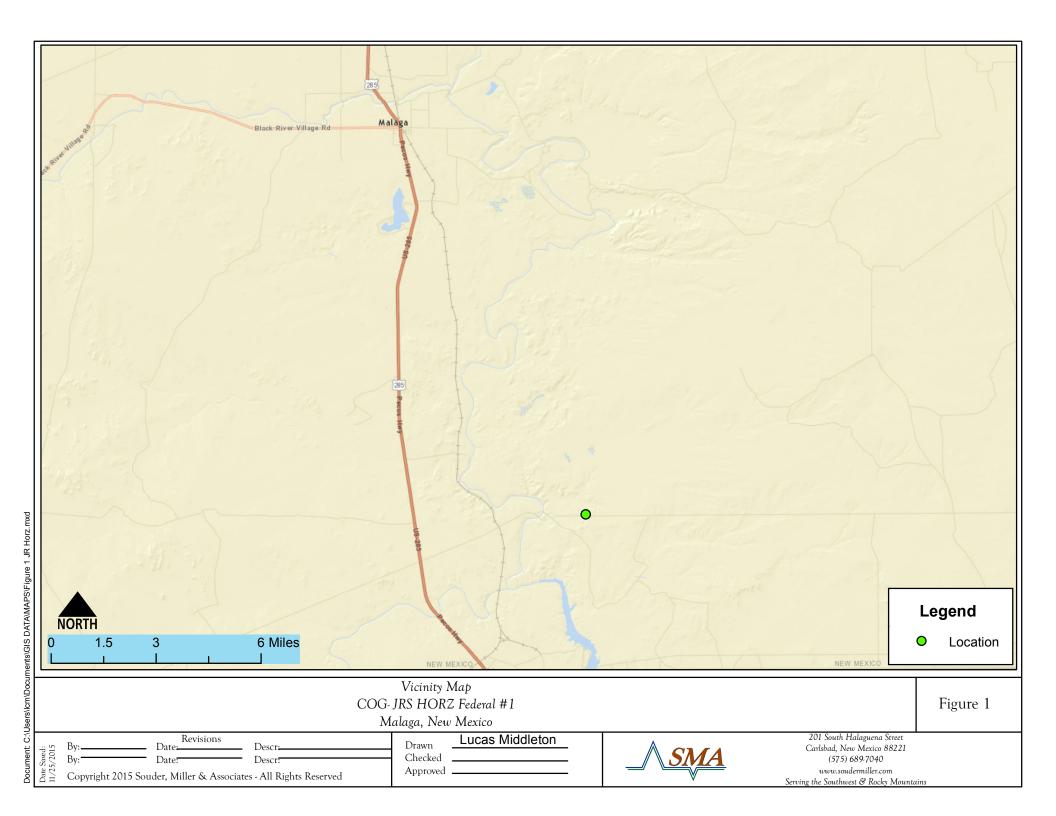
Table 1: Release Information and Site Ranking Table 2: Summary of Laboratory Analyses

# Appendices:

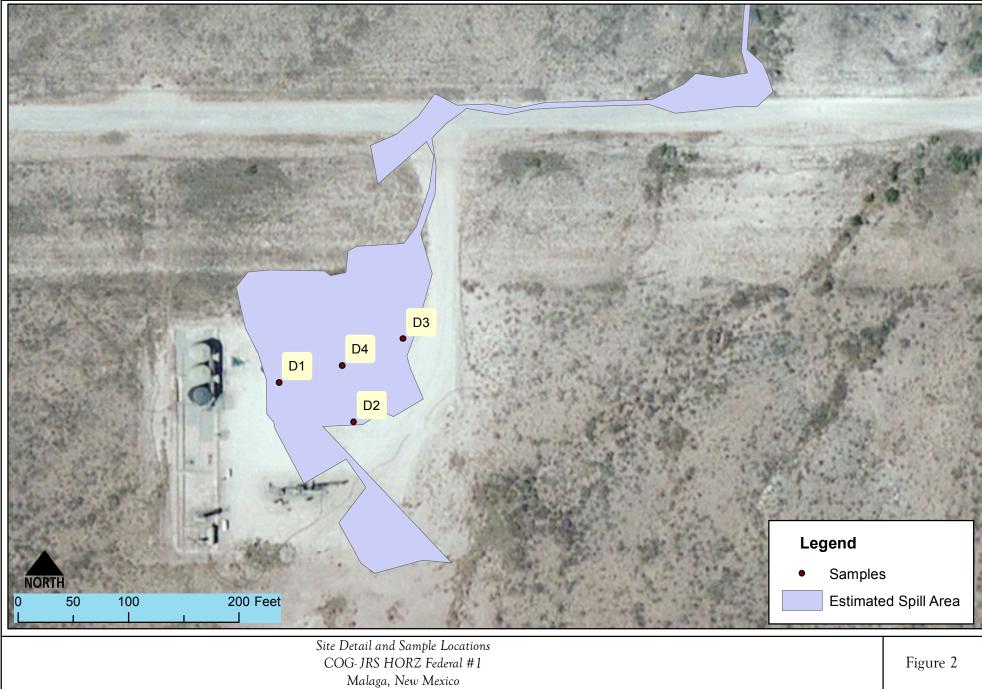
Appendix A: Laboratory Analytical Reports

