

3R-1011

**Release Report/ General
Correspondence**

Enterprise SJ

Date: Apr-Jun 2015

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

APR 17 2015

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Richardson #3 Release Site | Facility Type: Natural Gas Gathering Line |
| Surface Owner: Navajo | Mineral Owner: Navajo |
| API No. | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------------------|---------------------|------------------------|---------------------|---------------------------------|--------------------------------|---------------------------------|------------------------------|---------------------------|
| Unit Letter N | Section 2 | Township 27N | Range 13W | Feet from the 1313 | North South Line | Feet from the 2483 | East West Line | County San Juan |
|-------------------------|---------------------|------------------------|---------------------|---------------------------------|--------------------------------|---------------------------------|------------------------------|---------------------------|

Latitude **36.600598** Longitude **-108.189110**

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Natural Gas and Natural | Volume of Release: Unknown | Volume Recovered: Unknown |
| Source of Release: Suspected Internal Corrosion | Date and Hour of Occurrence: 3/22/2015 @ 2:50 p.m. | Date and Hour of Discovery: 3/22/2015 @ 3:50 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On March 22, 2015, Enterprise technicians confirmed a leak on Richardson #3 pipeline. The pipeline was isolated, de-pressurized and lock out tag out was applied. Repairs and remediation are currently in the scheduling process. A third party environmental contractor will oversee excavation activities and collected closure samples.

Describe Area Affected and Cleanup Action: An area of approximately ten (10) square feet of soil staining was observed at the ground surface. A third party environmental contractor will oversee excavation activities and collected closure samples. A "Final" C-141 will be submitted upon receipt of the third party environmental contractor corrective action report.

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.

| | | |
|------------------------------------|--|-----------------------------------|
| Signature: <i>Jon E. Fields</i> | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | Approval Date: 4/30/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 4-1-2015 | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

NCS 15120 30215

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Santa Fe, NM 87505

OIL CONS. DIV DIST. 3

APR 06 2015

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Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | |
|--|--|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Cedar Hill Compressor Station | Facility Type: Natural Gas Compression |

| | | |
|--------------------|--------------------|---------|
| Surface Owner: BLM | Mineral Owner: BLM | API No. |
|--------------------|--------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|------------------|-----------------------------------|------------------|----------------------------------|--------------------|
| Unit Letter N | Section 29 | Township 32N | Range 10W | Feet from the | North <u>South</u> Line 257 | Feet from the | East <u>West</u> Line 2125 | County San Juan |
|------------------|---------------|-----------------|--------------|------------------|-----------------------------------|------------------|----------------------------------|--------------------|

Latitude 36.949607 Longitude 107.907590

NATURE OF RELEASE

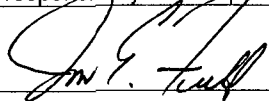
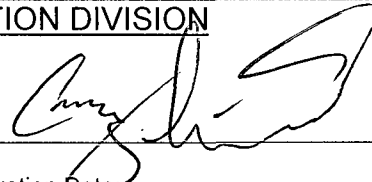
| | | |
|--|--|---|
| Type of Release: Natural Gas | Volume of Release: 23,600 MCF | Volume Recovered: None |
| Source of Release: Failed Suction Valve | Date and Hour of Occurrence: 3/21/2015 @ 2:30 p.m. | Date and Hour of Discovery: 3/23/2015 @ 9:30 a.m. |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Cory Smith - NMOCD; Shari Ketcham - BLM | |
| By Whom? Thomas Long | Date and Hour: 3/23/2015 @ 2:36 p.m. | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On March 23, 2015, Enterprise observed gas loss at the Cedar Hill Compressor Station. A technician was dispatched to investigate. The technician discovered the suction valve failed on Unit #2 allowing gas to emit to atmosphere.

Describe Area Affected and Cleanup Action Taken.* No fluids were released and no surface impacts were observed. No further action is necessary.

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.

| | | |
|--|---|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist:  | |
| Title: Director, Environmental | Approval Date: 5/8/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 3-27-15 | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

#NCS 151285 6900

①

District I
1625 N. French Dr., Hobbs, NM 88240
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811 S. First St., Artesia, NM 88210
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Oil Conservation Division
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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Maddox WN Federal #10 | Facility Type: Natural Gas Gathering Pipeline |

| | | |
|--------------------|--------------------|---------|
| Surface Owner: BLM | Mineral Owner: BLM | API No. |
|--------------------|--------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|------------------------|---------------------|-------------------------|-------------------|--------------------|
| Unit Letter M | Section 13 | Township 30N | Range 13W | Feet from the 87 | North/South Line | Feet from the 528 | East/West Line | County San Juan |
|------------------|---------------|-----------------|--------------|------------------------|---------------------|-------------------------|-------------------|--------------------|

OIL CONS. DIV DIST. 3

Latitude 36.80630 Longitude 108.16404

MAY 11 2015

NATURE OF RELEASE

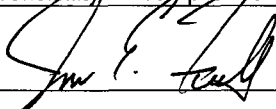
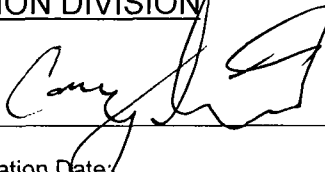
| | | |
|--|---|--|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: Unknown | Volume Recovered: None |
| Source of Release: Suspected internal corrosion | Date and Hour of Occurrence: 4/23/2015 @ 6:30 p.m. | Date and Hour of Discovery: 4/23/2015 @ 6:30 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? Thomas Long | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On April 23, 2015, Enterprise was notified of a possible gas release on the Maddox WN Federal #10 pipeline by a third party. Technicians were dispatched and confirmed the release. The pipeline was isolated, depressurized, locked out and tagged out. Repairs are currently being scheduled and subsurface impacts will be evaluated during repair activities.

Describe Area Affected and Cleanup Action Taken.* There were no fluids or staining observed at the ground surface. Subsurface impacts will be evaluated during repair activities.

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.

| | | | |
|--|--|---|-----------------------------------|
| Signature:  | | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | | Approved by Environmental Specialist:  | |
| Title: Director, Environmental | | Approval Date: 5/12/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 5-5-15 | | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

#NCS 15126503 61

①

District I
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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Lateral 2A-4 | Facility Type: Natural Gas Gathering Pipeline |

| | | |
|--------------------|--------------------|---------|
| Surface Owner: BLM | Mineral Owner: BLM | API No. |
|--------------------|--------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|--------------------------|---------------------|--------------------------|-------------------|--------------------|
| Unit Letter F | Section 24 | Township 27N | Range 10W | Feet from the 1602 | North/South Line | Feet from the 1484 | East/West Line | County San Juan |
|------------------|---------------|-----------------|--------------|--------------------------|---------------------|--------------------------|-------------------|--------------------|

Latitude 36.563504 Longitude 107.850989

OIL CONS. DIV DIST. 3

NATURE OF RELEASE

MAY 08 2015

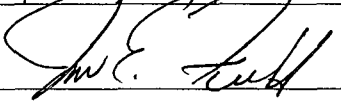
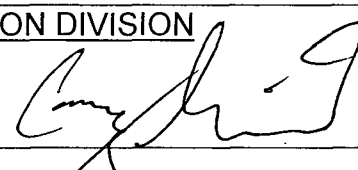
| | | |
|--|---|--|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: Unknown | Volume Recovered: None |
| Source of Release: Suspected internal corrosion | Date and Hour of Occurrence: 4/23/2015 @ 1:05 p.m. | Date and Hour of Discovery: 4/23/2015 @ 2:00 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? Thomas Long | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On April 23, 2015, during routine operations a field operation technician identified a natural gas release on Lateral 2A-4 pipeline. The pipeline was isolated, depressurized, locked out and tagged out. Repairs are currently being scheduled and subsurface impacts will be evaluated during repair activities.

Describe Area Affected and Cleanup Action Taken.* A small area of soil staining was observed on the ground surface. Subsurface impacts are unknown and will be evaluated during repair activities.

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.

| | | |
|--|---|-----------------------------------|
| Signature:  | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist:  | |
| Title: Director, Environmental | Approval Date: 5/12/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 5/4/2015 Phone: (713)381-6684 | | |

* Attach Additional Sheets If Necessary

#NCS 1513237838

①

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Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | | |
|--|---|---------|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long | |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 | |
| Facility Name: Lateral 3B-33 | Facility Type: Natural Gas Gathering Pipeline | |
| Surface Owner: BLM | Mineral Owner: BLM | API No. |

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|--------------|-----------------|--------------|-------------------------|--------------------------------|--------------------------|------------------------------|--------------------|
| Unit Letter N | Section 2 | Township 29N | Range 12W | Feet from the 903 | North South Line | Feet from the 1397 | East West Line | County San Juan |
|------------------|--------------|-----------------|--------------|-------------------------|--------------------------------|--------------------------|------------------------------|--------------------|

Latitude 36.750320 Longitude -108.072576

OIL CONS. DIV DIST. 3

NATURE OF RELEASE

MAY 08 2015

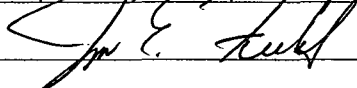

| | | |
|--|---|---|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: Unknown | Volume Recovered: None |
| Source of Release: Suspected internal corrosion | Date and Hour of Occurrence: 4/24/15 @ 9:25 a.m. | Date and Hour of Discovery: 4/24/15 @ 12:30 p.m. |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Cory Smith - NMOCD | |
| By Whom? Thomas Long | Date and Time 4/25/15 at 11:04 a.m. | |
| Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.* The release is located in a small ephemeral wash. No surface impacts observed.

Describe Cause of Problem and Remedial Action: On April 25, 2105, at 9:25am Gas Control reported a possible pipeline leak on Lateral 3B-33. At 9:41am Enterprise employees were dispatched to leak site. The cause of the release is unknown at this time. The release was verified and the pipeline was isolated, depressurized, locked out and tagged out. Subsurface impacted are unknown and will be evaluated during the repairs activities.

Describe Area Affected and Cleanup Action: No fluids were observed at the ground surface. Subsurface impacts are unknown and will be evaluated at the time of repairs. A "Final" C-141 will be submitted upon receipt of the third party environmental contractor corrective action report.

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.

| | | |
|--|---|-----------------------------------|
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| Printed Name: Jon E. Fields | Approved by Environmental Specialist:  | |
| Title: Director, Environmental | Approval Date: 5/12/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 5/4/2015 | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

#NLS 1513237509

①

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OIL CONSERVATION DIVISION

APR 27 2015

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Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Lateral C-7 Pipeline | Facility Type: Natural Gas Gathering Line |

| | | |
|--------------------|--------------------|---------|
| Surface Owner: BLM | Mineral Owner: BLM | API No. |
|--------------------|--------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|--------------|-----------------|-------------|----------------------|------------------|-----------------------|----------------|--------------------|
| Unit Letter C | Section 1 | Township 27N | Range 9W | Feet from the 417 | North South Line | Feet from the 2370 | East West Line | County San Juan |
|------------------|--------------|-----------------|-------------|----------------------|------------------|-----------------------|----------------|--------------------|

Latitude 36.610148

Longitude 107.740565

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: 204.18 MCF Gas; 25-50 BBLS fluids | Volume Recovered: None |
| Source of Release: Cracked weld on the pipeline | Date and Hour of Occurrence: 3/3/2015 @ 12:10 p.m. | Date and Hour of Discovery: 3/3/2015 @ 12:10 p.m. |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? NMOCD - Cory Smith; BLM - Shari Ketcham; San Juan County Sheriff's Department; LEPC | |
| By Whom? Thomas Long | Date and Hour: 3/3/2015 @ 2:15 p.m. | |
| Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If YES, Volume Impacting the Watercourse Estimated 1-2 BBLs | |

If a Watercourse was Impacted, Describe Fully. *Fluids released from the pipeline entered a small unclassified ephemeral wash.

Describe Cause of Problem and Remedial Action: On March 3, 2015, a third party reported pipeline release on the Lateral C-7. Enterprise technicians confirmed the release. The pipeline was isolated, depressurized, locked out and tagged out to mitigate any safety and environmental hazards. The release was a result of cracked weld on the pipeline. Upon completion of remediation activities, this section of the Lateral C-7 was removed from service.

Describe Area Affected and Cleanup Action Taken. * The contaminant mass was removed by mechanical excavation and hydro-excavation. The main excavation measured approximately 132 feet long by 40 feet wide by 35 feet deep. Additional areas in the bar ditched, wash and rill were manually excavated. Approximately 1, 870 cubic yards of hydrocarbon impacted soil and approximately 315 barrels of fluids/sludge was transported to a New Mexico Oil Conservation approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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.

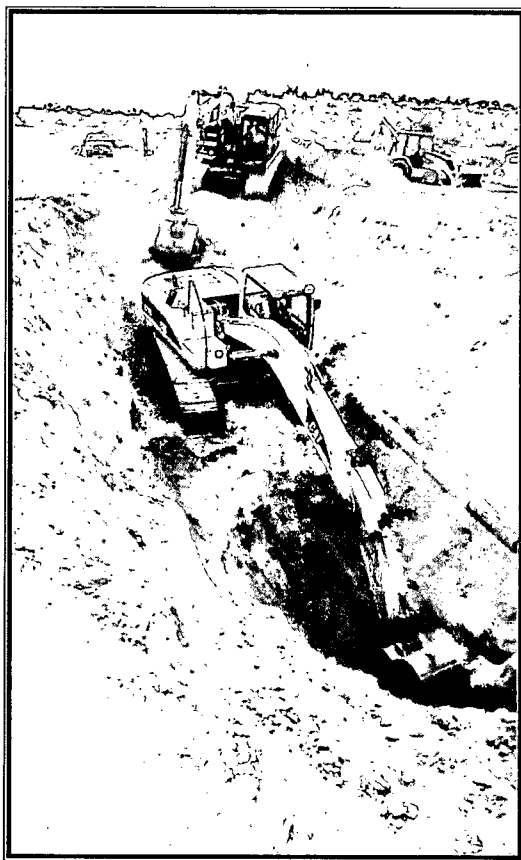
| | | | |
|---|--|--|------------------|
| Signature: <i>Jon E. Fields</i> | | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | | Approval Date: <i>5/2/15</i> | Expiration Date: |
| E-mail Address: jefields@eprod.com | | Conditions of Approval: | |
| Date: <i>4-24-2015</i> Phone: (713)381-6684 | | Attached <input type="checkbox"/> | |

* Attach Additional Sheets If Necessary

NCS 1509730925

219

Enterprise Products
Lateral C-7 Pipeline Release
Latitude North 36.61010°, Longitude West -107.74052°
Unit Letter A Section 1 T27N R9W
San Juan County, New Mexico
April 9, 2015



OIL CONS. DIV DIST. 3
APR 27 2015

Submitted To:

Enterprise Products
Field Environmental-San Juan Basin
614 Reilly Avenue
Farmington, NM 87401

Submitted By:

Souder, Miller & Associates
401 West Broadway
Farmington, NM 87401
(505)325-7535



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| 5.0 | Conclusions and Recommendations | 2 |
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Figure 1: Vicinity Map

Figure 2: Site Map

Figure 3: Soil Contaminant Concentration Map A

Figure 4: Soil Contaminant Concentration Map B

Figure 5: Soil Contaminant Concentration Map C

Tables:

Table 1: Release Information

Table 2: Site Ranking

Table 3: Summary of Laboratory Analysis

Appendices:

Appendix A: Site Photography

Appendix B: Soil Disposal Documentation

Appendix C: Laboratory Analytical Reports

1.0 Executive Summary

On March 16, 17 and 18, 2015, Souder, Miller & Associates (SMA) oversaw the excavation of a hydrocarbon release associated with the Lateral C-7 pipeline initially reported to SMA on March 3, 2015. The table below summarizes information about the recent remediation activities.

| TABLE 1: RELEASE INFORMATION | | | | | |
|--|--|-------------|--------------------------|-----------|-------------|
| Name | Lateral C-7 Pipeline Release | | | | |
| Location | Latitude/Longitude | | Section, Township, Range | | |
| | 36.61010° | -107.74052° | Unit A | Section 1 | T 27N, R 9W |
| Date Reported to SMA | March 3, 2015 | | | | |
| Reported to | Tom Long | | | | |
| Land Owner | Bureau of Land Management (BLM) | | | | |
| Reported To | BLM, NM Oil Conservation Division (NMOCD) | | | | |
| Diameter of Pipeline | 10 inches | | | | |
| Source of Release | Faulty Welds | | | | |
| Release Contents | Natural Gas Liquids/Condensate | | | | |
| Release Volume | Unknown | | | | |
| Nearest Waterway | Unnamed Tributary Wash to Blanco Wash | | | | |
| Depth to Groundwater | Assumed to be less than 50 feet | | | | |
| Nearest Domestic Water Source | Greater than 1,000 feet | | | | |
| NMOCD Ranking | 40 | | | | |
| SMA Response Dates | 3/16,17,18/2015 | | | | |
| Subcontractors | Halo Services Inc. | | | | |
| Disposal Facility | Envirotech Landfarm | | | | |
| Yd ³ Contaminated Soil Excavated and Disposed | 1870 Yd ³ Soil / 315 bbls liquids | | | | |

2.0 Introduction

On behalf of Enterprise Products Operating, LLC. (Enterprise), SMA has prepared this report that describes remediation of a hydrocarbon release associated with the Lateral C-7 pipeline. The C-7 pipeline release was a result of faulty weld of the 10-inch, steel pipeline. The release was initially reported to SMA on March 3, 2015. The release site is located in Unit Letter A, Section 1, Township 27 North, Range 9 West; 36.61010°, -107.74052°, San Juan County, New Mexico. Figure 1, Vicinity Map, illustrates the location of the release.

3.0 Site Ranking and Land Jurisdiction

The release site is located in an unnamed tributary wash to Blanco Wash on land managed by the Bureau of Land Management. The site is at an elevation of approximately 5,916 feet above sea level. After evaluation of the site using aerial photography and topographic maps, depth to groundwater is estimated to be less than 50 feet below ground surface (bgs). Figure 2 depicts the site location.

SMA searched the New Mexico State Engineer's Office online water well data base for water wells in the vicinity of the release. No wells were located within 1,000 feet of the site. However, 10 wells were located within a 1 mile radius of the site. The physical location of this release is within the jurisdiction of the Bureau of Land Management.

This release location has been assigned a NMOCD ranking of 40 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 100 ppm total petroleum hydrocarbons (TPH). Table 2 illustrates site ranking rationale.

4.0 Summary of Field Activities

On March 16, 17, 18, 2015, SMA mobilized to the release site to oversee excavation activities during the repair of the pipeline. SMA oversaw and directed the excavation of hydrocarbon impacted soils by Halo Services Inc. SMA guided the excavation activities by collecting soil samples for field screening with a calibrated photo-ionization detector (PID). Liquids Discharged from the pipeline traveled across the surface to the north and east in the bar ditches and washes near the release. Figures 3, 4 and 5 illustrate the soil sample locations.

Soil samples were initially field screened with a calibrated PID and submitted for conformation laboratory analysis per United States Environmental Protection Agency Method 8021 BTEX, and 8015 Diesel Range Organics (DRO) and Gasoline Range Organics (GRO) and EPA Method 300.0 for Chlorides to Hall Environmental Analytical Laboratory, Albuquerque, New Mexico. Figure 4 illustrates the extent of the excavation and composite soil sample locations and laboratory results. Laboratory results are included in Appendix C.

The final excavation dimensions were approximately 132 feet long by 40 feet wide and up to 35 feet deep, covering an area of approximately 5280 square feet. Surface impacts in the bar ditches, wash and the rill were manually excavated. In total, approximately 1,870 cubic yards of material were excavated and hauled to Envirotech Land Farm near Bloomfield, New Mexico for proper disposal and replaced with clean backfill material. Soil disposal documentation is included in Appendix B. Site photography is included in Appendix A.

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 40: 10 ppm benzene, 50 ppm total BTEX, and 100 ppm TPH.

Laboratory analytical results for all samples collected during the March, 2015 excavation indicate concentrations below NMOCD Guidelines. One sample taken from the area across the road where liquids pooled, prior to entering the small wash and the east bar ditch, was above NMOCD standards with combined TPH of 143 mg/kg. The location of this sample was further excavated on March 24, 2015 to 1 foot bgs. An additional sample was collected and submitted for laboratory analysis on March 24, 2014. The results for this subsequent sample, SC-1@1' bgs, were below NMOCD/BLM Guidelines for benzene, BTEX, TPH and chlorides.

Soil contaminant concentrations are illustrated in Figures 3, 4 and 5. A summary of laboratory analysis is included in Table 4. Laboratory reports are included in Appendix C.

SMA recommends no further activities at the Lateral C-7 site.

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, oversight and control of remediation operations, disposal arrangements and documentation, project management, and preparation of this summary report. All work has been performed in accordance with generally accepted professional environmental consulting practices.

If there are any questions regarding this report, please contact either Steve Moskal or Reid Allan at 505-325-7535.

Submitted by:

Reviewed by:

SOUDER, MILLER & ASSOCIATES

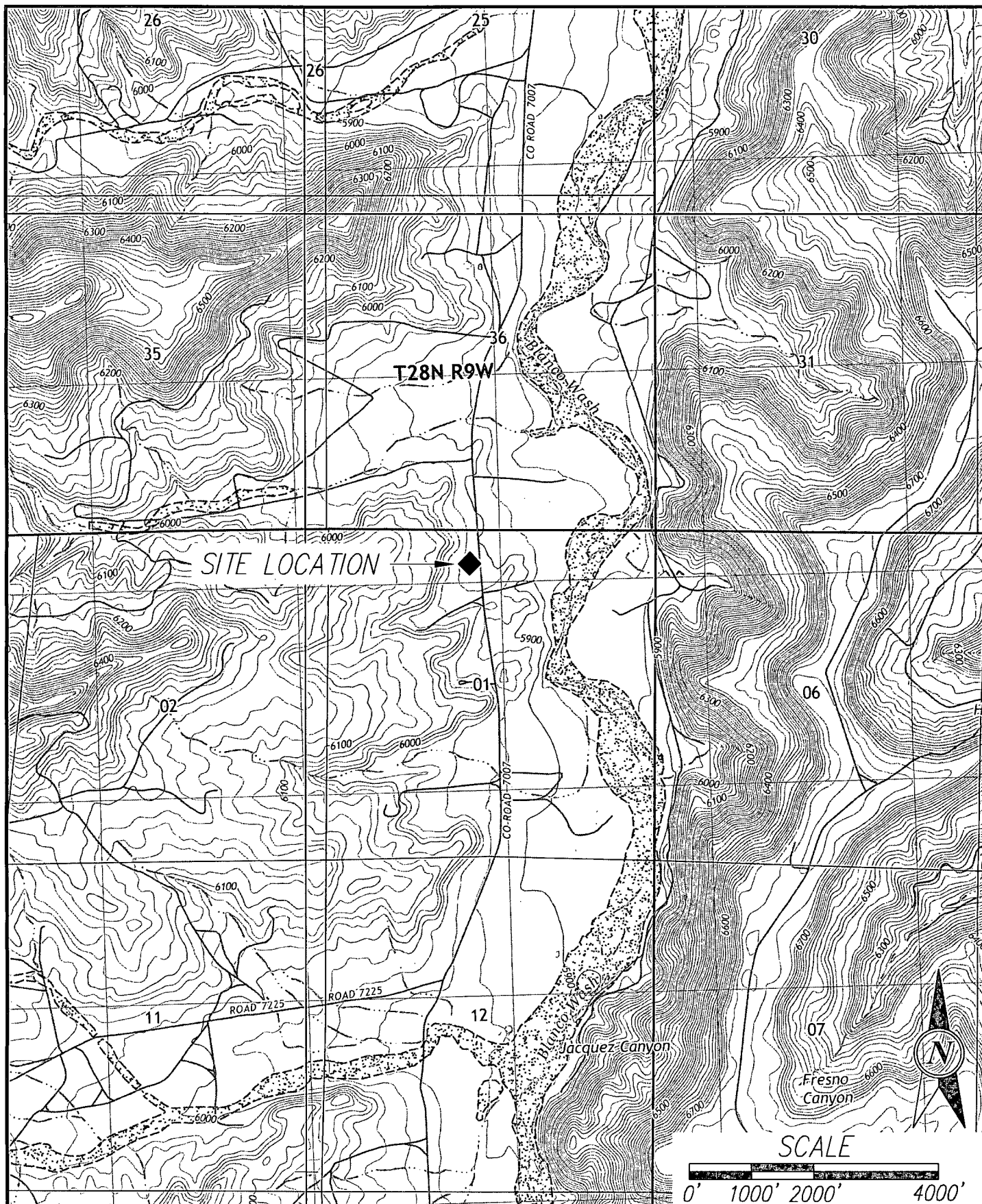


Jesse Sprague
Staff Scientist



Reid S. Allan, PG
Principal Scientist

Figures



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VICINITY MAP

LATERAL C-7

SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| | | |
|----------------|--------------|----------------|
| Designed SM | Drawn GJF | Checked RSA |
|----------------|--------------|----------------|

Date: APRIL 2015

Scale: Horiz: 1"=2000'
Vert: N/A

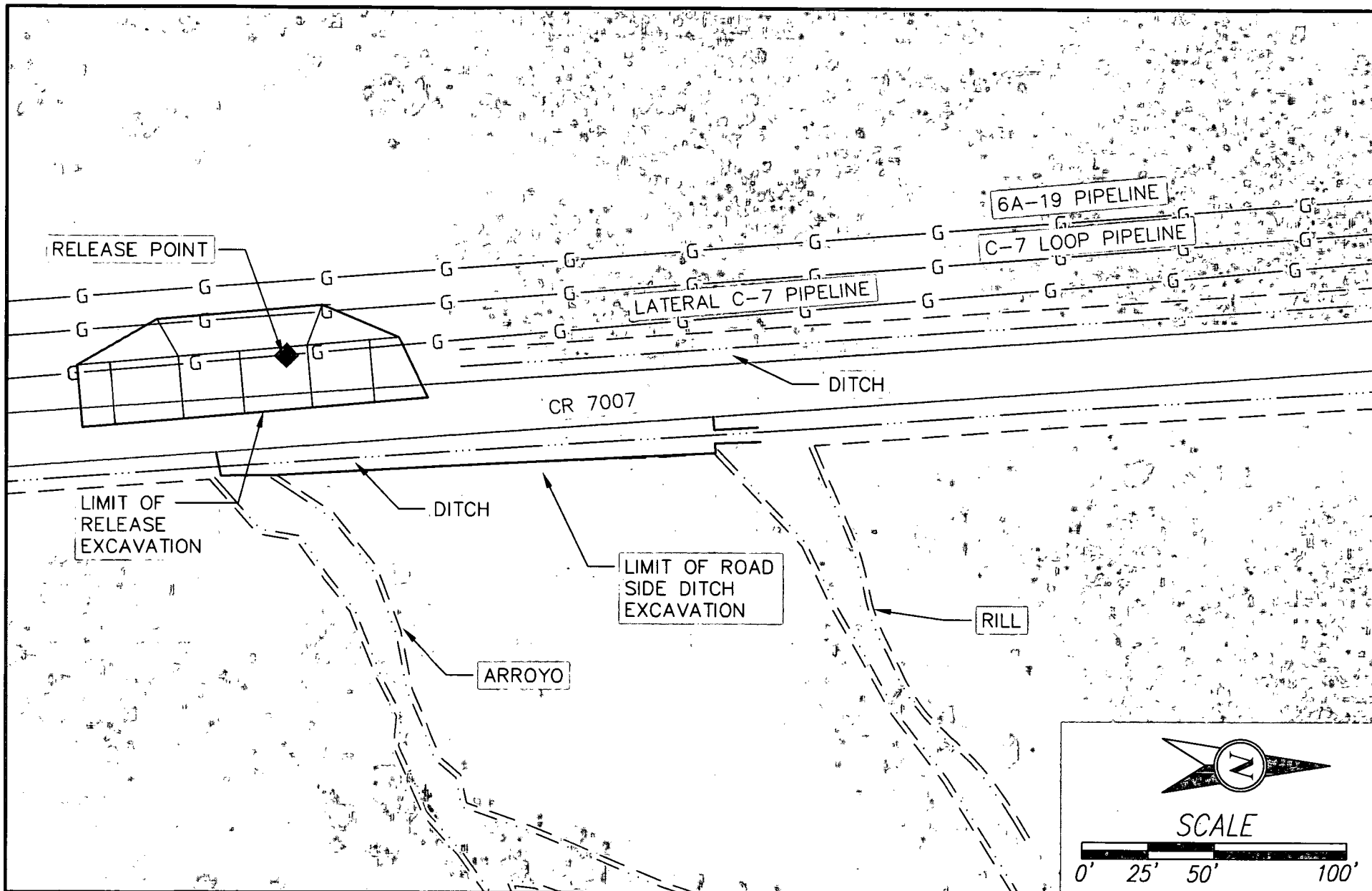
Project No: 5123699

Sheet: 1

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P:\15-Enterprise MSA (2015) 5123699\Release Response\BG12 - Lateral C-7\CAD\Civil\LOCATION MAP.dwg, GJF, 4/6/2015 1:13 PM



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**SITE LOCATION MAP
LATERAL C-7
SECTION 1, T27N, R9W**

SAN JUAN COUNTY, NEW MEXICO

| Designed SM | Drawn DJB | Checked RSA |
|----------------|---------------|----------------|
| Date: | APRIL 2015 | |
| Scale: | Horiz: 1"=50' | |
| | Vert: N/A | |
| Project No: | 5123699 | |
| Sheet: | 2 | |

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SC-40

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|-----------------|-------|-------------------------|----------------------------|--------------------|--------------------|---------------------------|------------------------|------------------------------|
| NMOC Guidelines | | NMOC Site Ranking: 0 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/18/2015 | 13:43 | SC-14 N Wall | 0'-15' | <2.8 | <9.8 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 13:46 | SC-15 N Bench | 15' | <2.9 | <9.8 | <0.029 | <0.057 | <30 |
| 3/18/2015 | 13:49 | SC-16 N Wall Deep | 15'-35' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/18/2015 | 13:52 | SC-17 N Deep Base | 35' | <3.3 | <9.9 | <0.033 | <0.067 | <30 |
| 3/18/2015 | 13:55 | SC-18 S Deep Base | 35' | <3.3 | <9.8 | <0.033 | <0.066 | <30 |
| 3/18/2015 | 13:58 | SC-19 S Deep Wall | 15'-35' | <2.8 | <10 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 14:01 | SC-20 S Bench | 15' | <3.2 | <10 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:04 | SC-21 S Wall | 0'-15' | <3.1 | <9.9 | <0.031 | <0.062 | <30 |
| 3/18/2015 | 14:07 | SC-22 NE Wall | 0'-15' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:10 | SC-23 NE Wall 2 | 0'-15' | <3.36 | <10 | <0.036 | <0.071 | <30 |
| 3/18/2015 | 14:13 | SC-24 E Wall Deep | 0'-35' | <2.9 | <9.9 | <0.029 | <0.058 | <30 |
| 3/18/2015 | 14:16 | SC-25 E Wall Deep South | 0'-35' | <3.2 | <10 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:19 | SC-26 E Wall S | 0'-15' | <3.5 | <9.9 | <0.035 | <0.070 | <30 |
| 3/18/2015 | 14:22 | SC-27 E Wall S 2 | 0'-15' | <3.0 | <10 | <0.030 | <0.06 | <30 |
| 3/18/2015 | 14:25 | SC-28 NW Wall | 0'-15' | <3.4 | <10 | <0.034 | <0.068 | <30 |
| 3/18/2015 | 14:28 | SC-29 NW Wall 2 | 0'-35' | <3.6 | <9.8 | <0.036 | <0.072 | <30 |
| 3/18/2015 | 14:31 | SC-30 NW Wall 3 | 0'-35' | <4.5 | <9.9 | <0.045 | <0.089 | <30 |
| 3/18/2015 | 14:34 | SC-31 SW Wall | 0'-35' | <3.2 | <9.9 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:37 | SC-32 SW Wall 2 | 0'-35' | <4.6 | <10 | <0.046 | <0.093 | <30 |
| 3/18/2015 | 14:40 | SC-33 SW Wall 3 | 0'-15' | <3.4 | <10 | <0.034 | <0.067 | <30 |
| 3/18/2015 | 15:01 | SC-40 Background | .5' | <4.6 | <9.9 | <0.046 | <0.091 | <30 |

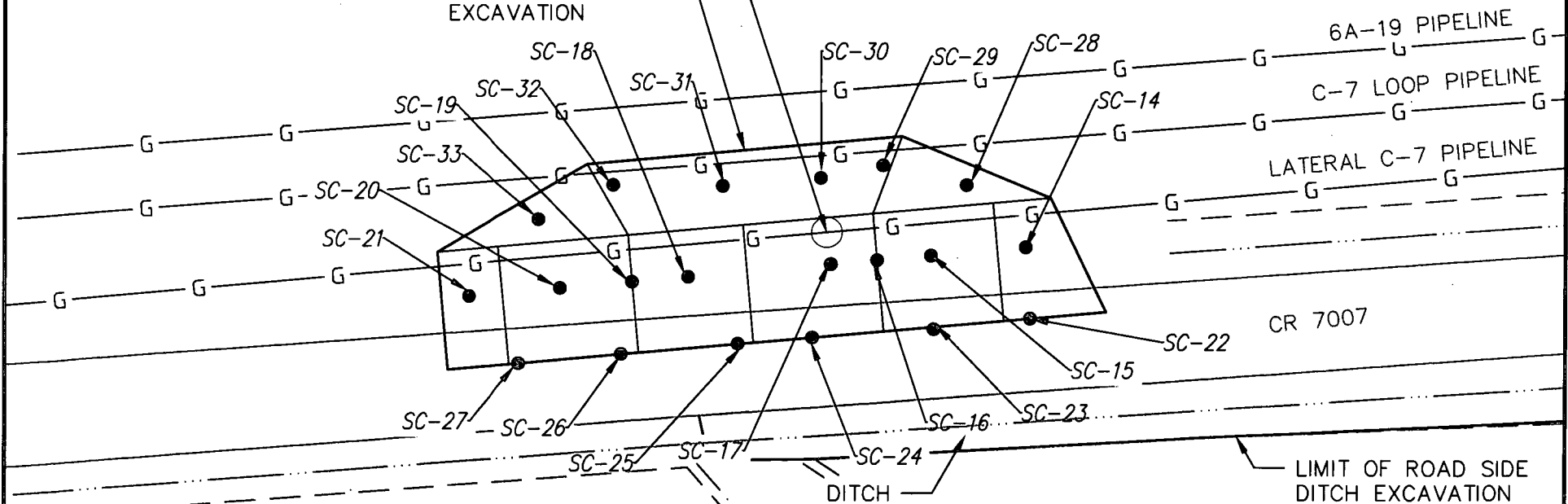


SCALE

0' 15' 30' 60'

LIMIT OF RELEASE
EXCAVATION

RELEASE POINT



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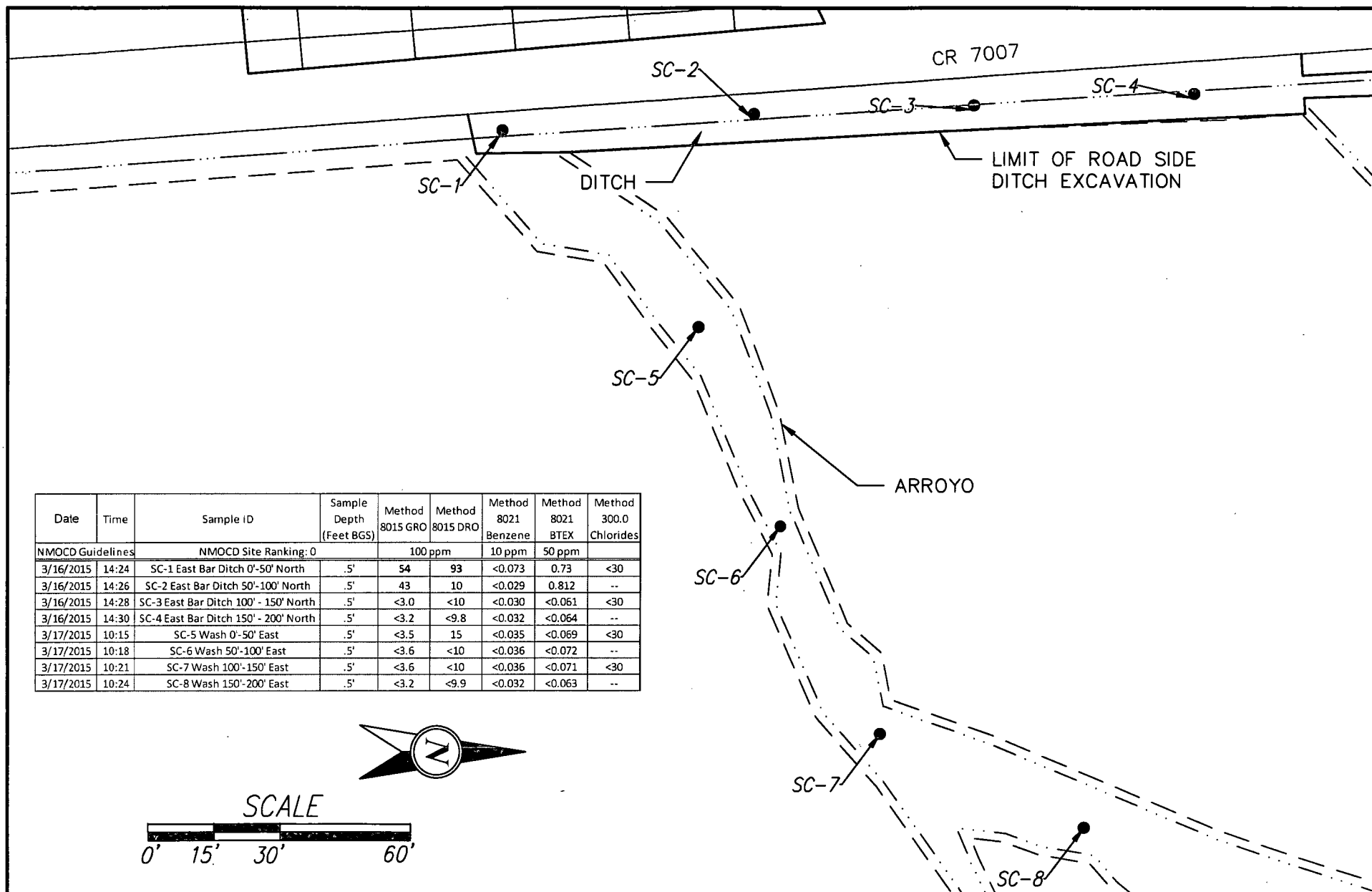
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FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION
LATERAL C-7
SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| Designed SM | Drawn DJB | Checked RSA |
|----------------|---------------|----------------|
| Date: | APRIL 2015 | |
| Scale: | Horiz. 1"=30' | |
| | Vert. N/A | |
| Project No: | 5123699 | |
| Sheet: | 3 | |



| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|-------------------------------------|-------------------------|-----------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | | NMOCD Site Ranking: 0 | | | 100 ppm | 10 ppm | 50 ppm |
| 3/16/2015 | 14:24 | SC-1 East Bar Ditch 0'-50' North | .5' | 54 | 93 | <0.073 | 0.73 | <30 |
| 3/16/2015 | 14:26 | SC-2 East Bar Ditch 50'-100' North | .5' | 43 | 10 | <0.029 | 0.812 | -- |
| 3/16/2015 | 14:28 | SC-3 East Bar Ditch 100'-150' North | .5' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/16/2015 | 14:30 | SC-4 East Bar Ditch 150'-200' North | .5' | <3.2 | <9.8 | <0.032 | <0.064 | -- |
| 3/17/2015 | 10:15 | SC-5 Wash 0'-50' East | .5' | <3.5 | 15 | <0.035 | <0.069 | <30 |
| 3/17/2015 | 10:18 | SC-6 Wash 50'-100' East | .5' | <3.6 | <10 | <0.036 | <0.072 | -- |
| 3/17/2015 | 10:21 | SC-7 Wash 100'-150' East | .5' | <3.6 | <10 | <0.036 | <0.071 | <30 |
| 3/17/2015 | 10:24 | SC-8 Wash 150'-200' East | .5' | <3.2 | <9.9 | <0.032 | <0.063 | -- |



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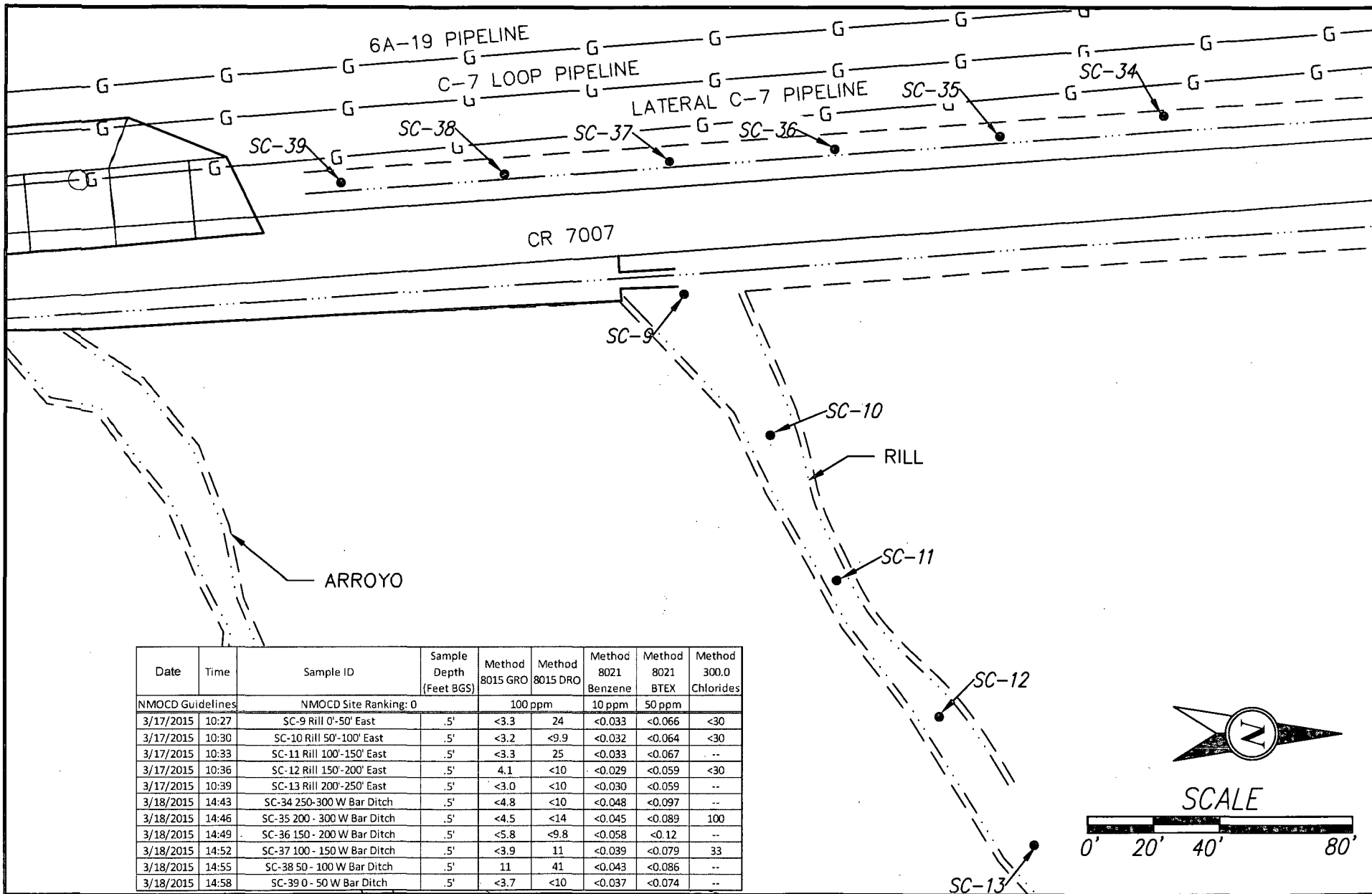
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**SOIL CONTAMINANT CONCENTRATION
 LATERAL C-7
 SECTION 1, T27N, R9W**

SAN JUAN COUNTY, NEW MEXICO

| | | |
|----------------------|--------------|----------------|
| Designed SM | Drawn DJB | Checked RSA |
| Date: APRIL 2015 | | |
| Scale: Horiz: 1"=30' | | |
| Vert: N/A | | |
| Project No: 5123699 | | |
| Sheet: 4 | | |

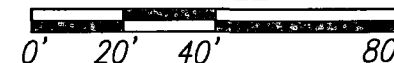
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| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|-----------------------------|-------------------------|-----------------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | | | NMOCD Site Ranking: 0 | | 100 ppm | 10 ppm | 50 ppm |
| 3/17/2015 | 10:27 | SC-9 Rill 0'-50' East | .5' | <3.3 | 24 | <0.033 | <0.066 | <30 |
| 3/17/2015 | 10:30 | SC-10 Rill 50'-100' East | .5' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/17/2015 | 10:33 | SC-11 Rill 100'-150' East | .5' | <3.3 | 25 | <0.033 | <0.067 | -- |
| 3/17/2015 | 10:36 | SC-12 Rill 150'-200' East | .5' | 4.1 | <10 | <0.029 | <0.059 | <30 |
| 3/17/2015 | 10:39 | SC-13 Rill 200'-250' East | .5' | <3.0 | <10 | <0.030 | <0.059 | -- |
| 3/18/2015 | 14:43 | SC-34 250'-300 W Bar Ditch | .5' | <4.8 | <10 | <0.048 | <0.097 | -- |
| 3/18/2015 | 14:46 | SC-35 200 - 300 W Bar Ditch | .5' | <4.5 | <14 | <0.045 | <0.089 | 100 |
| 3/18/2015 | 14:49 | SC-36 150 - 200 W Bar Ditch | .5' | <5.8 | <9.8 | <0.058 | <0.12 | -- |
| 3/18/2015 | 14:52 | SC-37 100 - 150 W Bar Ditch | .5' | <3.9 | 11 | <0.039 | <0.079 | 33 |
| 3/18/2015 | 14:55 | SC-38 50 - 100 W Bar Ditch | .5' | 11 | 41 | <0.043 | <0.086 | -- |
| 3/18/2015 | 14:58 | SC-39 0 - 50 W Bar Ditch | .5' | <3.7 | <10 | <0.037 | <0.074 | -- |



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SOIL CONTAMINANT CONCENTRATION LATERAL C-7 SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| | | |
|----------------|---------------|----------------|
| Designed SM | Drawn DJB | Checked RSA |
| Date: | APRIL 2015 | |
| Scale: | Horiz: 1"=40' | |
| | Vert: N/A | |
| Project No: | 5123699 | |
| Sheet: | 5 | |

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Tables

| Depth to Groundwater | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
|---|----------------------------------|--|---|
| < 50 BGS = 20 | 20 | Field verification that release is located within an unnamed wash. | Groundwater is assumed to be less than 50 feet below ground surface. |
| 50' to 99' = 10 | | | |
| >100' = 0 | | | |
| Ranking Criteria for Horizontal Distance to Nearest Surface Water | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
| < 200' = 20 | 20 | Field verification that release is located within an unnamed wash. | Release is located within an unnamed tributary wash of Blanco Wash. |
| 200'-1000' = 10 | | | |
| >1000' = 0 | | | |
| Ranking Criteria for Horizontal Distance to a Water Well or Water Source | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
| <1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0 | 0 | NM State Engineer Water Well Database | No recorded water wells located with 1000'; Ten wells located within a 1 mile radius. |
| | | | |
| | | | |
| Total Site Ranking | 40 | | |
| | | | |
| | | | |
| Soil Remediation Standards | 0 to 9 | 10 to 19 | >19 |
| | | | |
| Benzene | 10 PPM | 10 PPM | 10 PPM |
| BTEX | 50 PPM | 50 PPM | 50 PPM |
| TPH | 5000 PPM | 1000 PPM | 100 PPM |