Appendix B: Form C141 Initial

# FIGURE 1 VICINITY MAP



# FIGURE 2 SITE DETAILS AND SAMPLE LOCATIONS MAP

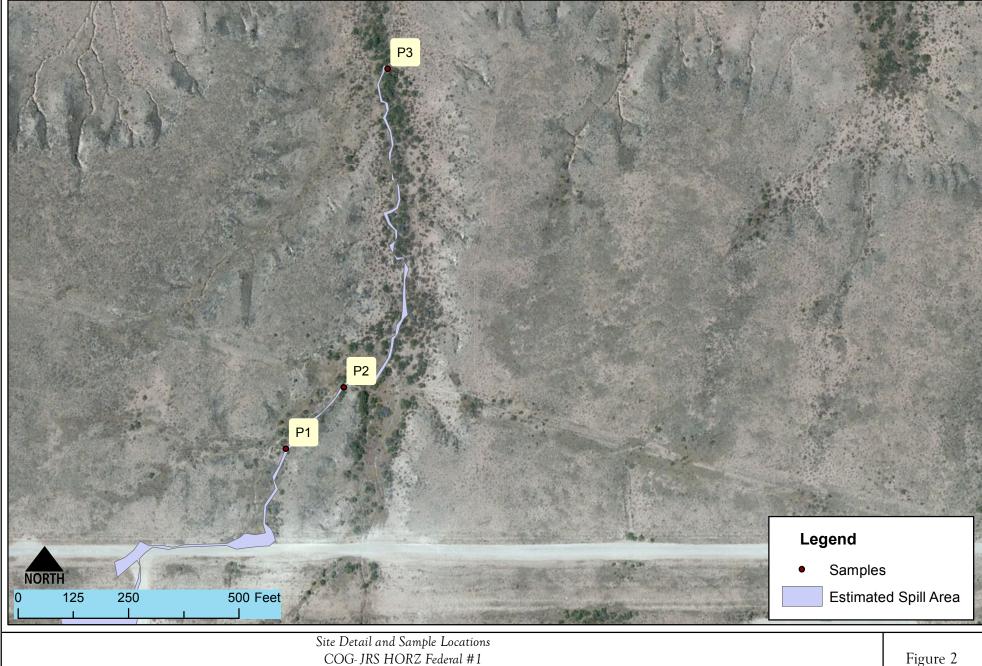


By: \_\_\_\_\_ Date: Revisions Descr: \_\_\_\_\_ Descr: Descr: \_\_\_\_\_ Descr: Descr:

Drawn Lucas Middleton
Checked Approved



201 South Halaguena Street
Carlsbad, New Mexico 88221
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Serving the Southwest & Rocky Mountains



COG- JRS HORZ Federal #1 Malaga, New Mexico

Revisions Date: Descr: Copyright 2015 Souder, Miller & Associates - All Rights Reserved

Lucas Middleton Drawn Checked Approved



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# TABLE 1 RELEASE INFORMATION AND SITE RANKING

# Enterprise Products Table 2: Site Ranking

| Depth to Groundwater  | NMOCD Numeric<br>Rank for this Site | Source for Ranking                        | Notes   |
|---|-------------------------------------|---|---|
| < 50 BGS = 20   |                                     | USGS Topo Maps;<br>Google Earth Elevation | Pecos River is 1.4 miles to the west of the                         |
| 50' to 99' = 10   |                                     | Difference from the site and the bobcat   | location.; Site elevation is approximately 102                      |
| >100' = 0   | 0                                   | draw wash to the west                     |   |
| Ranking Criteria for Horizontal<br>Distance to Nearest Surface Water            | NMOCD Numeric<br>Rank for this Site | Source for Ranking                        | Notes   |
| < 200' = 20   |                                     | USGS Topo Maps;                           | Pecos River is located  |
| 200' - 1000' = 10   |                                     | Google Earth ; PRCC Mapping Tool          | approximately 1.4 miles<br>to the west release                      |
| >1000' = 0  | 0                                   |   |   |
| Ranking Criteria for Horizontal Distance to a Water Well or Water Source        | NMOCD Numeric<br>Rank for this Site | Source for Ranking                        | Notes   |
| <1000' from a water source? <200'   |                                     |   | manusch well aven 2 000   |
| from a private domestic water<br>source? YES OR NO to BOTH. YES =<br>20, NO = 0 | 0                                   | NM State Engineer<br>Water Well Database  | nearest well over 3,000<br>meter use Pecos River<br>for water depth |
| Table's Paulin  |                                     |   |   |
| Total Site Ranking Soil Remedation Standards                                    | 0 to 9                              | 0<br>10 to 19                             | >19   |
| Jon Remedation Standards  | 0 10 3                              | 10 (0 19                                  | 713   |
| Benzene   | 10 PPM                              | 10 PPM                                    | 10 PPM  |
| BTEX  | 50 PPM                              | 50 PPM                                    | 50 PPM  |
| ТРН   | 5000 PPM                            | 1000 PPM                                  | 100 PPM   |



# TABLE 2 SUMMARY OF LABORATORY ANALYSES

**Table 2: Summary of Laboratory Analyses** 

| Analytical<br>Report-<br>1512A57 | Sample<br>Number on<br>Figure 2 Map | Sample Date | Depth | BTEX ppm | Benzene<br>mg/Kg | GRO<br>mg/Kg | DRO<br>mg/Kg | CI-<br>mg/Kg |
|----------------------------------|-------------------------------------|-------------|-------|----------|------------------|--------------|--------------|--------------|
| 1512A57-<br>001                  | D3-16                               | 12/16/2015  | 16'   | N/A      | N/A              | N/A          | N/A          | 180          |
| 1512A57-<br>002                  | D3-12                               | 12/16/2015  | 12'   | N/A      | N/A              | N/A          | N/A          | 210          |
| 1512A57-<br>003                  | D3-6                                | 12/16/2015  | 6'    | N/A      | N/A              | N/A          | N/A          | 80           |
| 1512A57-<br>004                  | D3-4                                | 12/16/2015  | 4'    | N/A      | N/A              | N/A          | N/A          | 440          |
| 1512A57-<br>005                  | D4-2                                | 12/16/2015  | 2'    | N/A      | N/A              | N/A          | N/A          | 1,100        |
| 1512A57-<br>006                  | D4-4                                | 12/16/2015  | 4'    | N/A      | N/A              | N/A          | N/A          | BDL          |

|            |       | FIELD SCREENING RES       | SULTS SUMMA                | RY                   |                             |
|------------|-------|---------------------------|----------------------------|----------------------|-----------------------------|
| Date       | Time  | Field Screening Reference | Sample Depth<br>(Feet BGS) | Chlorides<br>Results | Lab Sample<br>Collected Y/N |
| 12/16/2015 | 11:00 | P1-S                      | SURFACE                    | 7,712                | у                           |
| 12/16/2015 | 11:00 | P1-1                      | 1'                         | 1,290                | У                           |
| 12/16/2015 | 11:00 | P1-3                      | 3'                         | 717                  | У                           |
| 12/16/2015 | 11:00 | P2-S                      | SURFACE                    | 5,619                | У                           |
| 12/16/2015 | 11:00 | P2-1                      | 1'                         | 488                  | у                           |
| 12/16/2015 | 11:00 | P2-3                      | 3'                         | 244                  | У                           |
| 12/16/2015 | 11:00 | P-3                       | SURFACE                    | 11,180               | у                           |

<sup>\*</sup>BDL= Below Detectable Level



# APPENDIX A LABORATORY ANALYTICAL REPORTS



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

November 23, 2015

Austin Weyant Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221

TEL: (575) 689-7040

FAX

RE: J.R. HORZ OrderNo.: 1511524

#### Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/12/2015 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Indest

4901 Hawkins NE

Albuquerque, NM 87109

#### Lab Order 1511524

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/23/2015

CLIENT: Souder, Miller & Associates Client Sample ID: L3-S

 Project:
 J.R. HORZ
 Collection Date: 11/9/2015 1:00:00 PM

 Lab ID:
 1511524-001
 Matrix: SOIL
 Received Date: 11/12/2015 9:10:00 AM

| Analyses                           | Result | RL Qu  | al Units | DF | Date Analyzed        | Batch           |
|------------------------------------|--------|--------|----------|----|----------------------|-----------------|
| EPA METHOD 300.0: ANIONS           |        |        |          |    | Anal                 | yst: <b>LGT</b> |
| Chloride                           | 25000  | 1500   | mg/Kg    | 1E | 11/18/2015 4:35:15 I | PM 22381        |
| <b>EPA METHOD 8021B: VOLATILES</b> |        |        |          |    | Anal                 | yst: <b>NSB</b> |
| Benzene                            | ND     | 0.050  | mg/Kg    | 1  | 11/13/2015 10:22:07  | PM 22313        |
| Toluene                            | ND     | 0.050  | mg/Kg    | 1  | 11/13/2015 10:22:07  | PM 22313        |
| Ethylbenzene                       | ND     | 0.050  | mg/Kg    | 1  | 11/13/2015 10:22:07  | PM 22313        |
| Xylenes, Total                     | ND     | 0.10   | mg/Kg    | 1  | 11/13/2015 10:22:07  | PM 22313        |
| Surr: 4-Bromofluorobenzene         | 108    | 80-120 | %REC     | 1  | 11/13/2015 10:22:07  | PM 22313        |

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

- \* 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
- R RPD outside accepted recovery limits
- 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 Page 1 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Lab Order 1511524

Date Reported: 11/23/2015

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Client Sample ID: L1-S

 Project:
 J.R. HORZ
 Collection Date: 11/9/2015 1:00:00 PM

 Lab ID:
 1511524-002
 Matrix: SOIL
 Received Date: 11/12/2015 9:10:00 AM

| Analyses                      | Result       | RL Qu    | al Units | DF | Date Analyzed        | Batch          |
|-------------------------------|--------------|----------|----------|----|----------------------|----------------|
| EPA METHOD 300.0: ANIONS      |              |          |          |    | Analy                | st: <b>LGT</b> |
| Chloride                      | 35000        | 1500     | mg/Kg    | 1E | 11/18/2015 4:47:39 F | PM 22381       |
| EPA METHOD 8015M/D: DIESEL RA | ANGE ORGANIC | S        |          |    | Analy                | st: <b>KJH</b> |
| Diesel Range Organics (DRO)   | ND           | 9.7      | mg/Kg    | 1  | 11/13/2015 11:39:44  | AM 22317       |
| Surr: DNOP                    | 101          | 70-130   | %REC     | 1  | 11/13/2015 11:39:44  | AM 22317       |
| EPA METHOD 8015D: GASOLINE R  | ANGE         |          |          |    | Analy                | st: NSB        |
| Gasoline Range Organics (GRO) | ND           | 4.9      | mg/Kg    | 1  | 11/13/2015 10:45:32  | PM 22313       |
| Surr: BFB                     | 84.6         | 75.4-113 | %REC     | 1  | 11/13/2015 10:45:32  | PM 22313       |

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

- \* 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
- R RPD outside accepted recovery limits
- 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 Page 2 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit

#### Lab Order **1511524**

Hall Environmental Analysis Laboratory, Inc.