Enterprise Products
Table 3: Summary of Laboratory Analysis
Results in mg/Kg

Lateral C-7
Pipeline Release
4/9/2015

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|---------------------------------------|-------------------------|-----------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | NMOCD Site Ranking: 40 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/16/2015 | 14:24 | SC-1 East Bar Ditch 0'-50' North | .5' | 54 | 93 | <0.073 | 0.73 | <30 |
| 3/24/2015 | 9:30 | SC-1 East Bar Ditch 0'-50' North | 1' | <4.9 | <9.8 | <0.049 | <0.097 | 39 |
| 3/16/2015 | 14:26 | SC-2 East Bar Ditch 50'-100' North | .5' | 43 | 10 | <0.029 | 0.812 | -- |
| 3/16/2015 | 14:28 | SC-3 East Bar Ditch 100' - 150' North | .5' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/16/2015 | 14:30 | SC-4 East Bar Ditch 150' - 200' North | .5' | <3.2 | <9.8 | <0.032 | <0.064 | -- |
| 3/17/2015 | 10:15 | SC-5 Wash 0'-50' East | .5' | <3.5 | 15 | <0.035 | <0.069 | <30 |
| 3/17/2015 | 10:18 | SC-6 Wash 50'-100' East | .5' | <3.6 | <10 | <0.036 | <0.072 | -- |
| 3/17/2015 | 10:21 | SC-7 Wash 100'-150' East | .5' | <3.6 | <10 | <0.036 | <0.071 | <30 |
| 3/17/2015 | 10:24 | SC-8 Wash 150'-200' East | .5' | <3.2 | <9.9 | <0.032 | <0.063 | -- |
| 3/17/2015 | 10:27 | SC-9 Rill 0'-50' East | .5' | <3.3 | 24 | <0.033 | <0.066 | <30 |
| 3/17/2015 | 10:30 | SC-10 Rill 50'-100' East | .5' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/17/2015 | 10:33 | SC-11 Rill 100'-150' East | .5' | <3.3 | 25 | <0.033 | <0.067 | -- |
| 3/17/2015 | 10:36 | SC-12 Rill 150'-200' East | .5' | 4.1 | <10 | <0.029 | <0.059 | <30 |
| 3/17/2015 | 10:39 | SC-13 Rill 200'-250' East | .5' | <3.0 | <10 | <0.030 | <0.059 | -- |
| 3/18/2015 | 13:43 | SC-14 N Wall | 0'-15' | <2.8 | <9.8 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 13:46 | SC-15 N Bench | 15' | <2.9 | <9.8 | <0.029 | <0.057 | <30 |
| 3/18/2015 | 13:49 | SC-16 N Wall Deep | 15'-35' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/18/2015 | 13:52 | SC-17 N Deep Base | 35' | <3.3 | <9.9 | <0.033 | <0.067 | <30 |
| 3/18/2015 | 13:55 | SC-18 S Deep Base | 35' | <3.3 | <9.8 | <0.033 | <0.066 | <30 |
| 3/18/2015 | 13:58 | SC-19 S Deep Wall | 15'-35' | <2.8 | <10 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 14:01 | SC-20 S Bench | 15' | <3.2 | <10 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:04 | SC-21 S Wall | 0'-15' | <3.1 | <9.9 | <0.031 | <0.062 | <30 |
| 3/18/2015 | 14:07 | SC-22 NE Wall | 0'-15' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:10 | SC-23 NE Wall 2 | 0'-15' | <3.36 | <10 | <0.036 | <0.071 | <30 |
| 3/18/2015 | 14:13 | SC-24 E Wall Deep | 0'-35' | <2.9 | <9.9 | <0.029 | <0.058 | <30 |
| 3/18/2015 | 14:16 | SC-25 E Wall Deep South | 0'-35' | <3.2 | <10 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:19 | SC-26 E Wall S | 0'-15' | <3.5 | <9.9 | <0.035 | <0.070 | <30 |
| 3/18/2015 | 14:22 | SC-27 E Wall S 2 | 0'-15' | <3.0 | <10 | <0.030 | <0.06 | <30 |
| 3/18/2015 | 14:25 | SC-28 NW Wall | 0'-15' | <3.4 | <10 | <0.034 | <0.068 | <30 |
| 3/18/2015 | 14:28 | SC-29 NW Wall 2 | 0'-35' | <3.6 | <9.8 | <0.036 | <0.072 | <30 |
| 3/18/2015 | 14:31 | SC-30 NW Wall 3 | 0'-35' | <4.5 | <9.9 | <0.045 | <0.089 | <30 |
| 3/18/2015 | 14:34 | SC-31 SW Wall | 0'-35' | <3.2 | <9.9 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:37 | SC-32 SW Wall 2 | 0'-35' | <4.6 | <10 | <0.046 | <0.093 | <30 |
| 3/18/2015 | 14:40 | SC-33 SW Wall 3 | 0'-15' | <3.4 | <10 | <0.034 | <0.067 | <30 |



Enterprise Products
Table 3: Summary of Laboratory Analysis
Results in mg/Kg

Lateral C-7
Pipeline Release
4/9/2015

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|-----------------------------|-------------------------|-----------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | NMOCD Site Ranking: 40 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/18/2015 | 14:43 | SC-34 250-300 W Bar Ditch | .5' | <4.8 | <10 | <0.048 | <0.097 | -- |
| 3/18/2015 | 14:46 | SC-35 200 - 300 W Bar Ditch | .5' | <4.5 | <14 | <0.045 | <0.089 | 100 |
| 3/18/2015 | 14:49 | SC-36 150 - 200 W Bar Ditch | .5' | <5.8 | <9.8 | <0.058 | <0.12 | -- |
| 3/18/2015 | 14:52 | SC-37 100 - 150 W Bar Ditch | .5' | <3.9 | 11 | <0.039 | <0.079 | 33 |
| 3/18/2015 | 14:55 | SC-38 50 - 100 W Bar Ditch | .5' | 11 | 41 | <0.043 | <0.086 | -- |
| 3/18/2015 | 14:58 | SC-39 0 - 50 W Bar Ditch | .5' | <3.7 | <10 | <0.037 | <0.074 | -- |
| 3/18/2015 | 15:01 | SC-40 Background | .5' | <4.6 | <9.9 | <0.046 | <0.091 | <30 |



Appendix A
Site Photography

Site Photographs

Enterprise Products Lateral C-7 Pipeline



Photo 1: The liquids released from the Lateral C-7 eroded a large hole above the release location. Pictured is the release after residual liquids were removed.

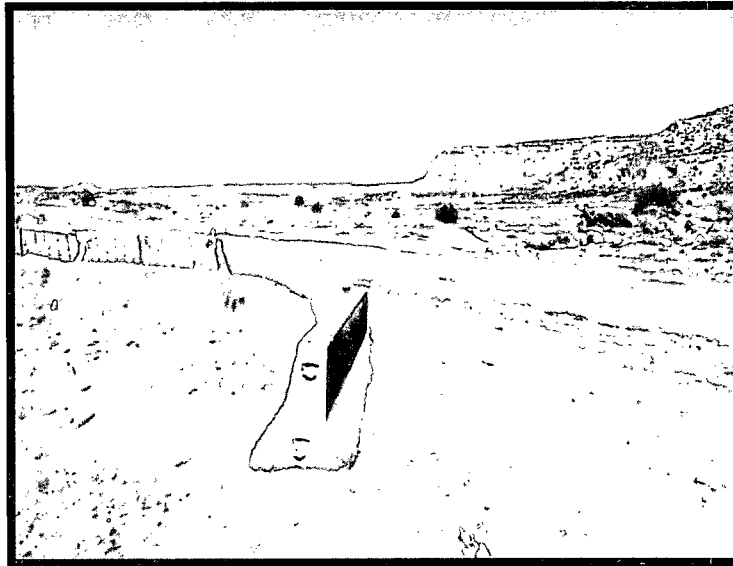


Photo 2: Surface impact from pipeline liquids as they traveled across ground surface in the vicinity of the release.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

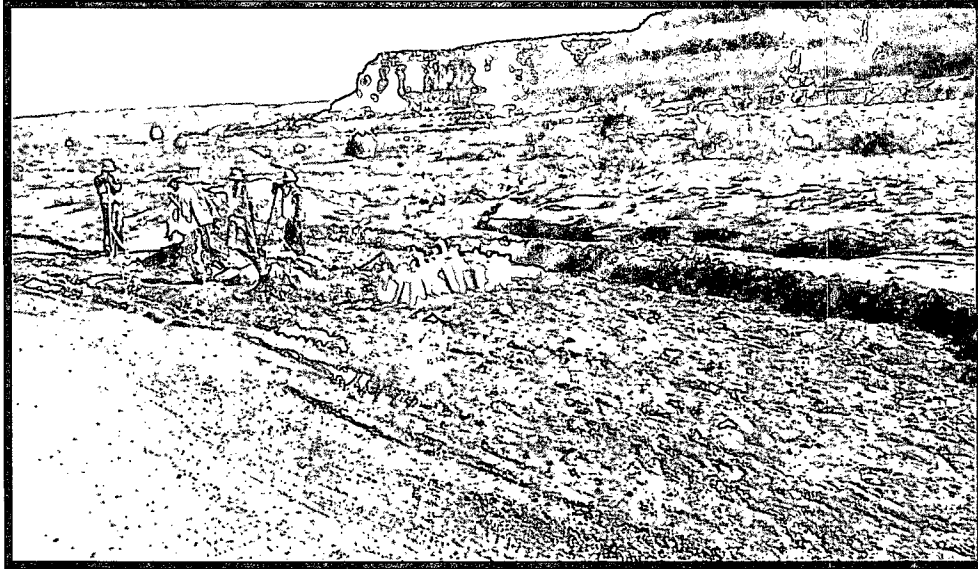


Photo 3: Manual excavation of surface impacts in the east bar ditch and wash by Halo Services Inc. contractors.



Photo 4: Visible surface impact, the location pictured is where the east bar ditch impact enters the rill and runs east. One point in a sample composite is visible.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

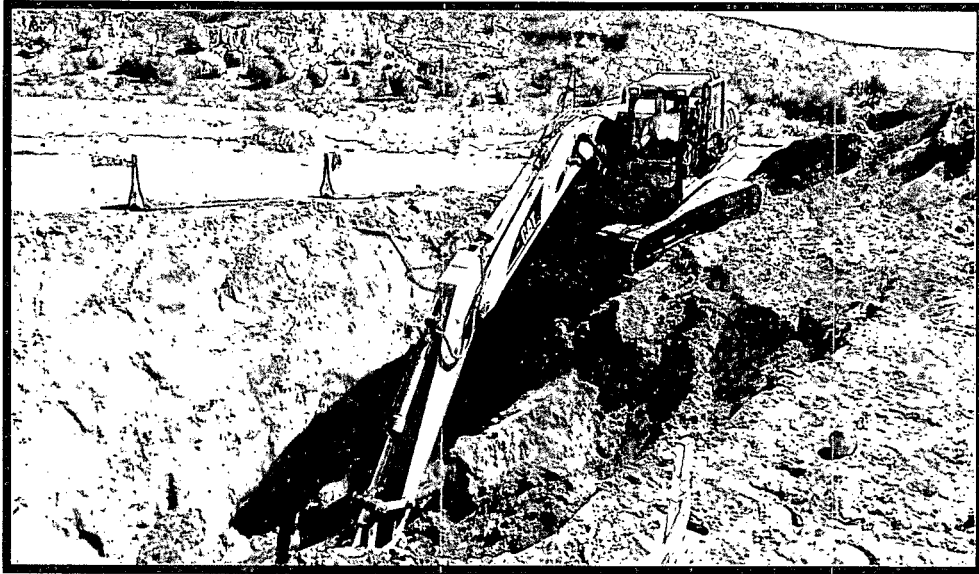


Photo 5: Initial excavation exposes impacted soils near the release. The depth of the pipeline necessitated a large excavation.

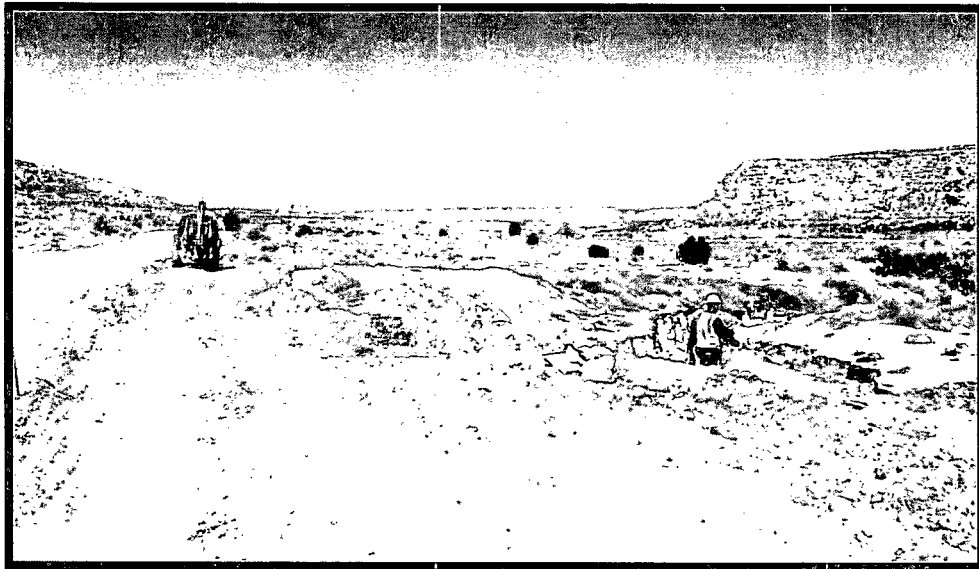


Photo 6: A rubber tire backhoe was used to remove the impact within the bar ditch. Also visible is the removal of surface impacts within the wash. View is to north.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

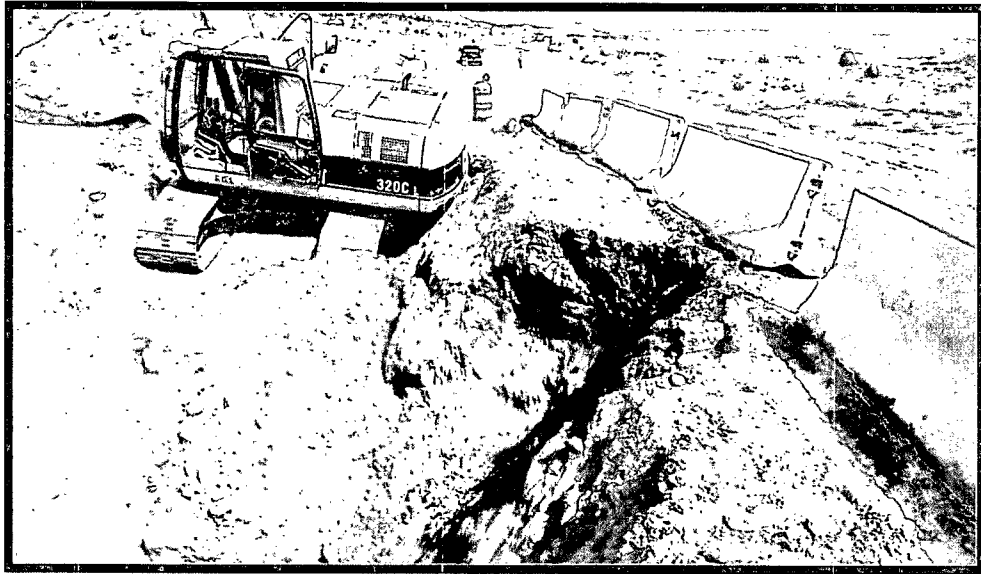


Photo 7: Contamination extended into the road base but was able to be removed by creating a shoofly to divert traffic to the east. Concrete barriers and barrels where used for safety.

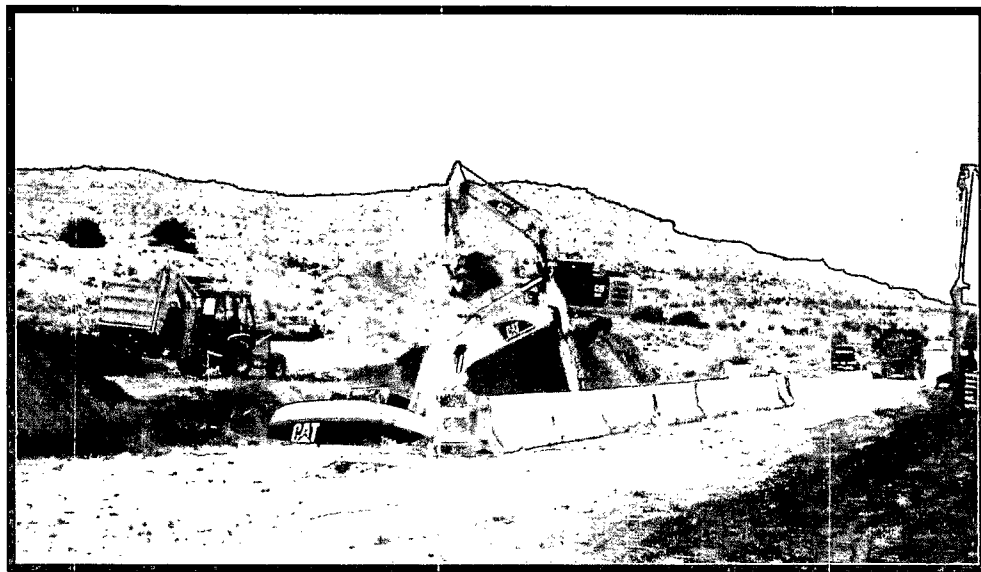


Photo 8: A second track mounted hoe was used to keep up with soil excavation and removal.

Site Photographs
Enterprise Products Lateral C-7 Pipeline

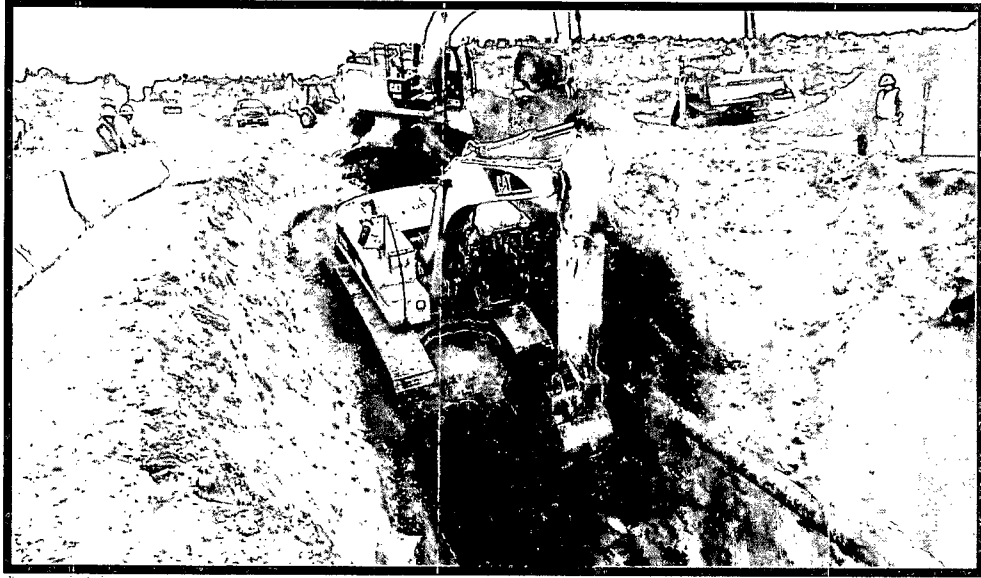


Photo 9: Heavily stained soils were encountered in the east end of the excavation however contamination was not detected in laboratory samples.

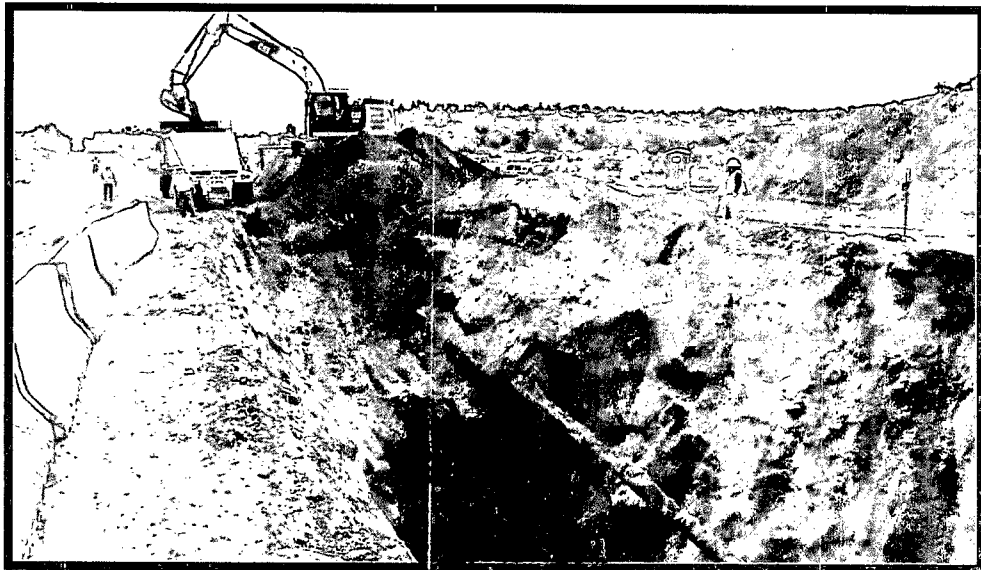


Photo 10: Final excavation extents measured over 130 feet long with depths to 35 feet below grade.

Appendix B
Soil Disposal Documentation

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources 97057-0693
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| |
|---|
| 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 |
| 2. Originating Site: Lateral C-7 Pipeline Release March 2015 |
| 3. Location of Material (Street Address, City, State or ULSTR): Unit C Sec 1 T 27 N R 9 W, San Juan County, NM; 36.610106, -107.740523 |
| 4. Source and Description of Waste: Source: Natural Gas Gathering Line Description: Hydrocarbon impacted soil/sludge/water released from a gathering line Estimated Volume 80 yd ³ / bbls Known Volume (to be entered by the operator at the end of the haul) 1798/315 yd ³ / bbls |

5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Thomas Long *Thomas Long*, representative or authorized agent for Enterprise Products Operating do hereby
Generator Signature
certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988
regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☐ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☒ Process Knowledge ☐ Other (Provide description in Box 4)

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Thomas Long *Thomas Long*, 3-3-15, representative for Enterprise Products Operating authorize to complete
Generator Signature
the required testing/sign the Generator Waste Testing Certification.

I, *Kendra Running*, representative for Envirotech, Inc. do hereby certify that
representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples
have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results
of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of
19.15.36 NMAC.