Date Reported: 11/23/2015

CLIENT: Souder, Miller & Associates Client Sample ID: L2-S

 Project:
 J.R. HORZ
 Collection Date: 11/9/2015 1:00:00 PM

 Lab ID:
 1511524-003
 Matrix: SOIL
 Received Date: 11/12/2015 9:10:00 AM

| Analyses                           | Result | RL Qu  | al Units | DF D  | ate Analyzed         | Batch          |
|------------------------------------|--------|--------|----------|-------|----------------------|----------------|
| EPA METHOD 300.0: ANIONS           |        |        |          |       | Analy                | st: <b>LGT</b> |
| Chloride                           | 14000  | 750    | mg/Kg    | 500 1 | 11/18/2015 5:00:04 F | PM 22381       |
| <b>EPA METHOD 8021B: VOLATILES</b> |        |        |          |       | Analy                | st: NSB        |
| Benzene                            | ND     | 0.049  | mg/Kg    | 1 1   | 11/13/2015 11:08:49  | PM 22313       |
| Toluene                            | ND     | 0.049  | mg/Kg    | 1 1   | 11/13/2015 11:08:49  | PM 22313       |
| Ethylbenzene                       | ND     | 0.049  | mg/Kg    | 1 1   | 11/13/2015 11:08:49  | PM 22313       |
| Xylenes, Total                     | ND     | 0.098  | mg/Kg    | 1 1   | 11/13/2015 11:08:49  | PM 22313       |
| Surr: 4-Bromofluorobenzene         | 109    | 80-120 | %REC     | 1 1   | 11/13/2015 11:08:49  | PM 22313       |

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

- \* 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
- R RPD outside accepted recovery limits
- 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 Page 3 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit

Date Reported: 11/23/2015

#### Lab Order 1511524

Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates

Client Sample ID: BG-1

 Project:
 J.R. HORZ
 Collection Date: 11/9/2015 1:00:00 PM

 Lab ID:
 1511524-004
 Matrix: SOIL
 Received Date: 11/12/2015 9:10:00 AM

| Analyses                 | Result | RL Qua | al Units | DF Date Analyzed B    |                  |  |  |  |  |
|--------------------------|--------|--------|----------|-----------------------|------------------|--|--|--|--|
| EPA METHOD 300.0: ANIONS |        |        |          | Ana                   | lyst: <b>LGT</b> |  |  |  |  |
| Chloride                 | ND     | 30     | mg/Kg    | 20 11/17/2015 2:02:41 | PM 22381         |  |  |  |  |

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

- \* 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
- R RPD outside accepted recovery limits
- 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 Page 4 of 8
- P Sample pH Not In Range
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: **1511524** 

23-Nov-15

Client: Souder, Miller & Associates

**Project:** J.R. HORZ

Sample ID MB-22381 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 22381 RunNo: 30303

Prep Date: 11/17/2015 Analysis Date: 11/17/2015 SeqNo: 924530 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID LCS-22381 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 22381 RunNo: 30303

Prep Date: 11/17/2015 Analysis Date: 11/17/2015 SeqNo: 924531 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 96.4 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

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# Hall Environmental Analysis Laboratory, Inc.

WO#: **1511524** 

23-Nov-15

Client: Souder, Miller & Associates

**Project:** J.R. HORZ

Sample ID MB-22317 SampType: MBLK TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: PBS Batch ID: 22317 RunNo: 30214 Prep Date: 11/12/2015 Analysis Date: 11/13/2015 SeqNo: 920806 Units: mg/Kg Analyte **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 7.8 10.00 78.4 70 130

Sample ID LCS-22317 SampType: LCS TestCode: EPA Method 8015M/D: Diesel Range Organics Client ID: LCSS Batch ID: 22317 RunNo: 30214 Prep Date: 11/12/2015 Analysis Date: 11/13/2015 SeqNo: 921043 Units: mg/Kg Analyte SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Diesel Range Organics (DRO) 10 88.2 57.4 44 50.00 139 Surr: DNOP 3.6 5.000 71.8 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 6 of 8

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1511524

23-Nov-15

Client: Souder, Miller & Associates

**Project:** J.R. HORZ

Sample ID MB-22313 SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range

Client ID: **PBS** Batch ID: **22313** RunNo: **30224** 

Prep Date: 11/12/2015 Analysis Date: 11/13/2015 SeqNo: 921636 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Gasoline Range Organics (GRO) ND 5.0

Surr: BFB 830 1000 82.5 75.4 113

Sample ID LCS-22313 SampType: LCS TestCode: EPA Method 8015D: Gasoline Range

Client ID: LCSS Batch ID: 22313 RunNo: 30224

Prep Date: 11/12/2015 Analysis Date: 11/13/2015 SeqNo: 921637 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Gasoline Range Organics (GRO)
 20
 5.0
 25.00
 0
 80.8
 79.6
 122

 Surr: BFB
 930
 1000
 92.7
 75.4
 113

#### 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 7 of 8

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1511524

23-Nov-15

Client: Souder, Miller & Associates

**Project:** J.R. HORZ

Sample ID MB-22313 SampType: MBLK TestCode: EPA Method 8021B: Volatiles PBS Client ID: Batch ID: 22313 RunNo: 30224 Prep Date: 11/12/2015 Analysis Date: 11/13/2015 SeqNo: 921692 Units: mg/Kg Analyte Result **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Benzene ND 0.050 Toluene ND 0.050 Ethylbenzene ND 0.050 ND Xylenes, Total 0.10 1.000 104 Surr: 4-Bromofluorobenzene 1.0 80 120

| Sample ID LCS-22313        | Samp1      | ype: <b>LC</b>  | s         | Tes         | tCode: E | PA Method | 8021B: Vola | tiles      |          |      |
|----------------------------|------------|-----------------|-----------|-------------|----------|-----------|-------------|------------|----------|------|
| Client ID: LCSS            | Batcl      | n ID: <b>22</b> | 313       | F           | RunNo: 3 | 0224      |             |            |          |      |
| Prep Date: 11/12/2015      | Analysis D | Date: 11        | 1/13/2015 | S           | SeqNo: 9 | 21693     | Units: mg/k | <b>(</b> g |          |      |
| Analyte                    | Result     | PQL             | SPK value | SPK Ref Val | %REC     | LowLimit  | HighLimit   | %RPD       | RPDLimit | Qual |
| Benzene                    | 0.81       | 0.050           | 1.000     | 0           | 81.2     | 80        | 120         |            |          |      |
| Toluene                    | 0.82       | 0.050           | 1.000     | 0           | 81.9     | 80        | 120         |            |          |      |
| Ethylbenzene               | 0.90       | 0.050           | 1.000     | 0           | 90.3     | 80        | 120         |            |          |      |
| Xylenes, Total             | 2.8        | 0.10            | 3.000     | 0           | 94.0     | 80        | 120         |            |          |      |
| Surr: 4-Bromofluorobenzene | 1.1        |                 | 1.000     |             | 112      | 80        | 120         |            |          |      |

#### Qualifiers:

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

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Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

# Sample Log-In Check List

RcptNo: 1 Work Order Number: 1511524 SMA-CARLSBAD Client Name: Received by/date: 11/12/2015 9:10:00 AM Logged By: Ashley Gallegos 11/12/2015 9:55:06 AM Completed By: Ashley Gallegos 11/12/15 Reviewed By: IO Chain of Custody Not Present V Yes Custody seals intact on sample bottles? Not Present Yes 🗸 No 2. Is Chain of Custody complete? Courier 3. How was the sample delivered? Log In NA . No . Yes 🗸 4. Was an attempt made to cool the samples? No 🗌 NA . Were all samples received at a temperature of >0° C to 6.0°C Yes V No \_ Yes V Sample(s) in proper container(s)? Yes V 7. Sufficient sample volume for indicated test(s)? Yes V 8. Are samples (except VOA and ONG) properly preserved? NA . Yes No V 9. Was preservative added to bottles? No VOA Viais 🗸 Yes No L 10. VOA vials have zero headspace? No V Yes 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗌 Yes V 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13, Are matrices correctly identified on Chain of Custody? No 🗌 **V** 14. Is it clear what analyses were requested? Checked by: No 🗌 ~ 15. Were all holding times able to be met? Yes (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA V No L 16. Was client notified of all discrepancies with this order? Date Person Notified: eMail Phone Fax In Person Via: By Whom: Regarding: Client Instructions: 17. Additional remarks: 18. Cooler Information Signed By Cooler No Temp °C Condition Seal Date Seal Intact | Seal No 2.8 Good

| HALL ENVIRONMENTAL      | LABORATORY  |                           | Albuquerque, NM 87109          | 07           |                     |                  |               | (1)                             |                              |                          | elddu8 riA                             |                |    |      |      |          |          |   |   |          |   | 73                           | refer                        |
|-------------------------|-------------|---------------------------|--------------------------------|--------------|---------------------|------------------|---------------|---------------------------------|------------------------------|--------------------------|--|----------------|----|------|------|----------|----------|---|---|----------|---|------------------------------|------------------------------|
| Z                       | BC          | moo:                      | NM 8                           | 505-345-4107 | st                  | -                |               | _                               | (AC                          | 200                      | DV) 808S8<br>m9S) 07S8                 |                |    |      |      | +        | - 4      | + | + | $\vdash$ | _ | 2                            | 50                           |
| R                       | 5           | www.hallenvironmental.com | dne,                           | 05-34        | Request             | s                | LCB.          | 280                             | 8/8                          | - 12                     | itse9 1808                             |                |    |      |      | 1        | 1        |   |   |          |   | 3                            | 0                            |
| >                       | ANALYSIS    | ronm                      | ndne                           | Fax 5        |                     |                  | 5-750-514     |                                 |                              |                          | ) snoinA                               | X              | X  | X    | X    |          |          |   |   |          |   |                              | 5                            |
| Ē                       | YS          | lenvi                     |                                | ш            | Analysis            |                  |               |                                 |                              | 30.00                    | M 8 ARDA                               |                |    |      |      |          |          |   |   |          | _ |                              | 7                            |
|                         | A           | w.hal                     | 4901 Hawkins NE -              | 975          | ١                   |                  | (SMIS         |                                 |                              |                          | £8) s'HA9                              |                |    |      |      |          | _        |   |   |          | + | 13)                          | -                            |
| H                       | Z           | *                         | kins                           | 45-3         |                     |                  |               |                                 | 280                          | 200                      | EDB (Meth                              |                |    |      |      | -        | -        | + | + | $\vdash$ | - | 17                           | 3                            |
|                         |             |                           | Haw                            | 505-345-3975 |                     | (                |               |                                 |                              | 1000                     | TPH (Meth                              | _              |    |      |      | $\dashv$ | +        | + | + | $\vdash$ | + | -00                          | C-Mai                        |
|                         |             |                           | 106                            | Tel. 5       |                     |                  |               |                                 |                              | -                        | TPH 8015E                              |                | X. |      |      |          | $\dashv$ | + | + | H        | _ | - ks:                        | 0)                           |
|                         |             |                           | 4                              |              |                     | 1075             |               | 0.00                            | 200-30                       |                          | rm + X3T8<br>rm + X3T8                 |                |    |      |      |          | +        | + | + |          | + | Remarks:                     |                              |
| -                       |             |                           |                                | Ш            |                     | ()               | 2007          | I                               | 1                            |                          | LVV · XIII                             | $\wedge$       | 4  | 0    | -    |          | +        | + | + | $\vdash$ |   | 341/2                        | 2                            |
| Turn-Around Time:       | dard 🗆 Rush |                           | J. K. 17041                    | 44           |                     | Project Manager: | 中をプレ          | 3                               | XYes □ No                    | Sample Temperature: 2.\$ | ner Preservative HEAL No. Type ISTISAL | -              |    | 5007 | 700- |          |          |   |   |          |   | Date Tim                     | Date Tin                     |
| Turn-Arc                | Standard    | Project Name:             |                                | Project #:   |                     | Project I        | 3             | Cample                          | On Ice:                      | Sample                   | Container<br>Type and #                | 40/            | -  |      |      |          |          |   |   | >        |   | Received by:                 | Received by.                 |
| Chain-of-Custody Record | lient: SE   |                           | ailing Address: 201 Styly Bolo | 35           | hone #: 875 6897040 | Fax# Custon      | A/OC Package: | Standard Level 4 (1 on various) | Octeditation □ Other □ Other | EDD (Type)               | Date Time Matrix Sample Request ID     | 10 12 SOL 12-5 | 3  | 10,5 | 172  |          |          |   |   |          | 3 | Sate: Time: Relinquished by: | Date: Time: Relinquished by: |