5. Transporter: To Be Determined, *Envirotech, Halo, BET, Contant, HBL, Flying M, Del Prado, 3E Energy, Lokato, Esparza, B+B Excavation, Rockies*

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running

SIGNATURE: *Kendra Running*

Surface Waste Management Facility Authorized Agent

TITLE: Waste Coordinator

TELEPHONE NO.:

505-632-0615

DATE: 3/3/15

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources 97057-0693
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| |
|---|
| 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 |
| 2. Originating Site: Lateral C-7 Pipeline Release <div style="text-align: right;">April 2015</div> |
| 3. Location of Material (Street Address, City, State or ULSTR): Unit C Sec 1 T 27 N R 9 W, San Juan County, NM; 36.610106, -107.740523 |
| 4. Source and Description of Waste: Source: Natural Gas Gathering Line Description: Hydrocarbon impacted soil/sludge/water released from a gathering line Estimated Volume 80 yd ³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 72 yd ³ bbls |
| 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Thomas Long <i>Thomas Long</i> , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input checked="" type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, Thomas Long <i>Thomas Long</i> 3-3-15, representative for Enterprise Products Operating authorize to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <i>Kendra Running</i> , representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. |
| 5. Transporter: To Be Determined <u>Envirotech, Rich Trucking</u> |

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running
SIGNATURE: *Kendra Running*
Surface Waste Management Facility Authorized Agent

TITLE: Waste Coordinator
TELEPHONE NO.: 505-632-0615

DATE: 4/1/15

Appendix C

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

March 18, 2015

Steve Moskal

Souder, Miller and Associates

401 W. Broadway

Farmington, NM 87401

TEL: (505) 325-5667

FAX

RE: Lateral C-7

OrderNo.: 1503672

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/17/2015 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 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 #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-1**Project:** Lateral C-7**Collection Date:** 3/16/2015 2:24:00 PM**Lab ID:** 1503672-001**Matrix:** MEOH (SOIL)**Received Date:** 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | 93 | 10 | | mg/Kg | 1 | 3/17/2015 1:03:40 PM | 18172 |
| Surr: DNOP | 117 | 63.5-128 | | %REC | 1 | 3/17/2015 1:03:40 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 54 | 15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Surr: BFB | 167 | 80-120 | S | %REC | 5 | 3/17/2015 9:07:38 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.073 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Toluene | ND | 0.15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Ethylbenzene | ND | 0.15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Xylenes, Total | 0.73 | 0.29 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 116 | 80-120 | | %REC | 5 | 3/17/2015 9:07:38 AM | 18158 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/17/2015 9:24:05 AM | 18176 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2

Project: Lateral C-7

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503672-002

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | 10 | 9.9 | | mg/Kg | 1 | 3/17/2015 1:25:14 PM | 18172 |
| Surr: DNOP | 112 | 63.5-128 | | %REC | 1 | 3/17/2015 1:25:14 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 43 | 2.9 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Surr: BFB | 329 | 80-120 | S | %REC | 1 | 3/17/2015 9:36:22 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Toluene | 0.072 | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Ethylbenzene | 0.11 | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Xylenes, Total | 0.63 | 0.058 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 132 | 80-120 | S | %REC | 1 | 3/17/2015 9:36:22 AM | 18158 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 2 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3

Project: Lateral C-7

Collection Date: 3/16/2015 2:28:00 PM

Lab ID: 1503672-003

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/17/2015 1:46:58 PM | 18172 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/17/2015 1:46:58 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Surr: BFB | 98.9 | 80-120 | | %REC | 1 | 3/17/2015 10:05:07 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Xylenes, Total | ND | 0.061 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 112 | 80-120 | | %REC | 1 | 3/17/2015 10:05:07 AM | 18158 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/17/2015 9:36:29 AM | 18176 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4

Project: Lateral C-7

Collection Date: 3/16/2015 2:30:00 PM

Lab ID: 1503672-004

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/17/2015 2:08:32 PM | 18172 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/17/2015 2:08:32 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Surr: BFB | 104 | 80-120 | | %REC | 1 | 3/17/2015 10:33:48 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 110 | 80-120 | | %REC | 1 | 3/17/2015 10:33:48 AM | 18158 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 4 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18176 | SampType: | MBLK | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | PBS | Batch ID: | 18176 | RunNo: | 24873 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732771 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18176 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18176 | RunNo: | 24873 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732772 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 94.2 | 90 | 110 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18172 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18172 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732781 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 11 | | 10.00 | | 113 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18172 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18172 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732873 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 93.8 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.4 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503672-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 18172 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733111 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 190 | 10 | 49.80 | 92.72 | 191 | 29.2 | 176 | | | S |
| Surr: DNOP | 5.6 | | 4.980 | | 112 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503672-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 18172 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733126 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 240 | 10 | 50.35 | 92.72 | 286 | 29.2 | 176 | 22.9 | 23 | S |
| Surr: DNOP | 5.9 | | 5.035 | | 117 | 63.5 | 128 | 0 | 0 | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18142 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18142 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733137 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 11 | | 10.00 | | 108 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18142 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18142 | RunNo: | 24861 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733142 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.5 | | 5.000 | | 89.4 | 63.5 | 128 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | MB-18158 | | SampType: MBLK | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | | Batch ID: 18158 | | RunNo: 24877 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/17/2015 | | SeqNo: 733166 | | 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 | 920 | | 1000 | | 92.4 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | LCS-18158 | | SampType: LCS | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | | Batch ID: 18158 | | RunNo: 24877 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/17/2015 | | SeqNo: 733167 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 109 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | MB-18158 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | 18158 | | RunNo: | 24877 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 733197 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 108 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | LCS-18158 | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | 18158 | | RunNo: | 24877 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 733198 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.2 | 0.050 | 1.000 | 0 | 116 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 110 | 75 | 124 | | | |
| Ethylbenzene | 1.1 | 0.050 | 1.000 | 0 | 112 | 79.5 | 126 | | | |
| Xylenes, Total | 3.3 | 0.10 | 3.000 | 0 | 111 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 115 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503672

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

3/17/2015 7:10:00 AM

Completed By: Lindsay Mangin

3/17/2015 7:22:34 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 3.0 | Good | Yes | | | |



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

March 19, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503746

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/18/2015 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 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 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,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-5**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:15:00 AM**Lab ID:** 1503746-001**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 15 | 10 | | mg/Kg | 1 | 3/18/2015 1:12:03 PM | 18173 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/18/2015 1:12:03 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.5 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Surr: BFB | 91.4 | 80-120 | | %REC | 1 | 3/18/2015 11:23:40 AM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Toluene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Ethylbenzene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Xylenes, Total | ND | 0.069 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/18/2015 11:23:40 AM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:29:03 AM | 18203 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6

Project: Lateral C-7

Collection Date: 3/17/2015 10:18:00 AM

Lab ID: 1503746-002

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 1:33:44 PM | 18173 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/18/2015 1:33:44 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Surr: BFB | 90.4 | 80-120 | | %REC | 1 | 3/18/2015 11:52:24 AM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Xylenes, Total | ND | 0.072 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Surr: 4-Bromofluorobenzene | 104 | 80-120 | | %REC | 1 | 3/18/2015 11:52:24 AM | 18167 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 2 of 13 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-7

Project: Lateral C-7

Collection Date: 3/17/2015 10:21:00 AM

Lab ID: 1503746-003

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 1:55:25 PM | 18173 |
| Surr: DNOP | 104 | 63.5-128 | | %REC | 1 | 3/18/2015 1:55:25 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Surr: BFB | 92.8 | 80-120 | | %REC | 1 | 3/18/2015 12:21:12 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Xylenes, Total | ND | 0.071 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/18/2015 12:21:12 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:41:27 AM | 18203 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-8

Project: Lateral C-7

Collection Date: 3/17/2015 10:24:00 AM

Lab ID: 1503746-004

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/18/2015 2:17:18 PM | 18173 |
| Surr: DNOP | 109 | 63.5-128 | | %REC | 1 | 3/18/2015 2:17:18 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Surr: BFB | 126 | 80-120 | S | %REC | 1 | 3/18/2015 12:49:55 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Xylenes, Total | ND | 0.063 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 118 | 80-120 | | %REC | 1 | 3/18/2015 12:49:55 PM | 18167 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-9

Project: Lateral C-7

Collection Date: 3/17/2015 10:27:00 AM

Lab ID: 1503746-005

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 24 | 10 | | mg/Kg | 1 | 3/18/2015 2:39:02 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 2:39:02 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Surr: BFB | 90.6 | 80-120 | | %REC | 1 | 3/18/2015 1:18:37 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Xylenes, Total | ND | 0.066 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/18/2015 1:18:37 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:53:53 AM | 18203 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-10**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:30:00 AM**Lab ID:** 1503746-006**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|---------------|-----------|-------------|--------------|-----------|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/18/2015 3:02:17 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 3:02:17 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Surr: BFB | 91.9 | 80-120 | | %REC | 1 | 3/18/2015 7:03:18 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/18/2015 7:03:18 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 11:06:17 AM | 18203 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-11**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:33:00 AM**Lab ID:** 1503746-007**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 25 | 9.9 | | mg/Kg | 1 | 3/18/2015 3:24:05 PM | 18173 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/18/2015 3:24:05 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Surr: BFB | 108 | 80-120 | | %REC | 1 | 3/18/2015 7:32:05 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 109 | 80-120 | | %REC | 1 | 3/18/2015 7:32:05 PM | 18167 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-12

Project: Lateral C-7

Collection Date: 3/17/2015 10:36:00 AM

Lab ID: 1503746-008

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 3:46:00 PM | 18173 |
| Surr: DNOP | 100 | 63.5-128 | | %REC | 1 | 3/18/2015 3:46:00 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 4.1 | 2.9 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Surr: BFB | 125 | 80-120 | S | %REC | 1 | 3/18/2015 8:00:49 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Xylenes, Total | ND | 0.059 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 108 | 80-120 | | %REC | 1 | 3/18/2015 8:00:49 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 11:18:41 AM | 18203 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-13**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:39:00 AM**Lab ID:** 1503746-009**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 4:07:36 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 4:07:36 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Surr: BFB | 91.6 | 80-120 | | %REC | 1 | 3/18/2015 8:29:31 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Xylenes, Total | ND | 0.059 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 3/18/2015 8:29:31 PM | 18167 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|-----------|--------------------------|-----------|-------|----------|------|
| Sample ID | MB-18203 | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | Batch ID: | 18203 | | RunNo: | 24924 | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/18/2015 | | SeqNo: | 734344 | Units: | mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18203 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18203 | RunNo: | 24924 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/18/2015 | SeqNo: | 734345 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.4 | 90 | 110 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | MB-18173 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18173 | | RunNo: | 24890 | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733846 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | | |
| Surr: DNOP | 10 | | 10.00 | | 100 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | LCS-18173 | | SampType: | LCS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | LCSS | | Batch ID: | 18173 | | RunNo: | 24890 | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733847 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 93.7 | 67.8 | 130 | | | | |
| Surr: DNOP | 4.3 | | 5.000 | | 85.3 | 63.5 | 128 | | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | MB-18167 | | SampType: MBLK | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | | Batch ID: 18167 | | RunNo: 24903 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/18/2015 | | SeqNo: 733915 | | 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 | 910 | | 1000 | | 90.5 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | LCS-18167 | | SampType: LCS | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | | Batch ID: 18167 | | RunNo: 24903 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/18/2015 | | SeqNo: 733916 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 26 | 5.0 | 25.00 | 0 | 105 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | MB-18167 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | 18167 | | RunNo: | 24903 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733941 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 104 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | LCS-18167 | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | 18167 | | RunNo: | 24903 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733942 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.2 | 0.050 | 1.000 | 0 | 122 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 115 | 75 | 124 | | | |
| Ethylbenzene | 1.2 | 0.050 | 1.000 | 0 | 116 | 79.5 | 126 | | | |
| Xylenes, Total | 3.4 | 0.10 | 3.000 | 0 | 115 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503746

RcptNo: 1

Received by/date:

AT

03/18/15

Logged By: Lindsay Mangin

3/18/2015 7:10:00 AM

Completed By: Lindsay Mangin

3/18/2015 7:19:53 AM

Reviewed By:

AT 03/18/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.0 | Good | Yes | | | |

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farmington, NM 87401

Phone #: 505 325 3478

email or Fax#: Steve.Moskal@Soudo.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush Same day

Project Name:

Labrad C-7

Project #:

N20609

Project Manager:

Steve Moskal

Sampler:

J. Sprague

On Ice:

☒ Yes

☐ No

Sample Temperature:

100



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975

Fax 505-345-4107

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + MTBE + TPH (Gas only) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (CRO / DRO / MRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 chlorides | Air Bubbles (Y or N) |
|------|------|--------|-------------------|----------------------|-------------------|----------|------------------------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 3-17 | 1015 | Soil | SC-5 | 1402 | MeOH | -001 | X | X | X | | | | | | | | | X | |
| | 1018 | | SC-6 | | | -002 | X | X | X | | | | | | | | | | |
| | 1021 | | SC-7 | | | -003 | X | X | X | | | | | | | | | X | |
| | 1024 | | SC-8 | | | -004 | X | X | X | | | | | | | | | | |
| | 1027 | | SC-9 | | | -005 | X | X | X | | | | | | | | | X | |
| | 1030 | | SC-10 | | | -006 | X | X | X | | | | | | | | | X | |
| | 1033 | | SC-11 | | | -007 | X | X | X | | | | | | | | | X | |
| | 1036 | | SC-12 | | | -008 | X | X | X | | | | | | | | | X | |
| | 1039 | | SC-13 | | | -009 | X | X | X | | | | | | | | | X | |

Date: 3/17/15 Time: 1810 Relinquished by: G-ES

Received by: Christy Wale Date: 3/17/15 Time: 1810

Date: 3/17/15 Time: 1841 Relinquished by: Christy Wale

Received by: Chris Date: 03/18/15 Time: 0710

Remarks: Bill Enterprise

Please copy

Jesse.Sprague@soudonilo.com



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

March 23, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503845

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 20 sample(s) on 3/19/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-14 N Wall

Project: Lateral C-7

Collection Date: 3/18/2015 1:43:00 PM

Lab ID: 1503845-001

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 10:34:09 AM | 18221 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/19/2015 10:34:09 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.8 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Surr: BFB | 92.2 | 80-120 | | %REC | 1 | 3/19/2015 2:24:40 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Toluene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Ethylbenzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Xylenes, Total | ND | 0.056 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 2:24:40 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 11:22:22 AM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-15 N Back

Project: Lateral C-7

Collection Date: 3/18/2015 1:46:00 PM

Lab ID: 1503845-002

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 11:01:40 AM | 18221 |
| Surr: DNOP | 117 | 63.5-128 | | %REC | 1 | 3/19/2015 11:01:40 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.9 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Surr: BFB | 92.8 | 80-120 | | %REC | 1 | 3/19/2015 10:05:57 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Xylenes, Total | ND | 0.057 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 10:05:57 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 11:59:35 AM | 18226 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 2 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-16 N Wall Deep

Project: Lateral C-7

Collection Date: 3/18/2015 1:49:00 PM

Lab ID: 1503845-003

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 11:28:54 AM | 18221 |
| Surr: DNOP | 121 | 63.5-128 | | %REC | 1 | 3/19/2015 11:28:54 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Surr: BFB | 93.4 | 80-120 | | %REC | 1 | 3/19/2015 10:34:46 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Xylenes, Total | ND | 0.061 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 10:34:46 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 12:12:00 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-17 N Deep Base**Project:** Lateral C-7**Collection Date:** 3/18/2015 1:52:00 PM**Lab ID:** 1503845-004**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:01:59 PM | 18221 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/19/2015 12:01:59 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Surr: BFB | 93.6 | 80-120 | | %REC | 1 | 3/19/2015 2:53:25 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/19/2015 2:53:25 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 12:49:13 PM | 18226 |

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

| | | | | | |
|--------------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 4 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-18 S Deep Base

Project: Lateral C-7

Collection Date: 3/18/2015 1:55:00 PM

Lab ID: 1503845-005

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 12:29:22 PM | 18221 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/19/2015 12:29:22 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Surr: BFB | 94.3 | 80-120 | | %REC | 1 | 3/19/2015 11:03:30 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Xylenes, Total | ND | 0.066 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/19/2015 11:03:30 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:01:38 PM | 18226 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-19 S Deep Wall

Project: Lateral C-7

Collection Date: 3/18/2015 1:58:00 PM

Lab ID: 1503845-006

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 10:38:27 AM | 18221 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/19/2015 10:38:27 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.8 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Surr: BFB | 93.5 | 80-120 | | %REC | 1 | 3/19/2015 11:32:18 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Toluene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Ethylbenzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Xylenes, Total | ND | 0.056 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 3/19/2015 11:32:18 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:14:02 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-20 S Back

Project: Lateral C-7

Collection Date: 3/18/2015 2:01:00 PM

Lab ID: 1503845-007

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 10:59:55 AM | 18221 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/19/2015 10:59:55 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Surr: BFB | 92.4 | 80-120 | | %REC | 1 | 3/19/2015 7:11:46 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 7:11:46 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:26:27 PM | 18226 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 7 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-21 S Wall**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:04:00 PM**Lab ID:** 1503845-008**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 11:21:29 AM | 18221 |
| Surr: DNOP | 98.4 | 63.5-128 | | %REC | 1 | 3/19/2015 11:21:29 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.1 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Surr: BFB | 93.7 | 80-120 | | %REC | 1 | 3/19/2015 12:01:01 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Toluene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Ethylbenzene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Xylenes, Total | ND | 0.062 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 12:01:01 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:38:51 PM | 18226 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-22 NE Wall**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:07:00 PM**Lab ID:** 1503845-009**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 11:42:50 AM | 18221 |
| Surr: DNOP | 102 | 63.5-128 | | %REC | 1 | 3/19/2015 11:42:50 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Surr: BFB | 93.4 | 80-120 | | %REC | 1 | 3/19/2015 7:40:31 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 108 | 80-120 | | %REC | 1 | 3/19/2015 7:40:31 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:51:16 PM | 18226 |

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

| | | | | | |
|--------------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 9 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-23 NE Wall 2**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:10:00 PM**Lab ID:** 1503845-010**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 12:04:23 PM | 18221 |
| Surr: DNOP | 99.1 | 63.5-128 | | %REC | 1 | 3/19/2015 12:04:23 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:03:40 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Xylenes, Total | ND | 0.071 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 99.1 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: Toluene-d8 | 88.1 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-24 E Wall Deep

Project: Lateral C-7

Collection Date: 3/18/2015 2:13:00 PM

Lab ID: 1503845-011

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:25:48 PM | 18221 |
| Surr: DNOP | 101 | 63.5-128 | | %REC | 1 | 3/19/2015 12:25:48 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.9 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Surr: BFB | 94.5 | 80-120 | | %REC | 1 | 3/19/2015 12:29:43 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Xylenes, Total | ND | 0.058 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 12:29:43 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:16:05 PM | 18226 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-25 E Wall Deep South**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:16:00 PM**Lab ID:** 1503845-012**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 12:47:18 PM | 18221 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 3/19/2015 12:47:18 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Surr: BFB | 94.0 | 80-120 | | %REC | 1 | 3/19/2015 12:58:28 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Xylenes, Total | ND | 0.065 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 12:58:28 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:28:29 PM | 18226 |

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

| | | | | | |
|--------------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 12 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-26 E Wall S

Project: Lateral C-7

Collection Date: 3/18/2015 2:19:00 PM

Lab ID: 1503845-013

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 1:08:43 PM | 18221 |
| Surr: DNOP | 108 | 63.5-128 | | %REC | 1 | 3/19/2015 1:08:43 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:40:54 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Toluene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Ethylbenzene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Xylenes, Total | ND | 0.070 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.3 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 99.6 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: Toluene-d8 | 94.1 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.5 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |

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

| | | | | | |
|-------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 13 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-27 E Wall S2**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:22:00 PM**Lab ID:** 1503845-014**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:30:10 PM | 18221 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/19/2015 1:30:10 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:18:06 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Xylenes, Total | ND | 0.060 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 105 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: Dibromofluoromethane | 107 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: Toluene-d8 | 96.0 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: BFB | 111 | 67.4-150 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-28 NW Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:25:00 PM

Lab ID: 1503845-015

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:51:33 PM | 18221 |
| Surr: DNOP | 113 | 63.5-128 | | %REC | 1 | 3/19/2015 1:51:33 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 51 | 30 | | mg/Kg | 20 | 3/19/2015 3:30:30 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Toluene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Ethylbenzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Xylenes, Total | ND | 0.068 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 103 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 101 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: Toluene-d8 | 93.0 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.4 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

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Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-29 NW Wall 2

Project: Lateral C-7

Collection Date: 3/18/2015 2:28:00 PM

Lab ID: 1503845-016

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 2:13:13 PM | 18221 |
| Surr: DNOP | 108 | 63.5-128 | | %REC | 1 | 3/19/2015 2:13:13 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:42:55 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Xylenes, Total | ND | 0.072 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 99.4 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 97.7 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: Toluene-d8 | 92.4 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-30 NW Wall 3

Project: Lateral C-7

Collection Date: 3/18/2015 2:31:00 PM

Lab ID: 1503845-017

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 2:34:36 PM | 18221 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/19/2015 2:34:36 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:55:20 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Toluene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Ethylbenzene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Xylenes, Total | ND | 0.089 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.3 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 94.3 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: Toluene-d8 | 93.6 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.5 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-31 SW Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:34:00 PM

Lab ID: 1503845-018

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:56:58 PM | 18221 |
| Surr: DNOP | 113 | 63.5-128 | | %REC | 1 | 3/19/2015 12:56:58 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:32:34 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Xylenes, Total | ND | 0.065 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.4 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 93.1 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: Toluene-d8 | 89.5 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: BFB | 101 | 67.4-150 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-32 SW Wall 2

Project: Lateral C-7

Collection Date: 3/18/2015 2:37:00 PM

Lab ID: 1503845-019

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----------------------|----------------------|--------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | Analyst: JME | | |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:24:03 PM | 18221 |
| Surr: DNOP | 116 | 63.5-128 | | %REC | 1 | 3/19/2015 1:24:03 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | Analyst: LGT | | |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:44:58 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | Analyst: cadg | | |
| Benzene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.6 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.2 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: Toluene-d8 | 93.1 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | Analyst: cadg | | |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: BFB | 106 | 67.4-150 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-33 SW Wall 3

Project: Lateral C-7

Collection Date: 3/18/2015 2:40:00 PM

Lab ID: 1503845-020

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:51:18 PM | 18221 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/19/2015 1:51:18 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:57:23 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Toluene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Ethylbenzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 90.8 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: Toluene-d8 | 90.6 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.4 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18226 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18226 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735228 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | LCS-18226 | | SampType: | LCS | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | LCSS | | Batch ID: | 18226 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735229 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | 15 | 1.5 | 15.00 | 0 | 96.7 | 90 | 110 | | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18230 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18230 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735257 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|-----------|----------------|-----------|----------|-----------|--------------------------|----------|--------|-------|
| Sample ID | LCS-18230 | | | SampType: | LCS | | TestCode: | EPA Method 300.0: Anions | | | |
| Client ID: | LCSS | | | Batch ID: | 18230 | | RunNo: | 24944 | | | |
| Prep Date: | 3/19/2015 | | | Analysis Date: | 3/19/2015 | | SeqNo: | 735258 | | Units: | mg/Kg |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 90 | 110 | | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | MB-18221 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18221 | | RunNo: | 24910 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734182 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | | |
| Surr: DNOP | 9.7 | | 10.00 | | 97.4 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | LCS-18221 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18221 | | RunNo: 24910 | | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734183 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 101 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.4 | 63.5 | 128 | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|---|------|-------------|------|--|
| Sample ID | MB-18201 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18201 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734292 | | Units: %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Surr: DNOP | 12 | | 10.00 | | 124 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|---|------|-------------|------|--|
| Sample ID | MB-18211 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18211 | | RunNo: | 24910 | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734296 | | Units: %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Surr: DNOP | 9.6 | | 10.00 | | 95.6 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|-----------------------------|----------------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | 1503845-001AMS | | SampType: | MS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | SC-14 N Wall | | Batch ID: | 18221 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734579 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 52 | 10 | 50.15 | 0 | 104 | 29.2 | 176 | | | | |
| Surr: DNOP | 5.3 | | 5.015 | | 106 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|-----------------------------|-----------------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | 1503845-001AMSD | | SampType: | MSD | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | SC-14 N Wall | | Batch ID: | 18221 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734670 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 53 | 10 | 50.35 | 0 | 106 | 29.2 | 176 | 2.39 | 23 | | |
| Surr: DNOP | 5.4 | | 5.035 | | 107 | 63.5 | 128 | 0 | 0 | | |

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18211 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18211 | | RunNo: 24910 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734679 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.6 | | 5.000 | | 91.0 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18201 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18201 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734682 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 5.0 | | 5.000 | | 99.7 | 63.5 | 128 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | MB-18213 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | PBS | | Batch ID: | 18213 | | RunNo: | 24929 | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734777 | | 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 | 930 | | 1000 | | 93.4 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | LCS-18213 | | SampType: | LCS | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | LCSS | | Batch ID: | 18213 | | RunNo: | 24929 | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734778 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 107 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 100 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|--------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | B24 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | PBS | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734794 | | 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 | 940 | | 1000 | | 93.8 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|---------------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | 2.5UG GRO LCS | | SampType: | LCS | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | LCSS | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734795 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 5.0 | 25.00 | 0 | 97.8 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-------------------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | 1503845-004AMS | | SampType: | MS | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | SC-17 N Deep Base | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734797 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 16 | 3.3 | 16.71 | 0 | 92.8 | 47.9 | 144 | | | |
| Surr: BFB | 660 | | 668.4 | | 99.2 | 80 | 120 | | | |

| | | | | | | | | | | |
|------------|-------------------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|
| Sample ID | 1503845-004AMSD | | SampType: | MSD | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | SC-17 N Deep Base | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734798 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-------------------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-004AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | SC-17 N Deep Base | Batch ID: | R24929 | RunNo: | 24929 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734798 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 18 | 3.3 | 16.71 | 0 | 107 | 47.9 | 144 | 14.4 | 29.9 | |
| Surr: BFB | 670 | | 668.4 | | 101 | 80 | 120 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | MB-18213 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | 18213 | | RunNo: | 24929 | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734804 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 107 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | LCS-18213 | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | 18213 | | RunNo: | 24929 | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734805 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.0 | 0.050 | 1.000 | 0 | 103 | 76.6 | 128 | | | |
| Toluene | 0.98 | 0.050 | 1.000 | 0 | 97.8 | 75 | 124 | | | |
| Ethylbenzene | 0.97 | 0.050 | 1.000 | 0 | 96.8 | 79.5 | 126 | | | |
| Xylenes, Total | 2.9 | 0.10 | 3.000 | 0 | 96.7 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|--------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | B24 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734825 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 107 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|----------------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | 100NG BTEX LCS | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734826 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 115 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 110 | 75 | 124 | | | |
| Ethylbenzene | 1.1 | 0.050 | 1.000 | 0 | 110 | 79.5 | 126 | | | |
| Xylenes, Total | 3.3 | 0.10 | 3.000 | 0 | 109 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 112 | 80 | 120 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|----------------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | 1503845-007AMS | | SampType: MS | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | SC-20 S Back | | Batch ID: R24929 | | RunNo: 24929 | | | | | |
| Prep Date: | | | Analysis Date: 3/19/2015 | | SeqNo: 734829 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.37 | 0.032 | 0.6414 | 0.005728 | 56.3 | 69.2 | 126 | | | S |
| Toluene | 0.34 | 0.032 | 0.6414 | 0.006138 | 52.5 | 65.6 | 128 | | | S |
| Ethylbenzene | 0.35 | 0.032 | 0.6414 | 0 | 54.5 | 65.5 | 138 | | | S |
| Xylenes, Total | 1.0 | 0.064 | 1.924 | 0 | 53.4 | 63 | 139 | | | S |
| Surr: 4-Bromofluorobenzene | 0.72 | | 0.6414 | | 112 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------------|----------------|-----------|---------------------------------------|------|--------------|-----------|------|----------|------|
| Sample ID | 1503845-007AMSD | SampType: | MSD | TestCode: EPA Method 8021B: Volatiles | | | | | | |
| Client ID: | SC-20 S Back | Batch ID: | R24929 | RunNo: 24929 | | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: 734830 | | Units: mg/Kg | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.73 | 0.032 | 0.6414 | 0.005728 | 114 | 69.2 | 126 | 66.7 | 18.5 | R |
| Toluene | 0.69 | 0.032 | 0.6414 | 0.006138 | 106 | 65.6 | 128 | 66.6 | 20.6 | R |
| Ethylbenzene | 0.69 | 0.032 | 0.6414 | 0 | 107 | 65.5 | 138 | 65.1 | 20.1 | R |
| Xylenes, Total | 2.0 | 0.064 | 1.924 | 0 | 107 | 63 | 139 | 66.4 | 21.1 | R |
| Surr: 4-Bromofluorobenzene | 0.75 | | 0.6414 | | 116 | 80 | 120 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType: | MBLK | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | PBS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734835 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.47 | | 0.5000 | | 93.0 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.53 | | 0.5000 | | 106 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.48 | | 0.5000 | | 96.2 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.50 | | 0.5000 | | 101 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 100ng lcs | SampType: | LCS | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | LCSS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734836 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 107 | 70 | 130 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 109 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.49 | | 0.5000 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.49 | | 0.5000 | | 98.0 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 1503845-013a ms | SampType: | MS | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | SC-26 E Wall S | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734841 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.78 | 0.035 | 0.7047 | 0 | 111 | 57.8 | 132 | | | |
| Toluene | 0.75 | 0.035 | 0.7047 | 0 | 106 | 54.8 | 139 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.34 | | 0.3524 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.34 | | 0.3524 | | 97.8 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.35 | | 0.3524 | | 100 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.33 | | 0.3524 | | 94.2 | 70 | 130 | | | |

| | | | | | | | | | | |
|------------|------------------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 1503845-013a msd | SampType: | MSD | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | SC-26 E Wall S | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/20/2015 | SeqNo: | 734842 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.75 | 0.035 | 0.7047 | 0 | 107 | 57.8 | 132 | 4.12 | 20 | |
| Toluene | 0.71 | 0.035 | 0.7047 | 0 | 101 | 54.8 | 139 | 4.92 | 20 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|-----------------------------|------------------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|--|
| Sample ID | 1503845-013a msd | SampType: | MSD | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | | |
| Client ID: | SC-26 E Wall S | Batch ID: | R24920 | RunNo: | 24920 | | | | | | |
| Prep Date: | | Analysis Date: | 3/20/2015 | SeqNo: | 734842 | Units: | mg/Kg | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Surr: 1,2-Dichloroethane-d4 | 0.34 | | 0.3524 | | 97.7 | 70 | 130 | 0 | 0 | | |
| Surr: 4-Bromofluorobenzene | 0.35 | | 0.3524 | | 100 | 70 | 130 | 0 | 0 | | |
| Surr: Dibromofluoromethane | 0.37 | | 0.3524 | | 104 | 70 | 130 | 0 | 0 | | |
| Surr: Toluene-d8 | 0.33 | | 0.3524 | | 94.2 | 70 | 130 | 0 | 0 | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|--------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType: | MBLK | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734871 | 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 | 490 | | 500.0 | | 97.6 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|---------------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 2.5ug gro lcs | SampType: | LCS | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734872 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 100 | 79.9 | 135 | | | |
| Surr: BFB | 500 | | 500.0 | | 99.7 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-014a ms | SampType: | MS | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | SC-27 E Wall S2 | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/20/2015 | SeqNo: | 734876 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 14 | 3.0 | 15.11 | 0 | 93.3 | 65.2 | 156 | | | |
| Surr: BFB | 330 | | 302.1 | | 108 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|------------------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-014a msd | SampType: | MSD | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | SC-27 E Wall S2 | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/20/2015 | SeqNo: | 734877 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 13 | 3.0 | 15.11 | 0 | 89.3 | 65.2 | 156 | 4.34 | 20 | |
| Surr: BFB | 320 | | 302.1 | | 107 | 67.4 | 150 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503845

RcptNo: 1

Received by/date: AS 03/19/15

Logged By: Anne Thorne

3/19/2015 8:05:00 AM

Completed By: Anne Thorne

3/19/2015

Reviewed By: [Signature]

03/19/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

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

17. Additional remarks:

18. Cooler Information

| Cooler No. | Temp. °C | Condition | Seal Intact | Seal No. | Seal Date | Signed By |
|------------|----------|-----------|-------------|----------|-----------|-----------|
| 1 | 1.3 | Good | Yes | | | |

Client: SMA

lient:

5mA

Mailing Address:

401 W Broadway

Farmington NM 87401

Phone #: 505 325 7535

mail or Fax#: 562.994.4624 @ smc.smilax.com

!A/QC Package:

1 Standard

☐ Level 4 (Full Validation)

accreditation

3 NELAP

☐ Other

EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush Same Day

Project Name:

Lateral C-7

Project #:

N20609

Project Manager:

Steve Moskal

Sampler:

On Ice: ☒ Yes ☐ No

Sample Temperature

[illegible]

| | | |
|-------|-------|------------------|
| Date: | Time: | Relinquished by: |
|-------|-------|------------------|

18 | 1900 | 4 | 5 | 5 | 10

Date: Time: Relinquished by:

| | | |
|--------------|------|------|
| Received by: | Date | Time |
|--------------|------|------|

3/18/19 1900

| | | |
|--------------|------|------|
| Received by: | Date | Time |
|--------------|------|------|

Remarks: Under 21 10/11/60

Please copy Jesse.Snow@SoudaMills.com



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

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.

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farlington NM 87401

Phone #: 505 325 7535

Email or Fax#: Steven.moskal@spodermiller.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard ☒ Rush Same day

Project Name:

Lateral C-7

Project #:

N20809

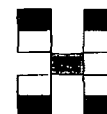
Project Manager:

Steve Moskal

Sampler: J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 10



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + MTBE + TPH (Gas only) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 chlorides | Air Bubbles (Y or N) |
|------|------|--------|-------------------|----------------------|-------------------|----------|------------------------------|------------------------------|-----------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| -18 | 1419 | Soil | SC-26 E wall 5 | 1402 | Modu | 1503845 | X | X | X | | | | | | | | | X | |
| | 1422 | | SC-27 E wall 5 2 | | | -014 | X | X | X | | | | | | | | | X | |
| | 1425 | | SC-28 NW wall | | | -015 | X | X | X | | | | | | | | | X | |
| | 1428 | | SC-29 NW wall 2 | | | -016 | X | X | X | | | | | | | | | X | |
| | 1431 | | SC-30 NW wall 3 | | | -017 | X | X | X | | | | | | | | | X | |
| | 1434 | | SC-31 SW wall | | | -018 | X | X | X | | | | | | | | | X | |
| | 1437 | | SC-32 SW wall 2 | | | -019 | X | X | X | | | | | | | | | X | |
| | 1440 | | SC-33 SW wall 3 | | | -020 | X | X | X | | | | | | | | | X | |

Date: -18 Time: 1900 Relinquished by: J-ES

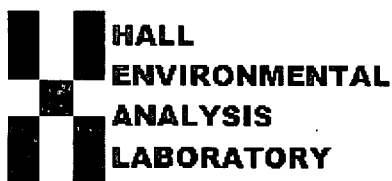
Received by: Christine Wells Date: 3/18/15 Time: 1900

Remarks: Invoice Entoprise

Date: 3/18/15 Time: 2005 Relinquished by: Christine Wells

Received by: Christine Wells Date: 03/19 Time:

Please copy Jesse.Sprague@spodermiller.com



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

March 25, 2015

Steve Moskal

Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503850

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/19/2015 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 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 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
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-34 250-300' W Bar ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:43:00 PM

Lab ID: 1503850-001

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/20/2015 8:27:48 AM | 18222 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/20/2015 8:27:48 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.6 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.3 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: Toluene-d8 | 91.9 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-35 200-250" W Bar ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:46:00 PM

Lab ID: 1503850-002

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 14 | 9.8 | | mg/Kg | 1 | 3/20/2015 9:32:22 AM | 18222 |
| Surr: DNOP | 118 | 63.5-128 | | %REC | 1 | 3/20/2015 9:32:22 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 100 | 30 | | mg/Kg | 20 | 3/19/2015 5:59:26 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Toluene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Ethylbenzene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Xylenes, Total | ND | 0.089 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.4 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 96.2 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: Toluene-d8 | 92.9 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.5 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: BFB | 114 | 67.4-150 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-36 150-200' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:49:00 PM

Lab ID: 1503850-003

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/20/2015 9:53:49 AM | 18222 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/20/2015 9:53:49 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Toluene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Ethylbenzene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Xylenes, Total | ND | 0.12 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 96.3 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 96.0 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: Dibromofluoromethane | 100 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: Toluene-d8 | 89.2 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 5.8 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: BFB | 101 | 67.4-150 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-37 100-150' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:52:00 PM

Lab ID: 1503850-004

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 11 | 10 | | mg/Kg | 1 | 3/20/2015 12:23:20 PM | 18222 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/20/2015 12:23:20 PM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 33 | 30 | | mg/Kg | 20 | 3/19/2015 6:11:51 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Toluene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Ethylbenzene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Xylenes, Total | ND | 0.079 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.9 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: Toluene-d8 | 92.2 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.9 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: BFB | 106 | 67.4-150 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-38 50-100' W Bar Ditch**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:55:00 PM**Lab ID:** 1503850-005**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 41 | 9.8 | | mg/Kg | 1 | 3/20/2015 9:22:36 AM | 18222 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/20/2015 9:22:36 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Toluene | 0.047 | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Ethylbenzene | ND | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Xylenes, Total | ND | 0.086 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 95.4 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 98.7 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: Dibromofluoromethane | 99.1 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: Toluene-d8 | 89.0 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | 11 | 4.3 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: BFB | 109 | 67.4-150 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-39 0-50' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:58:00 PM

Lab ID: 1503850-006

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/20/2015 9:49:48 AM | 18222 |
| Surr: DNOP | 116 | 63.5-128 | | %REC | 1 | 3/20/2015 9:49:48 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 6:24:15 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Toluene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Ethylbenzene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Xylenes, Total | ND | 0.074 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 98.8 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: Toluene-d8 | 91.1 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.7 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: BFB | 108 | 67.4-150 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-40 Background

Project: Lateral C-7

Collection Date: 3/18/2015 3:01:00 PM

Lab ID: 1503850-007

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/20/2015 10:16:54 AM | 18222 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/20/2015 10:16:54 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/24/2015 10:51:49 AM | 18295 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Xylenes, Total | ND | 0.091 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.0 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 104 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: Toluene-d8 | 88.0 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18230 | SampType: | MBLK | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | PBS | Batch ID: | 18230 | RunNo: | 24944 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 735257 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18230 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18230 | RunNo: | 24944 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 735258 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 90 | 110 | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18295 | SampType: | MBLK | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | PBS | Batch ID: | 18295 | RunNo: | 25049 | | | | | |
| Prep Date: | 3/24/2015 | Analysis Date: | 3/24/2015 | SeqNo: | 739028 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18295 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18295 | RunNo: | 25049 | | | | | |
| Prep Date: | 3/24/2015 | Analysis Date: | 3/24/2015 | SeqNo: | 739029 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.9 | 90 | 110 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | MB-18222 | | SampType: MBLK | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | | Batch ID: 18222 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734184 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 11 | | 10.00 | | 110 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | LCS-18222 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18222 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734185 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 53 | 10 | 50.00 | 0 | 107 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 98.5 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | MB-18200 | | SampType: MBLK | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | | Batch ID: 18200 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734189 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 11 | | 10.00 | | 108 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18200 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18200 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734192 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.9 | | 5.000 | | 98.9 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | MB-18201 | | SampType: MBLK | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | | Batch ID: 18201 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734292 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 12 | | 10.00 | | 124 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18201 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18201 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734682 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 5.0 | | 5.000 | | 99.7 | 63.5 | 128 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503850-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-34 250-300' W B | Batch ID: | 18222 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/20/2015 | SeqNo: | 735108 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.25 | 6.442 | 86.3 | 29.2 | 176 | | | |
| Surr: DNOP | 5.3 | | 5.025 | | 106 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503850-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-34 250-300' W B | Batch ID: | 18222 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/20/2015 | SeqNo: | 735109 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 45 | 9.9 | 49.70 | 6.442 | 78.2 | 29.2 | 176 | 9.42 | 23 | |
| Surr: DNOP | 5.4 | | 4.970 | | 108 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType: | MBLK | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | PBS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734835 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.47 | | 0.5000 | | 93.0 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.53 | | 0.5000 | | 106 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.48 | | 0.5000 | | 96.2 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.50 | | 0.5000 | | 101 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 100ng lcs | SampType: | LCS | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | LCSS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734836 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 107 | 70 | 130 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 109 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.49 | | 0.5000 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.49 | | 0.5000 | | 98.0 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|--------------------------|--|-----------|-------------|--------------|----------|-----------|------|----------|------|
| Sample ID: 5mL rb | SampType: MBLK | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
| Client ID: PBS | Batch ID: R24920 | RunNo: 24920 | | | | | | | | |
| Prep Date: | Analysis Date: 3/19/2015 | SeqNo: 734871 | | | 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 | 490 | | 500.0 | | 97.6 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|--------------------------|--|-----------|-------------|--------------|----------|-----------|------|----------|------|
| Sample ID: 2.5ug gro lcs | SampType: LCS | TestCode: EPA Method 8015D Mod: Gasoline Range | | | | | | | | |
| Client ID: LCSS | Batch ID: R24920 | RunNo: 24920 | | | | | | | | |
| Prep Date: | Analysis Date: 3/19/2015 | SeqNo: 734872 | | | Units: mg/Kg | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 100 | 79.9 | 135 | | | |
| Surr: BFB | 500 | | 500.0 | | 99.7 | 67.4 | 150 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503850

RcptNo: 1

Received by/date: AT 03/19/15

Logged By: Anne Thorne 3/19/2015 8:05:00 AM

Completed By: Anne Thorne 3/19/2015

Reviewed By: [Signature] 03/19/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

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

17. Additional remarks:

18. Cooler Information

| Cooler No. | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No. | Seal Date | Signed By |
|------------|-------------------------|-----------|-------------|----------|-----------|-----------|
| 1 | 1.0 | Good | Yes | | | |

Chain-of-Custody Record

Client: SM A

Mailing Address: 401 W Broadway
Farmington, NM 87401

Phone #: 505 325 7535

Email or Fax #: Steve.Moskal@soudernmills.com

IA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Next Day

Project Name:
Lateral C-7

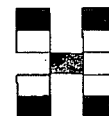
Project #:
N 20609

Project Manager:
Steve Moskal

Sampler:
JS

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX (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 ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 Chlorides | Air Bubbles (Y or N) |
|------|------|--------|------------------------------|----------------------|-------------------|----------|-------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 5-18 | 1443 | Soil | SC-34 250-300 W Bar ditch | 1 4oz | — | -C01 | X | X | X | | | | | | | | | | |
| | 1446 | | SC-35 200-250 W Bar ditch | | | -C02 | X | X | X | | | | | | | | | X | |
| | 1449 | | SC-36 150-200 W Bar ditch | | | -C03 | X | X | X | | | | | | | | | | |
| | 1452 | | SC-37 100-150 West Bar Ditch | | | -C04 | X | X | X | | | | | | | | | X | |
| | 1455 | | SC-38 50-100 West Bar Ditch | | | -C05 | X | X | X | | | | | | | | | | |
| | 1458 | | SC-39 0-50 West Bar ditch | | | -C06 | X | X | X | | | | | | | | | X | |
| | 1501 | | SC-40 Background | | | -C07 | X | X | X | | | | | | | | | X | |

Date: 5-18 Time: 1900 Relinquished by: 9-ES

Date: 5/18/2005 Time: 0805 Received by: Chris Waack

Remarks: Invoice Enterprise
Please copy
Jesse.Sprague@soudernmills.com

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

March 31, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Lateral C-7

OrderNo.: 1503B68

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/25/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1503B68
Date Reported: 3/31/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1 @ 1'

Project: Lateral C-7

Collection Date: 3/24/2015 9:30:00 AM

Lab ID: 1503B68-001

Matrix: SOIL

Received Date: 3/25/2015 7:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/27/2015 3:56:33 PM | 18351 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 3/27/2015 3:56:33 PM | 18351 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Surr: BFB | 89.9 | 80-120 | | %REC | 1 | 3/28/2015 11:09:23 AM | 18355 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Surr: 4-Bromofluorobenzene | 100 | 80-120 | | %REC | 1 | 3/28/2015 11:09:23 AM | 18355 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 39 | 30 | | mg/Kg | 20 | 3/30/2015 3:05:50 PM | 18413 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18413 | SampType: | MBLK | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | PBS | Batch ID: | 18413 | RunNo: | 25153 | | | | | |
| Prep Date: | 3/30/2015 | Analysis Date: | 3/30/2015 | SeqNo: | 744362 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18413 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18413 | RunNo: | 25153 | | | | | |
| Prep Date: | 3/30/2015 | Analysis Date: | 3/30/2015 | SeqNo: | 744363 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.9 | 90 | 110 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18351 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18351 | RunNo: | 25073 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742950 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 9.7 | | 10.00 | | 97.5 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | LCS-18351 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18351 | | RunNo: 25073 | | | | | |
| Prep Date: | 3/26/2015 | | Analysis Date: 3/27/2015 | | SeqNo: 742951 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 48 | 10 | 50.00 | 0 | 95.2 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.7 | 63.5 | 128 | | | |

| | | | | | | | | | | | |
|-----------------------------|----------------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | 1503B68-001AMS | | SampType: | MS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | SC-1 @ 1' | | Batch ID: | 18351 | | RunNo: | 25073 | | | | |
| Prep Date: | 3/26/2015 | | Analysis Date: | 3/27/2015 | | SeqNo: | 742952 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 52 | 10 | 49.85 | 0 | 105 | 29.2 | 176 | | | | |
| Surr: DNOP | 5.2 | | 4.985 | | 103 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | 1503B68-001AMSD | | SampType: MSD | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 @ 1' | | Batch ID: 18351 | | RunNo: 25073 | | | | | |
| Prep Date: | 3/26/2015 | | Analysis Date: 3/27/2015 | | SeqNo: 742953 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.20 | 0 | 99.9 | 29.2 | 176 | 4.54 | 23 | |
| Surr: DNOP | 5.2 | | 5.020 | | 104 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18355 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742102 | 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 | 910 | | 1000 | | 91.2 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18355 | SampType: | LCS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742103 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 5.0 | 25.00 | 0 | 97.5 | 64 | 130 | | | |
| Surr: BFB | 990 | | 1000 | | 99.2 | 80 | 120 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18355 | SampType: | MBLK | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742123 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 103 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18355 | SampType: | LCS | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742124 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 110 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 106 | 75 | 124 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 104 | 79.5 | 126 | | | |
| Xylenes, Total | 3.1 | 0.10 | 3.000 | 0 | 103 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 109 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503B68

RcptNo: 1

Received by/date:

L-m 03/25/15

Logged By: Ashley Gallegos

3/25/2015 7:55:00 AM

Ag

Completed By: Ashley Gallegos

3/25/2015 5:58:39 PM

Ag

Reviewed By:

ja 03/24/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted?
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.7 | Good | Yes | | | |

Client: SMA

Mailing Address: 401 R. M. Jones

Farmington, NM 87401

Phone #: U 645 325 7535

email or Fax#: Steven.moskale@soudemiller.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush _____

Project Name:

Lateral C-7

Project #:

N20609

Project Manager:

Share Maskal

Sampler: /

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.7

[illegible]

| | | |
|-------|-------|------------------|
| Date: | Time: | Relinquished by: |
|-------|-------|------------------|

| | | |
|-------|------|------|
| 12/15 | 1346 | 4-25 |
|-------|------|------|

| | | |
|-------|-------|------------------|
| Date: | Time: | Relinquished by: |
|-------|-------|------------------|

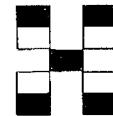
3/24/15 1944 / Mathew Wooders

| | | |
|--------------|------------|------|
| Received by: | Date | Time |
| | 21/11/2017 | |

Mothé Walter 3/24/15 1346

| | | |
|--------------|------|------|
| Received by: | Date | Time |
|--------------|------|------|