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

January 04, 2016

Austin Weyant Souder, Miller & Associates 201 S Halagueno Carlsbad, NM 88221 TEL: (575) 689-7040

FAX

RE: J.R. HORZ OrderNo.: 1512A57

#### Dear Austin Weyant:

Hall Environmental Analysis Laboratory received 6 sample(s) on 12/22/2015 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 <a href="www.hallenvironmental.com">www.hallenvironmental.com</a> 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 qualifers 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

Indest

4901 Hawkins NE

Albuquerque, NM 87109

Lab Order: **1512A57**Date Reported: **1/4/2016** 

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Souder, Miller & Associates Lab Order: 1512A57 Project: J.R. HORZ 1512A57-001 **Collection Date:** 12/16/2015 8:30:00 AM Lab ID: Client Sample ID: D3-16 Matrix: SOIL **Analyses** Result **RL Qual Units DF** Date Analyzed **Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 180 30 mg/Kg 20 12/30/2015 11:29:48 AM 23002 Lab ID: 1512A57-002 **Collection Date:** 12/16/2015 8:30:00 AM Client Sample ID: D3-12 Matrix: SOIL Result **RL Qual Units DF** Date Analyzed **Batch ID Analyses EPA METHOD 300.0: ANIONS** Analyst: **LGT** Chloride 210 30 mg/Kg 12/30/2015 12:31:51 PM 23002 Lab ID: **Collection Date:** 12/16/2015 8:30:00 AM 1512A57-003 Client Sample ID: D3-6 Matrix: SOIL **RL Qual Units** Analyses Result **DF Date Analyzed Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT 20 12/30/2015 12:44:15 PM 23002 Chloride 80 30 mg/Kg Lab ID: 1512A57-004 Collection Date: 12/16/2015 8:30:00 AM Client Sample ID: D3-4 Matrix: SOIL Analyses Result **RL Qual Units DF Date Analyzed Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT Chloride 440 30 mg/Kg 20 12/30/2015 12:56:40 PM 23002 Lab ID: 1512A57-005 **Collection Date:** 12/16/2015 8:30:00 AM Client Sample ID: D4-2 Matrix: SOIL Analyses Result **RL Qual Units DF Date Analyzed Batch ID EPA METHOD 300.0: ANIONS** Analyst: LGT 20 12/30/2015 1:09:04 PM 23002 Chloride 1100 30 mg/Kg

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

- \* 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
- R RPD outside accepted recovery limits
- 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 Page 1 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit

Lab Order: **1512A57**Date Reported: **1/4/2016** 

# Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller & Associates Lab Order: 1512A57

**Project:** J.R. HORZ

**Lab ID:** 1512A57-006 **Collection Date:** 12/16/2015 8:30:00 AM

Client Sample ID: D4-4 Matrix: SOIL

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed
 Batch ID

 EPA METHOD 300.0: ANIONS
 Analyst: LGT

 Chloride
 ND
 30
 mg/Kg
 20
 12/30/2015 1:21:29 PM
 23002

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

- \* 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
- R RPD outside accepted recovery limits
- 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
  - Page 2 of 3
- P Sample pH Not In Range
- RL Reporting Detection Limit

# Hall Environmental Analysis Laboratory, Inc.

WO#: 1512A57

04-Jan-16

Client: Souder, Miller & Associates

**Project:** J.R. HORZ

Sample ID MB-23002 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: **23002** RunNo: **31168** 

Prep Date: 12/29/2015 Analysis Date: 12/30/2015 SeqNo: 954140 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride ND 1.5

Sample ID LCS-23002 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 23002 RunNo: 31168

Prep Date: 12/29/2015 Analysis Date: 12/30/2015 SeqNo: 954141 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 14 1.5 15.00 0 92.4 90 110