03/25/15 0755



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

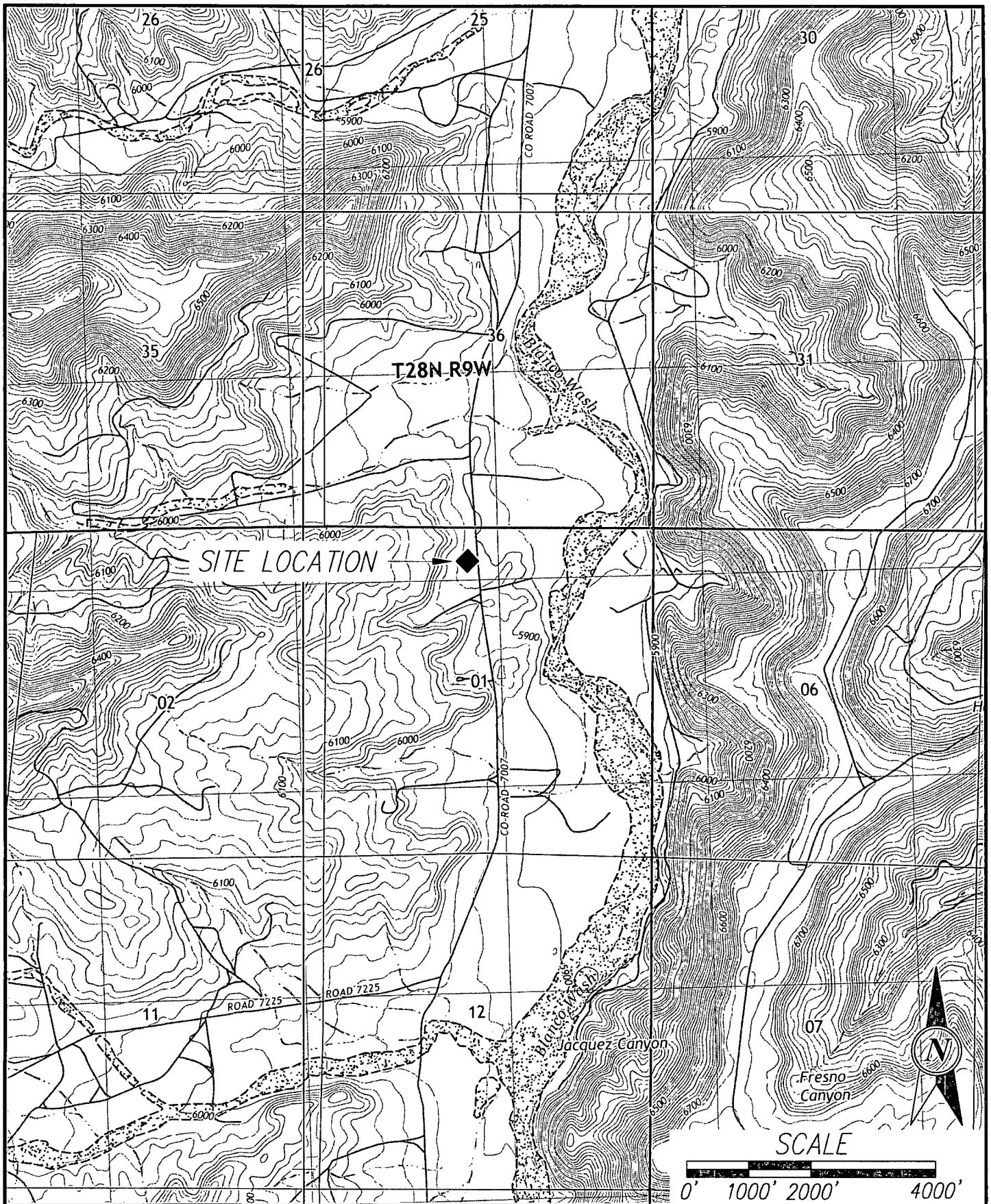
| | |
|---|--|
| X | (BTEX + MTBE) + PCB'S (8021) |
| | BTEX + MTBE + TPH (Gas only) |
| X | TPH 8015B (GRO / DRO / MRO) |
| | TPH (Method 418.1) |
| | EDB (Method 504.1) |
| | PAH's (8310 or 8270 SIMS) |
| | RCRA 8 Metals |
| | Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$) |
| | 8081 Pesticides / 8082 PCB's |
| | 8260B (VOA) |
| | 8270 (Semi-VOA) |
| X | 300.0 Chlorides |
| | Air Bubbles (Y or N) |


Remarks: 7. 10. 1960

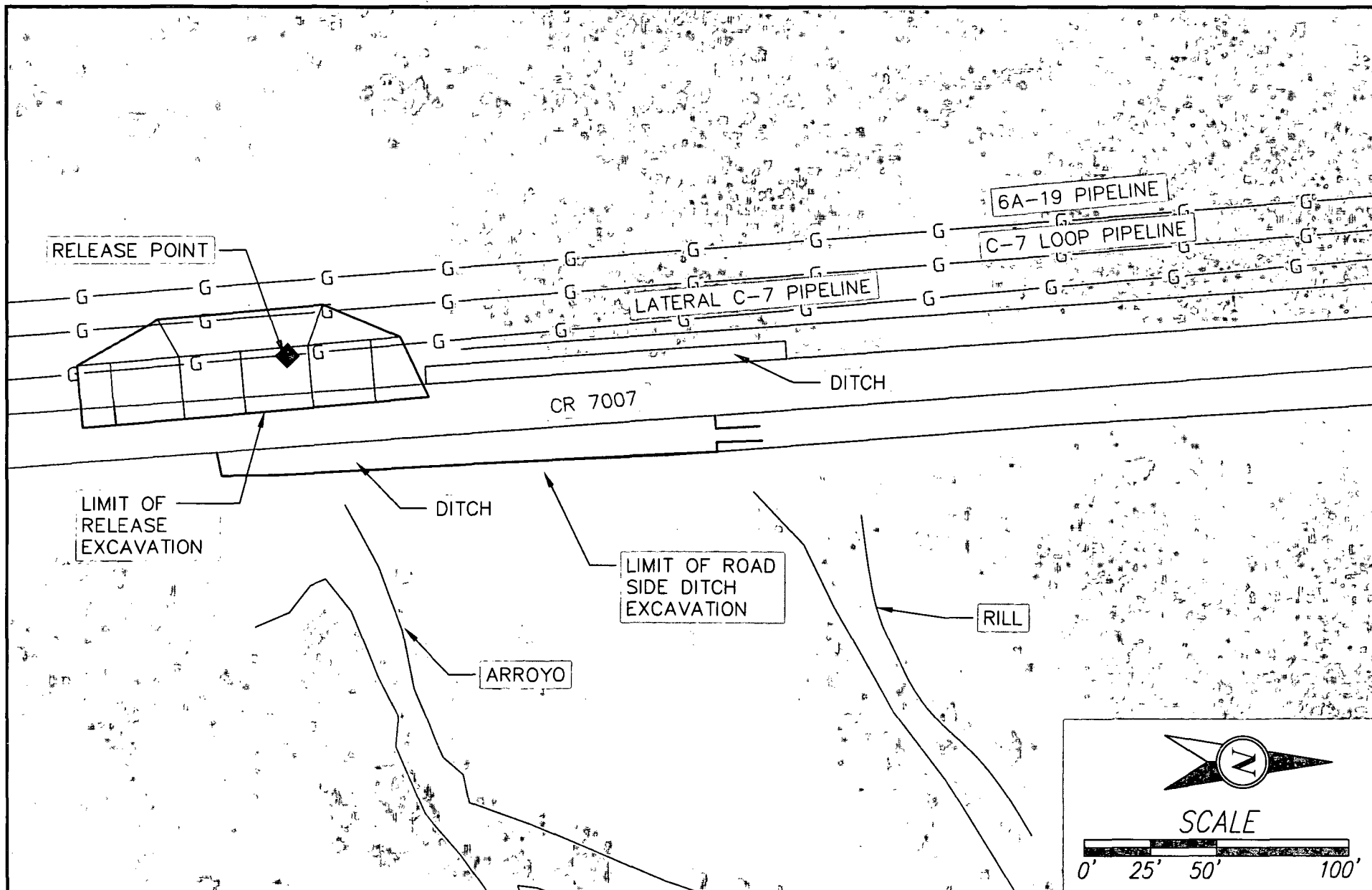
Invoice Enterprise

Please copy

Jesse.Sprague@saudermiller.com



| | | | | | | |
|--|--|---|--------------|------------------------|--|--|
|  <p>ASMA Engineering Environmental Surveying</p> | <p>SOUDER, MILLER & ASSOCIATES 401 W Broadway Avenue Farmington, NM 87401-5907 Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 325-0045 www.soudermiller.com Serving the Southwest & Rocky Mountains Albuquerque, Farmington, Las Cruces, Roswell, Santa Fe, NM • El Paso, TX Cortez, Grand Junction, CO • Safford, AZ • Moab, UT</p> | ENTERPRISE | | FARMINGTON, NEW MEXICO | | |
| | | <p>VICINITY MAP LATERAL C-7 SECTION 1, T27N, R9W</p> | | | | |
| | | Designed SM | Drawn GJF | Checked RSA | | |
| | | Date: APRIL 2015 | | | | |
| | | Scale: Horiz: 1"=2000' Vert: N/A | | | | |
| Project No: 5123699 | | | | | | |
| Sheet: 1 | | | | | | |



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ENTERPRISE

FARMINGTON, NEW MEXICO

SITE LOCATION MAP
LATERAL C-7
SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| Designed SM | Drawn DJB | Checked RSA |
|----------------|---------------|----------------|
| Date: | APRIL 2015 | |
| Scale: | Horiz: 1"=50' | |
| | Vert: N/A | |
| Project No: | 5123699 | |
| Sheet: | 2 | |

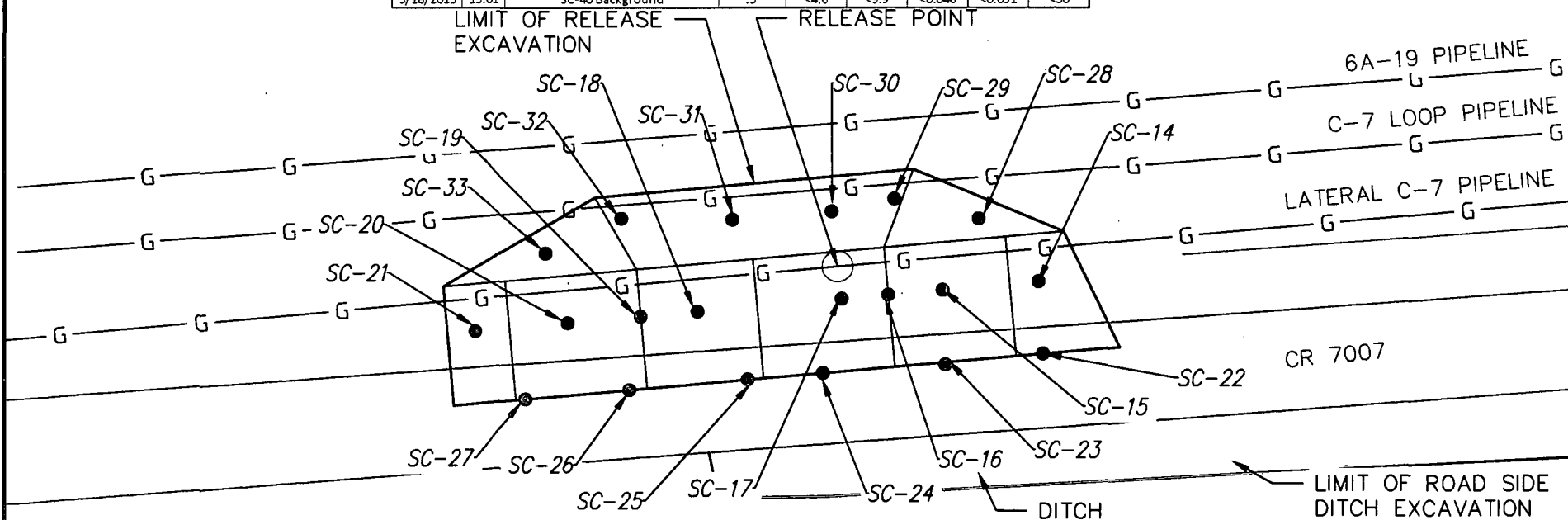
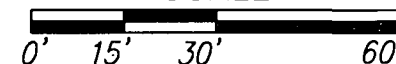
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SC-40

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|-------------------------|----------------------------|--------------------|--------------------|---------------------------|------------------------|------------------------------|
| NMOCD Guidelines | | NMOCD Site Ranking: 0 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/18/2015 | 13:43 | SC-14 N Wall | 0-15' | <2.8 | <9.8 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 13:46 | SC-15 N Bench | 15' | <2.9 | <9.8 | <0.029 | <0.057 | <30 |
| 3/18/2015 | 13:49 | SC-16 N Wall Deep | 15'-35' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/18/2015 | 13:52 | SC-17 N Deep Base | 35' | <3.3 | <9.9 | <0.033 | <0.067 | <30 |
| 3/18/2015 | 13:55 | SC-18 S Deep Base | 35' | <3.3 | <9.8 | <0.033 | <0.066 | <30 |
| 3/18/2015 | 13:58 | SC-19 S Deep Wall | 15-35' | <2.8 | <10 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 14:01 | SC-20 S Bench | 15' | <3.2 | <10 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:04 | SC-21 S Wall | 0'-15' | <3.1 | <9.9 | <0.031 | <0.062 | <30 |
| 3/18/2015 | 14:07 | SC-22 NE Wall | 0'-15' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:10 | SC-23 NE Wall 2 | 0'-15' | <3.36 | <10 | <0.036 | <0.071 | <30 |
| 3/18/2015 | 14:13 | SC-24 E Wall Deep | 0'-35' | <2.9 | <9.9 | <0.029 | <0.058 | <30 |
| 3/18/2015 | 14:16 | SC-25 E Wall Deep South | 0'-35' | <3.2 | <10 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:19 | SC-26 E Wall S | 0'-15' | <3.5 | <9.9 | <0.035 | <0.070 | <30 |
| 3/18/2015 | 14:22 | SC-27 E Wall S 2 | 0'-15' | <3.0 | <10 | <0.030 | <0.06 | <30 |
| 3/18/2015 | 14:25 | SC-28 NW Wall | 0'-15' | <3.4 | <10 | <0.034 | <0.068 | <30 |
| 3/18/2015 | 14:28 | SC-29 NW Wall 2 | 0'-35' | <3.6 | <9.8 | <0.036 | <0.072 | <30 |
| 3/18/2015 | 14:31 | SC-30 NW Wall 3 | 0'-35' | <4.5 | <9.9 | <0.045 | <0.089 | <30 |
| 3/18/2015 | 14:34 | SC-31 SW Wall | 0'-35' | <3.2 | <9.9 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:37 | SC-32 SW Wall 2 | 0'-35' | <4.6 | <10 | <0.046 | <0.093 | <30 |
| 3/18/2015 | 14:40 | SC-33 SW Wall 3 | 0'-15' | <3.4 | <10 | <0.034 | <0.067 | <30 |
| 3/18/2015 | 15:01 | SC-40 Background | .5' | <4.6 | <9.9 | <0.046 | <0.091 | <30 |



SCALE



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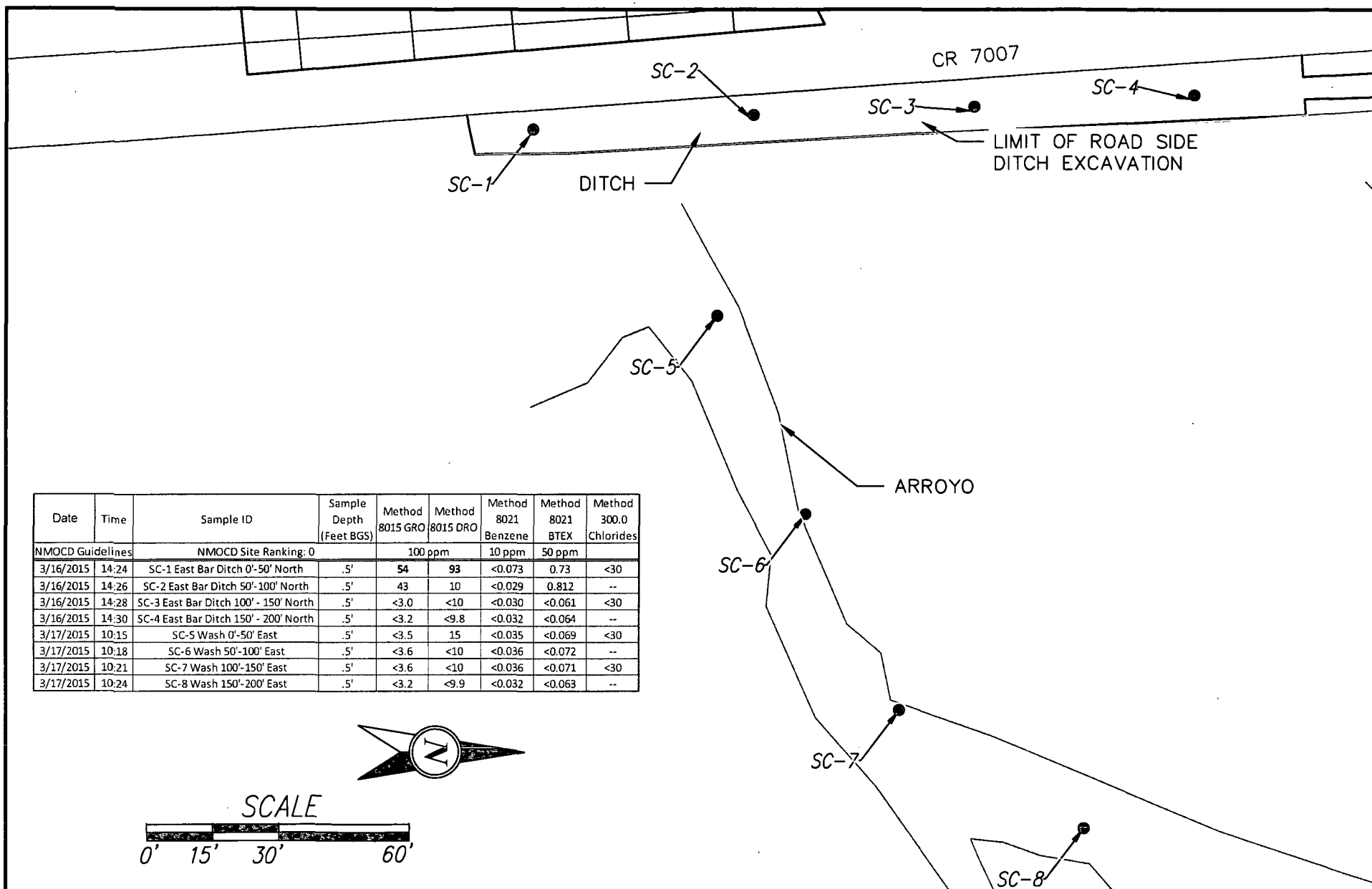
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SOIL CONTAMINANT CONCENTRATION
LATERAL C-7
SECTION 1, T27N, R9W

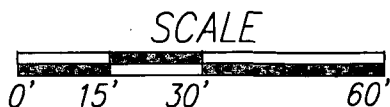
SAN JUAN COUNTY, NEW MEXICO

| Designed SM | Drawn DJB | Checked RSA |
|----------------|---------------|----------------|
| Date: | APRIL 2015 | |
| Scale: | Horiz: 1"=30' | |
| | Vert: N/A | |
| Project No: | 5123699 | |
| Sheet: | 3 | |

TWO DRAWINGS ASSEMBLED AND NOTED
FOR REVIEW FOR CONSTRUCTION UNDERSTANDING
STAMPED, SIGNED AND DATED



| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|---------------------------------------|-------------------------|-----------------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | | | NMOCD Site Ranking: 0 | | 100 ppm | 10 ppm | 50 ppm |
| 3/16/2015 | 14:24 | SC-1 East Bar Ditch 0'-50' North | .5' | 54 | 93 | <0.073 | 0.73 | <30 |
| 3/16/2015 | 14:26 | SC-2 East Bar Ditch 50'-100' North | .5' | 43 | 10 | <0.029 | 0.812 | -- |
| 3/16/2015 | 14:28 | SC-3 East Bar Ditch 100' - 150' North | .5' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/16/2015 | 14:30 | SC-4 East Bar Ditch 150' - 200' North | .5' | <3.2 | <9.8 | <0.032 | <0.064 | -- |
| 3/17/2015 | 10:15 | SC-5 Wash 0'-50' East | .5' | <3.5 | 15 | <0.035 | <0.069 | <30 |
| 3/17/2015 | 10:18 | SC-6 Wash 50'-100' East | .5' | <3.6 | <10 | <0.036 | <0.072 | -- |
| 3/17/2015 | 10:21 | SC-7 Wash 100'-150' East | .5' | <3.6 | <10 | <0.036 | <0.071 | <30 |
| 3/17/2015 | 10:24 | SC-8 Wash 150'-200' East | .5' | <3.2 | <9.9 | <0.032 | <0.063 | -- |



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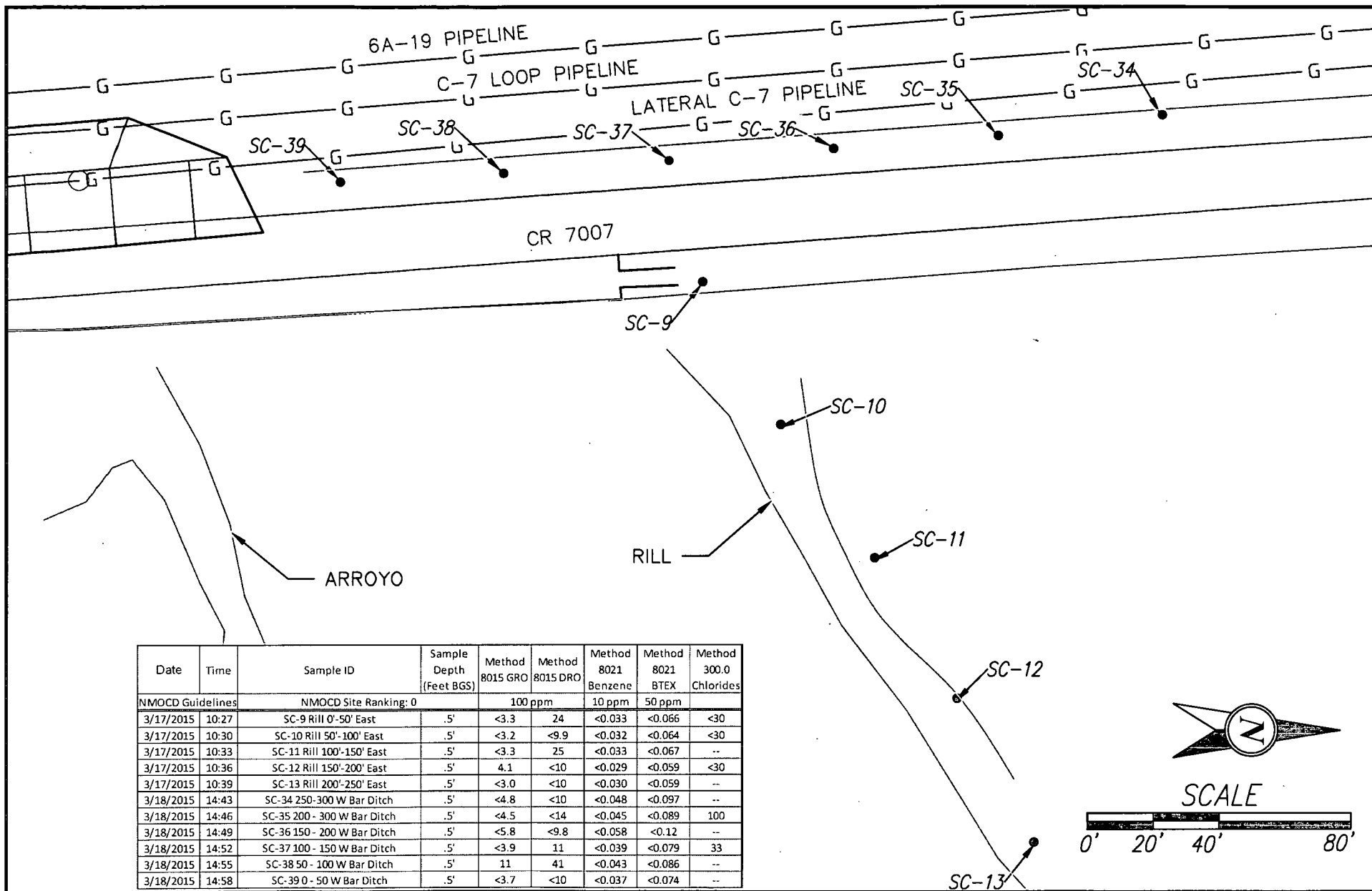
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FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION
LATERAL C-7
SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| Designed SM | Drawn DJB | Checked RSA |
|---------------------|----------------------|-------------|
| Date: APRIL 2015 | Scale: Horiz: 1"=30' | Vert: N/A |
| Project No: 5123699 | Sheet: 4 | |



| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|---------------------------|-------------------------|-----------------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | | | NMOCD Site Ranking: 0 | | 100 ppm | 10 ppm | 50 ppm |
| 3/17/2015 | 10:27 | SC-9 Rill 0'-50' East | .5' | <3.3 | 24 | <0.033 | <0.066 | <30 |
| 3/17/2015 | 10:30 | SC-10 Rill 50'-100' East | .5' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/17/2015 | 10:33 | SC-11 Rill 100'-150' East | .5' | <3.3 | 25 | <0.033 | <0.067 | -- |
| 3/17/2015 | 10:36 | SC-12 Rill 150'-200' East | .5' | 4.1 | <10 | <0.029 | <0.059 | <30 |
| 3/17/2015 | 10:39 | SC-13 Rill 200'-250' East | .5' | <3.0 | <10 | <0.030 | <0.059 | -- |
| 3/18/2015 | 14:43 | SC-34 250-300 W Bar Ditch | .5' | <4.8 | <10 | <0.048 | <0.097 | -- |
| 3/18/2015 | 14:46 | SC-35 200-300 W Bar Ditch | .5' | <4.5 | <14 | <0.045 | <0.089 | 100 |
| 3/18/2015 | 14:49 | SC-36 150-200 W Bar Ditch | .5' | <5.8 | <9.8 | <0.058 | <0.12 | -- |
| 3/18/2015 | 14:52 | SC-37 100-150 W Bar Ditch | .5' | <3.9 | 11 | <0.039 | <0.079 | 33 |
| 3/18/2015 | 14:55 | SC-38 50-100 W Bar Ditch | .5' | 11 | 41 | <0.043 | <0.086 | -- |
| 3/18/2015 | 14:58 | SC-39 0-50 W Bar Ditch | .5' | <3.7 | <10 | <0.037 | <0.074 | -- |



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ENTERPRISE

FARMINGTON, NEW MEXICO

SOIL CONTAMINANT CONCENTRATION LATERAL C-7 SECTION 1, T27N, R9W

SAN JUAN COUNTY, NEW MEXICO

| | | |
|----------------------|--------------|----------------|
| Designed SM | Drawn DJB | Checked RSA |
| Date: APRIL 2015 | | |
| Scale: Horiz: 1"=40' | | |
| Vert: N/A | | |
| Project No: 5123699 | | |
| Sheet: 5 | | |

THIS DRAWING IS COMPLETE AND NOT TO BE USED FOR CONSTRUCTION UNLESS IT IS STAMPED, SIGNED AND DATED

Tables

| Depth to Groundwater | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
|---|----------------------------------|--|---|
| < 50 BGS = 20 | 20 | Field verification that release is located within an unnamed wash. | Groundwater is assumed to be less than 50 feet below ground surface. |
| 50' to 99' = 10 | | | |
| >100' = 0 | | | |
| Ranking Criteria for Horizontal Distance to Nearest Surface Water | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
| < 200' = 20 | 20 | Field verification that release is located within an unnamed wash. | Release is located within an unnamed tributary wash of Blanco Wash. |
| 200'-1000' = 10 | | | |
| >1000' = 0 | | | |
| Ranking Criteria for Horizontal Distance to a Water Well or Water Source | NMOCD Numeric Rank for this Site | Source for Ranking | Notes |
| <1000' from a water source? <200' for a private domestic water source? YES OR NO to BOTH. YES = 20, NO = 0 | 0 | NM State Engineer Water Well Database | No recorded water wells located with 1000'; Ten wells located within a 1 mile radius. |
| | | | |
| | | | |
| Total Site Ranking | 40 | | |
| | | | |
| | | | |
| Soil Remediation Standards | 0 to 9 | 10 to 19 | >19 |
| | | | |
| Benzene | 10 PPM | 10 PPM | 10 PPM |
| BTEX | 50 PPM | 50 PPM | 50 PPM |
| TPH | 5000 PPM | 1000 PPM | 100 PPM |



Enterprise Products
Table 3: Summary of Laboratory Analysis
Results in mg/Kg

Lateral C-7
Pipeline Release
4/9/2015

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|---------------------------------------|-------------------------|-----------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | NMOCD Site Ranking: 40 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/16/2015 | 14:24 | SC-1 East Bar Ditch 0'-50' North | .5' | 54 | 93 | <0.073 | 0.73 | <30 |
| 3/24/2015 | 9:30 | SC-1 East Bar Ditch 0'-50' North | 1' | <4.9 | <9.8 | <0.049 | <0.097 | 39 |
| 3/16/2015 | 14:26 | SC-2 East Bar Ditch 50'-100' North | .5' | 43 | 10 | <0.029 | 0.812 | -- |
| 3/16/2015 | 14:28 | SC-3 East Bar Ditch 100' - 150' North | .5' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/16/2015 | 14:30 | SC-4 East Bar Ditch 150' - 200' North | .5' | <3.2 | <9.8 | <0.032 | <0.064 | -- |
| 3/17/2015 | 10:15 | SC-5 Wash 0'-50' East | .5' | <3.5 | 15 | <0.035 | <0.069 | <30 |
| 3/17/2015 | 10:18 | SC-6 Wash 50'-100' East | .5' | <3.6 | <10 | <0.036 | <0.072 | -- |
| 3/17/2015 | 10:21 | SC-7 Wash 100'-150' East | .5' | <3.6 | <10 | <0.036 | <0.071 | <30 |
| 3/17/2015 | 10:24 | SC-8 Wash 150'-200' East | .5' | <3.2 | <9.9 | <0.032 | <0.063 | -- |
| 3/17/2015 | 10:27 | SC-9 Rill 0'-50' East | .5' | <3.3 | 24 | <0.033 | <0.066 | <30 |
| 3/17/2015 | 10:30 | SC-10 Rill 50'-100' East | .5' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/17/2015 | 10:33 | SC-11 Rill 100'-150' East | .5' | <3.3 | 25 | <0.033 | <0.067 | -- |
| 3/17/2015 | 10:36 | SC-12 Rill 150'-200' East | .5' | 4.1 | <10 | <0.029 | <0.059 | <30 |
| 3/17/2015 | 10:39 | SC-13 Rill 200'-250' East | .5' | <3.0 | <10 | <0.030 | <0.059 | -- |
| 3/18/2015 | 13:43 | SC-14 N Wall | 0'-15' | <2.8 | <9.8 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 13:46 | SC-15 N Bench | 15' | <2.9 | <9.8 | <0.029 | <0.057 | <30 |
| 3/18/2015 | 13:49 | SC-16 N Wall Deep | 15'-35' | <3.0 | <10 | <0.030 | <0.061 | <30 |
| 3/18/2015 | 13:52 | SC-17 N Deep Base | 35' | <3.3 | <9.9 | <0.033 | <0.067 | <30 |
| 3/18/2015 | 13:55 | SC-18 S Deep Base | 35' | <3.3 | <9.8 | <0.033 | <0.066 | <30 |
| 3/18/2015 | 13:58 | SC-19 S Deep Wall | 15'-35' | <2.8 | <10 | <0.028 | <0.056 | <30 |
| 3/18/2015 | 14:01 | SC-20 S Bench | 15' | <3.2 | <10 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:04 | SC-21 S Wall | 0'-15' | <3.1 | <9.9 | <0.031 | <0.062 | <30 |
| 3/18/2015 | 14:07 | SC-22 NE Wall | 0'-15' | <3.2 | <9.9 | <0.032 | <0.064 | <30 |
| 3/18/2015 | 14:10 | SC-23 NE Wall 2 | 0'-15' | <3.36 | <10 | <0.036 | <0.071 | <30 |
| 3/18/2015 | 14:13 | SC-24 E Wall Deep | 0'-35' | <2.9 | <9.9 | <0.029 | <0.058 | <30 |
| 3/18/2015 | 14:16 | SC-25 E Wall Deep South | 0'-35' | <3.2 | <10 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:19 | SC-26 E Wall S | 0'-15' | <3.5 | <9.9 | <0.035 | <0.070 | <30 |
| 3/18/2015 | 14:22 | SC-27 E Wall S 2 | 0'-15' | <3.0 | <10 | <0.030 | <0.06 | <30 |
| 3/18/2015 | 14:25 | SC-28 NW Wall | 0'-15' | <3.4 | <10 | <0.034 | <0.068 | <30 |
| 3/18/2015 | 14:28 | SC-29 NW Wall 2 | 0'-35' | <3.6 | <9.8 | <0.036 | <0.072 | <30 |
| 3/18/2015 | 14:31 | SC-30 NW Wall 3 | 0'-35' | <4.5 | <9.9 | <0.045 | <0.089 | <30 |
| 3/18/2015 | 14:34 | SC-31 SW Wall | 0'-35' | <3.2 | <9.9 | <0.032 | <0.065 | <30 |
| 3/18/2015 | 14:37 | SC-32 SW Wall 2 | 0'-35' | <4.6 | <10 | <0.046 | <0.093 | <30 |
| 3/18/2015 | 14:40 | SC-33 SW Wall 3 | 0'-15' | <3.4 | <10 | <0.034 | <0.067 | <30 |



Enterprise Products
Table 3: Summary of Laboratory Analysis
Results in mg/Kg

Lateral C-7
Pipeline Release
4/9/2015

| Date | Time | Sample ID | Sample Depth (Feet BGS) | Method 8015 GRO | Method 8015 DRO | Method 8021 Benzene | Method 8021 BTEX | Method 300.0 Chlorides |
|------------------|-------|-----------------------------|-------------------------|-----------------|-----------------|---------------------|------------------|------------------------|
| NMOCD Guidelines | | NMOCD Site Ranking: 40 | | 100 ppm | | 10 ppm | 50 ppm | |
| 3/18/2015 | 14:43 | SC-34 250-300 W Bar Ditch | .5' | <4.8 | <10 | <0.048 | <0.097 | -- |
| 3/18/2015 | 14:46 | SC-35 200 - 300 W Bar Ditch | .5' | <4.5 | <14 | <0.045 | <0.089 | 100 |
| 3/18/2015 | 14:49 | SC-36 150 - 200 W Bar Ditch | .5' | <5.8 | <9.8 | <0.058 | <0.12 | -- |
| 3/18/2015 | 14:52 | SC-37 100 - 150 W Bar Ditch | .5' | <3.9 | 11 | <0.039 | <0.079 | 33 |
| 3/18/2015 | 14:55 | SC-38 50 - 100 W Bar Ditch | .5' | 11 | 41 | <0.043 | <0.086 | -- |
| 3/18/2015 | 14:58 | SC-39 0 - 50 W Bar Ditch | .5' | <3.7 | <10 | <0.037 | <0.074 | -- |
| 3/18/2015 | 15:01 | SC-40 Background | .5' | <4.6 | <9.9 | <0.046 | <0.091 | <30 |



Appendix A

Site Photography

Site Photographs

Enterprise Products Lateral C-7 Pipeline



Photo 1: The liquids released from the Lateral C-7 eroded a large hole above the release location. Pictured is the release after residual liquids were removed.

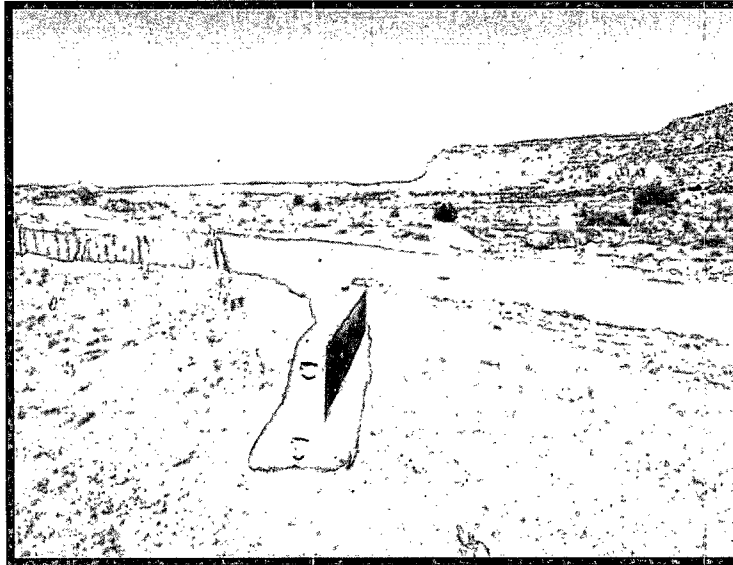


Photo 2: Surface impact from pipeline liquids as they traveled across ground surface in the vicinity of the release.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

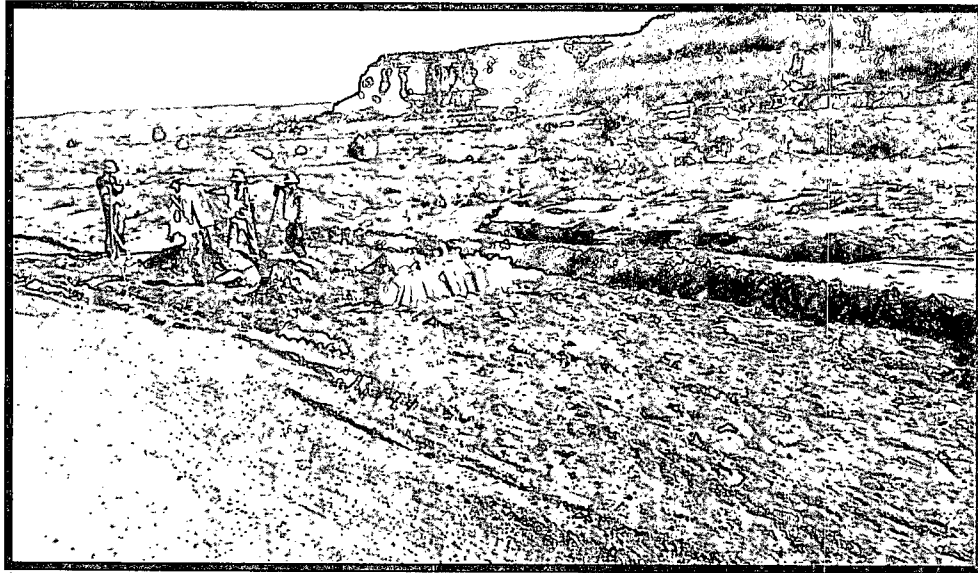


Photo 3: Manual excavation of surface impacts in the east bar ditch and wash by Halo Services Inc. contractors.



Photo 4: Visible surface impact, the location pictured is where the east bar ditch impact enters the rill and runs east. One point in a sample composite is visible.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

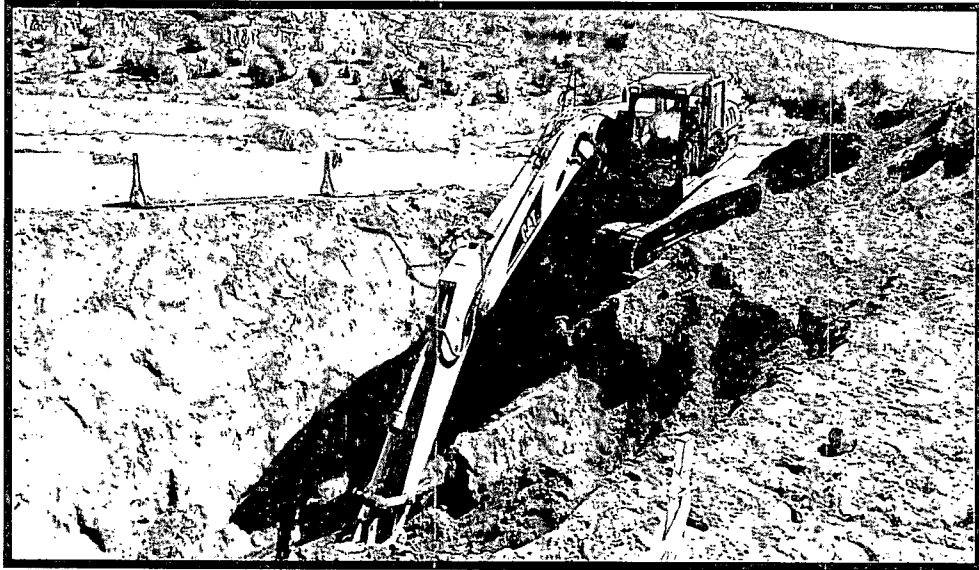


Photo 5: Initial excavation exposes impacted soils near the release. The depth of the pipeline necessitated a large excavation.

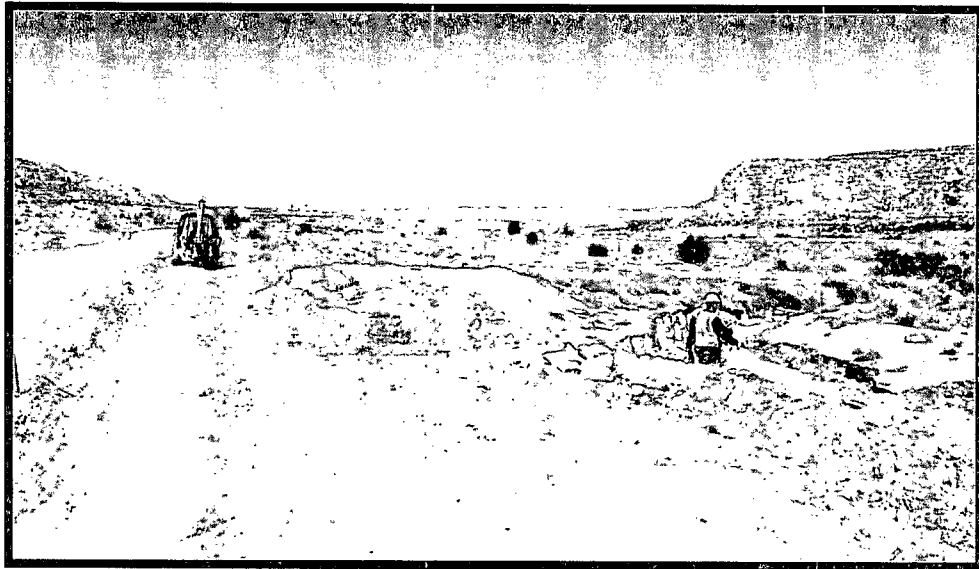


Photo 6: A rubber tire backhoe was used to remove the impact within the bar ditch. Also visible is the removal of surface impacts within the wash. View is to north.

Site Photographs

Enterprise Products Lateral C-7 Pipeline

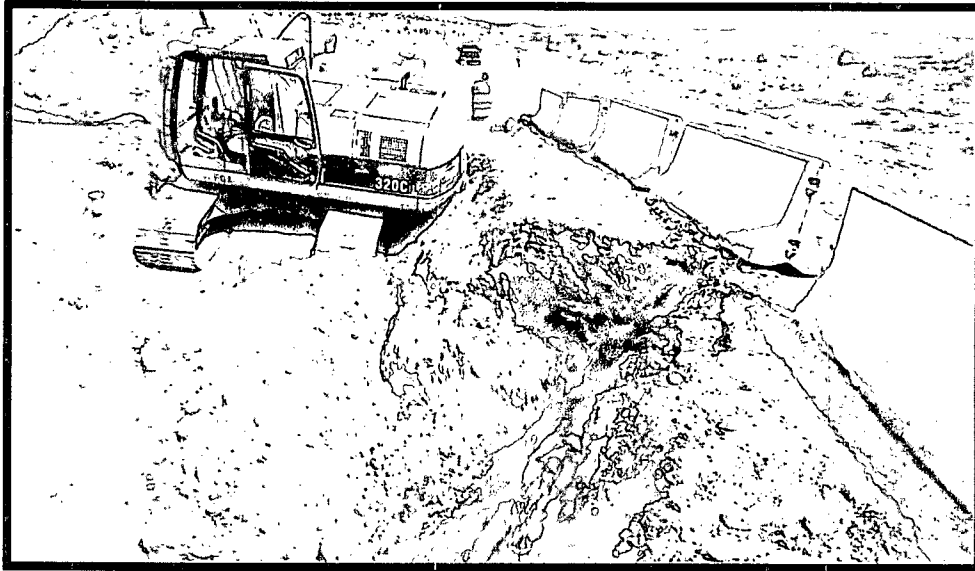


Photo 7: Contamination extended into the road base but was able to be removed by creating a shoofly to divert traffic to the east. Concrete barriers and barrels were used for safety.

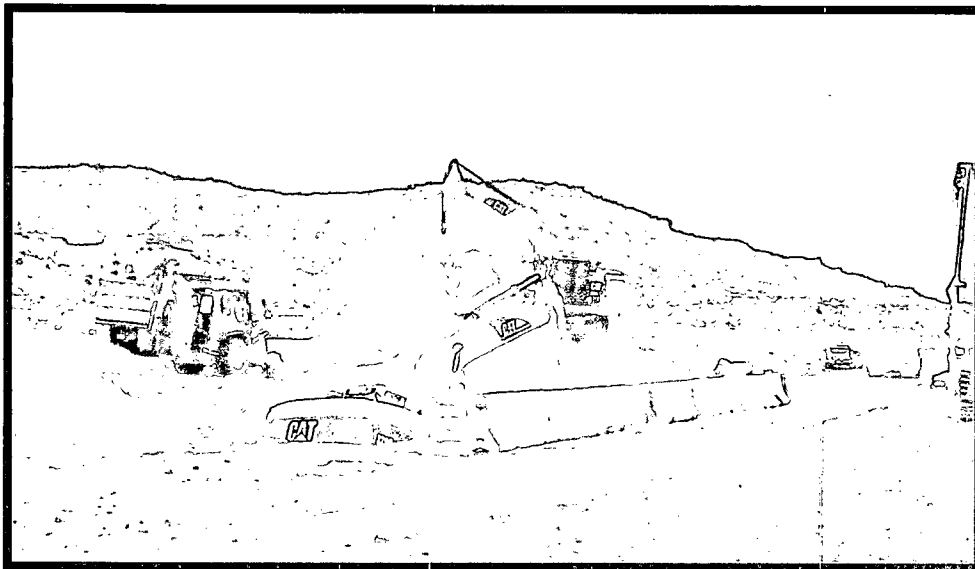


Photo 8: A second track mounted hoe was used to keep up with soil excavation and removal.

Site Photographs
Enterprise Products Lateral C-7 Pipeline

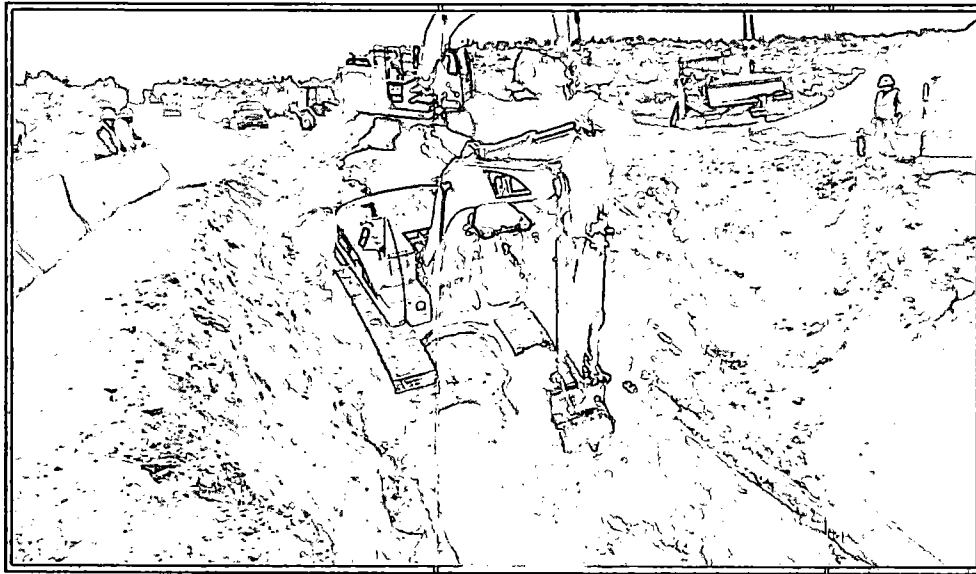


Photo 9: Heavily stained soils were encountered in the east end of the excavation however contamination was not detected in laboratory samples.