#### 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
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

Page 3 of 3



Hall Environmental Analysis Laboratory 4901 Hawkins NE

Albuquerque, NM 87109

Sample Log-In Check List TEL: 505-345-3975 FAX: 505-345-4107

Website: www.hallenvironmental.com RcptNo: 1 Work Order Number: 1512A57 SMA-CARLSBAD Client Name: Received by/date: 12/22/2015 9:25:00 AM Logged By: Ashley Gallegos 12/23/2015 9:03:19 AM Completed By: Ashley Gallegos Reviewed By: TO Chain of Custody Not Present No Yes Custody seals intact on sample bottles? Not Present No 🗌 Yes V 2. Is Chain of Custody complete? 3. How was the sample delivered? Courier Log In No ... NA Yes V 4. Was an attempt made to cool the samples? NA No 🗌 Were all samples received at a temperature of >0° C to 6.0°C No 🗌 Sample(s) in proper container(s)? 7. Sufficient sample volume for indicated test(s)? Yes V No No 🗌 Yes V 8. Are samples (except VOA and ONG) properly preserved? NA 🗌 No V 9. Was preservative added to bottles? No 🗌 No VOA Vials V Yes 10. VOA vials have zero headspace? Yes 🗌 No V 11. Were any sample containers received broken? # of preserved bottles checked for pH: No 🗆 12. Does paperwork match bottle labels? (<2 or >12 unless noted) (Note discrepancies on chain of custody) Adjusted? No 🗌 13. Are matrices correctly identified on Chain of Custody? No 🗆 ~ 14, Is it clear what analyses were requested? Checked by: No 🗌 Yes V 15. Were all holding times able to be met? (If no, notify customer for authorization.) Special Handling (if applicable) Yes NA V No . 16. Was client notified of all discrepancies with this order? Person Notified: Date eMail Phone Fax In Person Via: By Whom: Regarding

17. Additional remarks:

Client Instructions:

18. Cooler Information Cooler No Temp ℃ Condition Seal Intact Seal No Seal Date Signed By 4.3

| HALL ENVIRONMENTAL      | ANALYSIS LABORATORY | www.hallenvironmental.com | 4901 Hawkins NE - Albuquerque, NM 87109 | Tel. 505-345-3975 Fax 505-345-4107 |                     | ιΟ <sup>ψ</sup> ) | (Gas oo 860)   | (f. | FO 8118 8504 8 1 1 8 2 1 1 8 2 1 1 1 8 2 1 1 1 1 1 1 | O O O O O O O O O O O O O O O O O O O | BTEX + MT BTEX + MT TPH 8015E TPH (Methoracidate) (831 RCRA 8 Moracidate) (831 RCRA 8 Moracidate) (931 |                     | ×     | ×     | ×      | ×    |      | × | 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. |
|-------------------------|---------------------|---------------------------|---|------------------------------------|---------------------|-------------------|----------------|---|--|---------------------------------------|--|---------------------|-------|-------|--------|------|------|---|---|---|---|---|--|------------------------------|---|
| Turn-Around Time:       | & Standard   Rush   | Project Name:             | 3,12- HOULE                             | Project #:                         |                     | ١                 | ACOUNT NOTES   | Sampler: LM                             | X Yes □ No   | Sample Temperature: 4.3               | Container Preservative HEAL No: Type and # Type   CDAST  | 1001                | C00-  | 600-  | hQU'   | 790/ | 7001 |   |   |   |   | 3 | Received by: Date Time   12/22/15 0925 | Received by: Date Time       | Lontracted to other accredited laboratories. This serves as notice of this  |
| Chain-of-Custody Record | Client: SM/V        |                           | Mailing Address: 781 5                  | CARCOLLAS CARCOLL                  | Phone #: 684 - 7040 | email or Fax#:    | QA/QC Package: | -                                       | □ NELAP □ Other                                      | □ EDD (Type)                          | Date Time Matrix Sample Request ID   | 114 R20 Sec. 173-16 | 02-50 | 072-6 | D.2-17 | 0770 | 7-04 |   |   |   | 7 |   | Date: Time: Relinquished by:           | Date: Time: Relinquished by: | If necessary, samples submitted to Hall Environmental may be subv   |

# APPENDIX B FORM C141 INITIAL

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

## State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

| NABIE  | 53163   | 9135          |           |               | ٠. د. د د. | OPERA'   | OR                                    |       | ✓ Initia         | l Report    |          | Final Report |  |  |  |  |
|--|---|---------------|-----------|---------------|------------|--|---------------------------------------|-------|------------------|-------------|----------|--------------|--|--|--|--|
| Name of Co   |   |               |           | 224137        |            | Contact: Robert McNeill  |                                       |       |                  |             |          |              |  |  |  |  |
| Address: 60  | 0 West Illin  | ois Avenue.   | Midland   | d TX 79701    |            | Telephone N  | lo. 432-230-007                       | 77    |                  |             |          |              |  |  |  |  |
| Facility Nar   | ne: JR'S HC   | RZ FEDER      | AL #00    | 1             | F          | Facility Type: SWD   |                                       |       |                  |             |          |              |  |  |  |  |
| Surface Ow   | ner: Federal  |               |           | Mineral O     | wner:      |  |                                       |       | API No.          | . 30-015-3: | 3066     |              |  |  |  |  |
|  |   |               |           | LOCA          | TION       | OF REI   | EASE                                  |       |                  |             |          |              |  |  |  |  |
| Unit Letter  | Section   | Township      | Range     | Feet from the |            | South Line   | Feet from the                         | 1     | West Line County |             |          |              |  |  |  |  |
| D  | D 10 26S 29E 380° North 330° West Eddy                |               |           |               |            |  |                                       |       |                  |             |          | ,            |  |  |  |  |
|  | Latitude 32.0632515 Longitude -103.9792099            |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| NATURE OF RELEASE  Type of Release: Volume Recovered:  |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| Type of Relea  |   | •             |           |               |            | I  | Release:<br>; 1310 bbls PW            |       |                  |             |          |              |  |  |  |  |
| Source of Re   |   |               |           |               |            |  | our of Occurrenc                      |       | 240 bbls f       | Hour of Dis | coverv:  |              |  |  |  |  |
| Lightning Str  |   |               |           |               |            | 10/21/2015   |                                       |       |                  |             |          |              |  |  |  |  |
| Was Immedia  | ate Notice Gi   |               |           |               |            | If YES, To   |                                       |       |                  |             |          |              |  |  |  |  |
|  |   |               | Yes [     | No Not Rec    | quired     | Mike Bratcher – NMOCD / Jim Amos – BLM   |                                       |       |                  |             |          |              |  |  |  |  |
| By Whom?   |   |               |           |               |            | Date and Hour: Fri 10/23/2015 4:05 PM  |                                       |       |                  |             |          |              |  |  |  |  |
| Was a Water  | course Reach  | ed?           | Ves 🕅     | l No          |            | If YES, Volume Impacting the Watercourse.  |                                       |       |                  |             |          |              |  |  |  |  |
| ADTICIA DIGENIAT   |   |               |           |               |            |  |                                       |       |                  |             |          | I            |  |  |  |  |
| NOV 1 1 2015   |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| Describe Cau   | Describe Cause of Problem and Remedial Action Taken.* |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| This release was caused by a lightning strike. Once the fire was extinguished, vacuum trucks were dispatched to recover all standing fluid.  |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| Describe Are   | a Affected ar   | d Cleanup A   | ction Tak | en.*          |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| This release was not contained on location. Concho will have the spill site sampled to delineate any possible contamination from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation work.  |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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. |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
|  |   |               |           | e C           |            |  | OIL CON                               | SERVA | ATION            | DIVISIO     | <u> </u> | •,           |  |  |  |  |
| Signature:   |   |               |           |               |            |  |                                       |       |                  |             | / ,      | .            |  |  |  |  |
| Printed Name: Amanda Trujillo Davis  Approved by Environmental Specialist:   |   |               |           |               |            |  |                                       |       |                  |             |          |              |  |  |  |  |
| Title: Senior  | Environment   | al Coordinate | or        |               |            | Approval Date: 11 12 5 Expiration Date: N/A  |                                       |       |                  |             |          |              |  |  |  |  |
| E-mail Addre   | ess: atrujillo@                                       | deoncho.com   |           |               |            | Conditions of Approval:  Remediation per O.C.D. Rules & Guidelines   Remediation PROPOSAL NO |                                       |       |                  |             |          |              |  |  |  |  |
| Date: 11/4/2   | 015   | hone: 575-7   | 48_6QAD   |               |            | SUBMIT REMEDIATION PROPOSAL NO   |                                       |       |                  |             |          |              |  |  |  |  |
|  | tional Sheet  |               |           |               |            | SUBMIT-  | JAN: ZI                               | 2115  | <u> </u>         | 7           | .//      | 33.86p       |  |  |  |  |
| ALIAULI AUU  |   |               | -         |               |            | IAILH  | ····································· |       | •                | /           | 1/1/-    | $\alpha$     |  |  |  |  |

## Patterson, Heather, EMNRD

Amanda Trujillo Davis <ATrujillo@concho.com> From:

Sent: Wednesday, November 11, 2015 6:38 PM

To: Patterson, Heather, EMNRD; Bratcher, Mike, EMNRD; James\_Amos@blm.gov; Shelly

Tucker

Cc: Austin Weyant; Lucas Middleton

Subject: (C-141 Initial) JR's Horz Federal #1 SWD (30-015-33066) **Attachments:** 

10-22-2015 JRs Horz Federal #1 SWD (TB) Initial.pdf

Mr. Bratcher,

Attached is a C-141 for your consideration. Souder, Miller and Associates will be addressing this release on our behalf. Please feel to contact me if you have any additional questions or concerns.

Thank you,

## **Amanda Trujillo Davis**

Senior Environmental Coordinator COG Operating LLC Cell: 505.350.1336 Office: 575.748.6930 atrujillo@concho.com

1401 Commerce Drive Carlsbad, NM 88220



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From: Amanda Trujillo Davis **Sent:** Friday, October 23, 2015 4:05 PM

To: Heather Patterson; Mike.Bratcher@state.nm.us; James\_Amos@blm.gov; Shelly Tucker

Subject: (Notification) JR's Horz Federal #1 SWD (30-015-33066)

Mr. Bratcher,

COG Operating LLC is reporting a release on the JR's Horz Federal #1 SWD (30-015-33066).

Unit D Section 10, Township 26S Range 29E

The release occurred at 9:40 pm on 10/21/2015

Released: 44 bbls Oil; 1,360 bbls PW

Recovered: In Progress

The release was caused by a lightning strike resulting in a fire at the facility. The area is being evaluated and a C-141 will be submitted. If you have any additional questions please feel free to contact me.

Thank you,

#### **Lupe Carrasco**

Environmental Coordinator Concho Resources Cell: 575-725-0787 Office: 575-748-6933 gcarrasco@concho.com

2407 Pecos Ave. Artesia, NM 88210



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