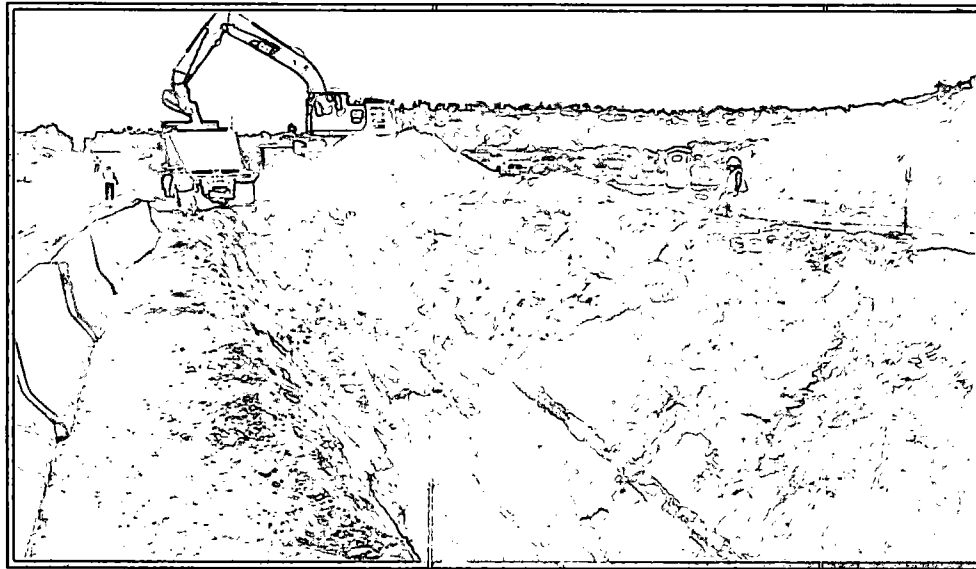


Photo 10: Final excavation extents measured over 130 feet long with depths to 35 feet below grade.

Appendix B

Soil Disposal Documentation

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources 97057-0693
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| |
|---|
| 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 |
| 2. Originating Site: Lateral C-7 Pipeline Release March 2015 |
| 3. Location of Material (Street Address, City, State or ULSTR): Unit C Sec 1 T 27 N R 9 W, San Juan County, NM; 36.610106, -107.740523 |
| 4. Source and Description of Waste: Source: Natural Gas Gathering Line Description: Hydrocarbon impacted soil/sludge/water released from a gathering line Estimated Volume 80 yd ³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 1798/315 yd ³ / bbls |

| |
|--|
| 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Thomas Long <i>Thomas Long</i> , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input checked="" type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) |
|--|

GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

| |
|---|
| I, Thomas Long <i>Thomas Long</i> , representative for Enterprise Products Operating authorize to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, Kendra Running <i>Kendra Running</i> , representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. |
|---|

5. Transporter: To Be Determined Envirotech, Halo, BET, Contant, HBL, Flying M, Del Prado, 3E Energy.
OCD Permitted Surface Waste Management Facility Lokato, Esparza, B+B Excavation, Rockies

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running

TITLE: Waste Coordinator

DATE: 3/3/15

SIGNATURE: *Kendra Running*
Surface Waste Management Facility Authorized Agent

TELEPHONE NO.: 505-632-0615

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

97057-0693

Form C-138
Revised 08/01/11

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

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| |
|---|
| 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Ave, Farmington NM 87401 |
| 2. Originating Site: Lateral C-7 Pipeline Release <div style="text-align: right;">April 2015</div> |
| 3. Location of Material (Street Address, City, State or ULSTR): Unit C Sec 1 T 27 N R 9 W, San Juan County, NM; 36.610106, -107.740523 |
| 4. Source and Description of Waste: Source: Natural Gas Gathering Line Description: Hydrocarbon impacted soil/sludge/water released from a gathering line Estimated Volume 80 yd ³ (bbls) Known Volume (to be entered by the operator at the end of the haul) 72 yd ³ bbls |
| 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, Thomas Long <i>Thomas Long</i> , representative or authorized agent for Enterprise Products Operating do hereby Generator Signature certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input checked="" type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, Thomas Long <i>Thomas Long</i> 3-3-15, representative for Enterprise Products Operating authorize to complete Generator Signature the required testing/sign the Generator Waste Testing Certification. I, <i>Kendra Running</i> , representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. |
| 5. Transporter: To Be Determined <u>Envirotech, Riehl Trucking</u> |

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

☐ DENIED (Must Be Maintained As Permanent Record)

PRINT NAME: Kendra Running
SIGNATURE: *Kendra Running*
Surface Waste Management Facility Authorized Agent

TITLE: Waste Coordinator
TELEPHONE NO.: 505-632-0615

DATE: 4/1/15

Appendix C

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*

March 18, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503672

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/17/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1

Project: Lateral C-7

Collection Date: 3/16/2015 2:24:00 PM

Lab ID: 1503672-001

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | 93 | 10 | | mg/Kg | 1 | 3/17/2015 1:03:40 PM | 18172 |
| Surr: DNOP | 117 | 63.5-128 | | %REC | 1 | 3/17/2015 1:03:40 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 54 | 15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Surr: BFB | 167 | 80-120 | S | %REC | 5 | 3/17/2015 9:07:38 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.073 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Toluene | ND | 0.15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Ethylbenzene | ND | 0.15 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Xylenes, Total | 0.73 | 0.29 | | mg/Kg | 5 | 3/17/2015 9:07:38 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 116 | 80-120 | | %REC | 5 | 3/17/2015 9:07:38 AM | 18158 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/17/2015 9:24:05 AM | 18176 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-2

Project: Lateral C-7

Collection Date: 3/16/2015 2:26:00 PM

Lab ID: 1503672-002

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | 10 | 9.9 | | mg/Kg | 1 | 3/17/2015 1:25:14 PM | 18172 |
| Surr: DNOP | 112 | 63.5-128 | | %REC | 1 | 3/17/2015 1:25:14 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 43 | 2.9 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Surr: BFB | 329 | 80-120 | S | %REC | 1 | 3/17/2015 9:36:22 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Toluene | 0.072 | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Ethylbenzene | 0.11 | 0.029 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Xylenes, Total | 0.63 | 0.058 | | mg/Kg | 1 | 3/17/2015 9:36:22 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 132 | 80-120 | S | %REC | 1 | 3/17/2015 9:36:22 AM | 18158 |

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

| | | | | | |
|--------------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 2 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-3

Project: Lateral C-7

Collection Date: 3/16/2015 2:28:00 PM

Lab ID: 1503672-003

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/17/2015 1:46:58 PM | 18172 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/17/2015 1:46:58 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Surr: BFB | 98.9 | 80-120 | | %REC | 1 | 3/17/2015 10:05:07 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Xylenes, Total | ND | 0.061 | | mg/Kg | 1 | 3/17/2015 10:05:07 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 112 | 80-120 | | %REC | 1 | 3/17/2015 10:05:07 AM | 18158 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/17/2015 9:36:29 AM | 18176 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503672

Date Reported: 3/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-4

Project: Lateral C-7

Collection Date: 3/16/2015 2:30:00 PM

Lab ID: 1503672-004

Matrix: MEOH (SOIL)

Received Date: 3/17/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: BCN |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/17/2015 2:08:32 PM | 18172 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/17/2015 2:08:32 PM | 18172 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Surr: BFB | 104 | 80-120 | | %REC | 1 | 3/17/2015 10:33:48 AM | 18158 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/17/2015 10:33:48 AM | 18158 |
| Surr: 4-Bromofluorobenzene | 110 | 80-120 | | %REC | 1 | 3/17/2015 10:33:48 AM | 18158 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 4 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18176 | SampType: | MBLK | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | PBS | Batch ID: | 18176 | RunNo: | 24873 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732771 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18176 | SampType: | LCS | TestCode: | EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | Batch ID: | 18176 | RunNo: | 24873 | | | | | |
| Prep Date: | 3/17/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 732772 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 94.2 | 90 | 110 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded.
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | MB-18172 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18172 | | RunNo: | 24861 | | | | |
| Prep Date: | 3/17/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 732781 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | | |
| Surr: DNOP | 11 | | 10.00 | | 113 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|-----|--------------------------|-------------|---|----------|--------------|------|----------|------|
| Sample ID | LCS-18172 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18172 | | RunNo: 24861 | | | | | |
| Prep Date: | 3/17/2015 | | Analysis Date: 3/17/2015 | | SeqNo: 732873 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 93.8 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.4 | 63.5 | 128 | | | |

| | | | | | | | | | | | |
|-----------------------------|----------------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | 1503672-001AMS | | SampType: | MS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | SC-1 | | Batch ID: | 18172 | | RunNo: | 24861 | | | | |
| Prep Date: | 3/17/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 733111 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 190 | 10 | 49.80 | 92.72 | 191 | 29.2 | 176 | | | S | |
| Surr: DNOP | 5.6 | | 4.980 | | 112 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|-----------------------------|-----------------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | 1503672-001AMSD | | SampType: | MSD | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | SC-1 | | Batch ID: | 18172 | | RunNo: | 24861 | | | | |
| Prep Date: | 3/17/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 733126 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 240 | 10 | 50.35 | 92.72 | 286 | 29.2 | 176 | 22.9 | 23 | S | |
| Surr: DNOP | 5.9 | | 5.035 | | 117 | 63.5 | 128 | 0 | 0 | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|---|------|-------------|------|--|
| Sample ID | MB-18142 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18142 | | RunNo: | 24861 | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/17/2015 | | SeqNo: | 733137 | | Units: %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Surr: DNOP | 11 | | 10.00 | | 108 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18142 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18142 | | RunNo: 24861 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/17/2015 | | SeqNo: 733142 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.5 | | 5.000 | | 89.4 | 63.5 | 128 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18158 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18158 | RunNo: | 24877 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733166 | 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 | 920 | | 1000 | | 92.4 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18158 | SampType: | LCS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | 18158 | RunNo: | 24877 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/17/2015 | SeqNo: | 733167 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 109 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503672

18-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

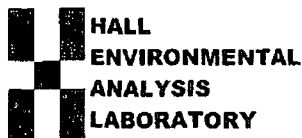
| | | | | | | | | | | |
|----------------------------|-----------|--------------------------|-----------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | MB-18158 | SampType: MBLK | | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | Batch ID: 18158 | | | RunNo: 24877 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: 3/17/2015 | | | SeqNo: 733197 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 108 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | LCS-18158 | | SampType: LCS | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | | Batch ID: 18158 | | RunNo: 24877 | | | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: 3/17/2015 | | SeqNo: 733198 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.2 | 0.050 | 1.000 | 0 | 116 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 110 | 75 | 124 | | | |
| Ethylbenzene | 1.1 | 0.050 | 1.000 | 0 | 112 | 79.5 | 126 | | | |
| Xylenes, Total | 3.3 | 0.10 | 3.000 | 0 | 111 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 115 | 80 | 120 | | | |

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503672

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

3/17/2015 7:10:00 AM

Completed By: Lindsay Mangin

3/17/2015 7:22:34 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 3.0 | Good | Yes | | | |

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farmington, NM 87401

Phone #: 505 325 7535

Email or Fax#: Steve.Moskal@Soudern.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush Same Day

Project Name:

Lateral C-7

Project #:

N20609

Project Manager:

Steve Moskal

Sampler:

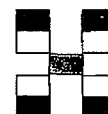
Jesse Sprague

On Ice:

☒ Yes

☐ No

Sample Temperature: 5.0



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + MTBE (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 ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 Chlorides | Air Bubbles (Y or N) |
|------|------|--------|-------------------|----------------------|-------------------|----------|--------------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 6-15 | 1424 | Soil | SC-1 | 1402 | Meckl | 1503672 | X | X | X | | | | | | | | | X | |
| | 1426 | " | SC-2 | | | -002 | X | X | X | | | | | | | | | | |
| | 1428 | " | SC-3 | | | -003 | X | X | X | | | | | | | | | X | |
| | 1430 | " | SC-4 | | | -004 | X | X | X | | | | | | | | | | |

Date: 6/15 Time: 1742 Relinquished by: G-ESP

Received by: Christine Walters Date: 3/16/15 Time: 1742

Date: 6/15 Time: 1825 Relinquished by: Christine Walters

Received by: [Signature] Date: 03/17/15 Time: 0710

Remarks: Invoice Enterprise

COPY Jesse.Sprague@southern.com



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

March 19, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503746

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 9 sample(s) on 3/18/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-5

Project: Lateral C-7

Collection Date: 3/17/2015 10:15:00 AM

Lab ID: 1503746-001

Matrix: ME0H (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 15 | 10 | | mg/Kg | 1 | 3/18/2015 1:12:03 PM | 18173 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/18/2015 1:12:03 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.5 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Surr: BFB | 91.4 | 80-120 | | %REC | 1 | 3/18/2015 11:23:40 AM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Toluene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Ethylbenzene | ND | 0.035 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Xylenes, Total | ND | 0.069 | | mg/Kg | 1 | 3/18/2015 11:23:40 AM | 18167 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/18/2015 11:23:40 AM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:29:03 AM | 18203 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-6

Project: Lateral C-7

Collection Date: 3/17/2015 10:18:00 AM

Lab ID: 1503746-002

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 1:33:44 PM | 18173 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/18/2015 1:33:44 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Surr: BFB | 90.4 | 80-120 | | %REC | 1 | 3/18/2015 11:52:24 AM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Xylenes, Total | ND | 0.072 | | mg/Kg | 1 | 3/18/2015 11:52:24 AM | 18167 |
| Surr: 4-Bromofluorobenzene | 104 | 80-120 | | %REC | 1 | 3/18/2015 11:52:24 AM | 18167 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 2 of 13 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-7**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:21:00 AM**Lab ID:** 1503746-003**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 1:55:25 PM | 18173 |
| Surr: DNOP | 104 | 63.5-128 | | %REC | 1 | 3/18/2015 1:55:25 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Surr: BFB | .92.8 | 80-120 | | %REC | 1 | 3/18/2015 12:21:12 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Xylenes, Total | ND | 0.071 | | mg/Kg | 1 | 3/18/2015 12:21:12 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/18/2015 12:21:12 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:41:27 AM | 18203 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-8

Project: Lateral C-7

Collection Date: 3/17/2015 10:24:00 AM

Lab ID: 1503746-004

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/18/2015 2:17:18 PM | 18173 |
| Surr: DNOP | 109 | 63.5-128 | | %REC | 1 | 3/18/2015 2:17:18 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Surr: BFB | 126 | 80-120 | S | %REC | 1 | 3/18/2015 12:49:55 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Xylenes, Total | ND | 0.063 | | mg/Kg | 1 | 3/18/2015 12:49:55 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 118 | 80-120 | | %REC | 1 | 3/18/2015 12:49:55 PM | 18167 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-9

Project: Lateral C-7

Collection Date: 3/17/2015 10:27:00 AM

Lab ID: 1503746-005

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 24 | 10 | | mg/Kg | 1 | 3/18/2015 2:39:02 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 2:39:02 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Surr: BFB | 90.6 | 80-120 | | %REC | 1 | 3/18/2015 1:18:37 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Xylenes, Total | ND | 0.066 | | mg/Kg | 1 | 3/18/2015 1:18:37 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/18/2015 1:18:37 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 10:53:53 AM | 18203 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-10

Project: Lateral C-7

Collection Date: 3/17/2015 10:30:00 AM

Lab ID: 1503746-006

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/18/2015 3:02:17 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 3:02:17 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Surr: BFB | 91.9 | 80-120 | | %REC | 1 | 3/18/2015 7:03:18 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/18/2015 7:03:18 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/18/2015 7:03:18 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 11:06:17 AM | 18203 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 6 of 13 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-11**Project:** Lateral C-7**Collection Date:** 3/17/2015 10:33:00 AM**Lab ID:** 1503746-007**Matrix:** MEOH (SOIL)**Received Date:** 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 25 | 9.9 | | mg/Kg | 1 | 3/18/2015 3:24:05 PM | 18173 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/18/2015 3:24:05 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Surr: BFB | 108 | 80-120 | | %REC | 1 | 3/18/2015 7:32:05 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/18/2015 7:32:05 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 109 | 80-120 | | %REC | 1 | 3/18/2015 7:32:05 PM | 18167 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-12

Project: Lateral C-7

Collection Date: 3/17/2015 10:36:00 AM

Lab ID: 1503746-008

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 3:46:00 PM | 18173 |
| Surr: DNOP | 100 | 63.5-128 | | %REC | 1 | 3/18/2015 3:46:00 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 4.1 | 2.9 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Surr: BFB | 125 | 80-120 | S | %REC | 1 | 3/18/2015 8:00:49 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Xylenes, Total | ND | 0.059 | | mg/Kg | 1 | 3/18/2015 8:00:49 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 108 | 80-120 | | %REC | 1 | 3/18/2015 8:00:49 PM | 18167 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/18/2015 11:18:41 AM | 18203 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503746

Date Reported: 3/19/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-13

Project: Lateral C-7

Collection Date: 3/17/2015 10:39:00 AM

Lab ID: 1503746-009

Matrix: MEOH (SOIL)

Received Date: 3/18/2015 7:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/18/2015 4:07:36 PM | 18173 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 3/18/2015 4:07:36 PM | 18173 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Surr: BFB | 91.6 | 80-120 | | %REC | 1 | 3/18/2015 8:29:31 PM | 18167 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Xylenes, Total | ND | 0.059 | | mg/Kg | 1 | 3/18/2015 8:29:31 PM | 18167 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 3/18/2015 8:29:31 PM | 18167 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 9 of 13 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------|-----------|---------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18203 | SampType | MBLK | TestCode | EPA Method 300.0: Anions | | | | | |
| Client ID | PBS | Batch ID | 18203 | RunNo | 24924 | | | | | |
| Prep Date | 3/18/2015 | Analysis Date | 3/18/2015 | SeqNo | 734344 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|-----------|-----------|---------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18203 | SampType | LCS | TestCode | EPA Method 300.0: Anions | | | | | |
| Client ID | LCSS | Batch ID | 18203 | RunNo | 24924 | | | | | |
| Prep Date | 3/18/2015 | Analysis Date | 3/18/2015 | SeqNo | 734345 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.4 | 90 | 110 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18173 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18173 | RunNo: | 24890 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/18/2015 | SeqNo: | 733846 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 10 | | 10.00 | | 100 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18173 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18173 | RunNo: | 24890 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/18/2015 | SeqNo: | 733847 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 47 | 10 | 50.00 | 0 | 93.7 | 67.8 | 130 | | | |
| Surr: DNOP | 4.3 | | 5.000 | | 85.3 | 63.5 | 128 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18167 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18167 | RunNo: | 24903 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/18/2015 | SeqNo: | 733915 | 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 | 910 | | 1000 | | 90.5 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18167 | SampType: | LCS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | 18167 | RunNo: | 24903 | | | | | |
| Prep Date: | 3/16/2015 | Analysis Date: | 3/18/2015 | SeqNo: | 733916 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 26 | 5.0 | 25.00 | 0 | 105 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503746

19-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | MB-18167 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | 18167 | | RunNo: | 24903 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733941 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 104 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | LCS-18167 | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | 18167 | | RunNo: | 24903 | | | |
| Prep Date: | 3/16/2015 | | Analysis Date: | 3/18/2015 | | SeqNo: | 733942 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.2 | 0.050 | 1.000 | 0 | 122 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 115 | 75 | 124 | | | |
| Ethylbenzene | 1.2 | 0.050 | 1.000 | 0 | 116 | 79.5 | 126 | | | |
| Xylenes, Total | 3.4 | 0.10 | 3.000 | 0 | 115 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503746

ReptNo: 1

Received by/date:

AT

03/18/15

Logged By: Lindsay Mangin

3/18/2015 7:10:00 AM

Lindsay Mangin

Completed By: Lindsay Mangin

3/18/2015 7:19:53 AM

Lindsay Mangin

Reviewed By:

AT 03/18/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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:

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.0 | Good | Yes | | | |

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farmington, NM 87401

Phone #: 505 325 3478

email or Fax#: Steve.Moskal@Soudo.com

QA/QC Package:

☐ Standard

☐ Level 4 (Full Validation)

Accreditation

☐ NELAP

☐ Other

☐ EDD (Type)

Turn-Around Time:

☐ Standard

☒ Rush Same day

Project Name:

Labrad C-7

Project #:

N20609

Project Manager:

Steve Moskal

Sampler:

On Ice:

☒ Yes

☐ No

Sample Temperature:

1.0



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + MTBE | BTEX + MTBE | TPH 8015B | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 Chlorides | Air Bubbles (Y or N) |
|------|------|--------|-------------------|----------------------|-------------------|----------|-------------|-------------|-----------|--------------------|--------------------|--------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 3-17 | 1015 | Soil | SC-5 | 1402 | neoh | 1503416 | X | X | X | | | | | | | | | X | |
| | 1018 | | SC-6 | | | -001 | X | X | X | | | | | | | | | X | |
| | 1021 | | SC-7 | | | -002 | X | X | X | | | | | | | | | X | |
| | 1024 | | SC-8 | | | -003 | X | X | X | | | | | | | | | | |
| | 1027 | | SC-9 | | | -004 | X | X | X | | | | | | | | | X | |
| | 1030 | | SC-10 | | | -005 | X | X | X | | | | | | | | | X | |
| | 1033 | | SC-11 | | | -006 | X | X | X | | | | | | | | | X | NO ₃ + IV |
| | 1036 | | SC-12 | | | -007 | X | X | X | | | | | | | | | X | |
| | 1039 | | SC-13 | | | -008 | X | X | X | | | | | | | | | | |
| | | | | | | -009 | | | | | | | | | | | | | |

Date: 3/17/15 Time: 1810 Relinquished by: G-ES

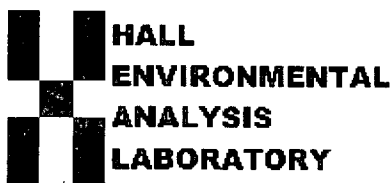
Received by: Christy Wale Date: 3/17/15 Time: 1810

Remarks: Bill Enterprise

Date: 3/17/15 Time: 1841 Relinquished by: Christy Wale

Received by: Chris Date: 03/18/15 Time: 0710

Please copy Jessie Sprague@Soudo.com



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

March 23, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503845

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 20 sample(s) on 3/19/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-14 N Wall

Project: Lateral C-7

Collection Date: 3/18/2015 1:43:00 PM

Lab ID: 1503845-001

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 10:34:09 AM | 18221 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/19/2015 10:34:09 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.8 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Surr: BFB | 92.2 | 80-120 | | %REC | 1 | 3/19/2015 2:24:40 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Toluene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Ethylbenzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Xylenes, Total | ND | 0.056 | | mg/Kg | 1 | 3/19/2015 2:24:40 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 2:24:40 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 11:22:22 AM | 18226 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 1 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-15 N Back

Project: Lateral C-7

Collection Date: 3/18/2015 1:46:00 PM

Lab ID: 1503845-002

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 11:01:40 AM | 18221 |
| Surr: DNOP | 117 | 63.5-128 | | %REC | 1 | 3/19/2015 11:01:40 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.9 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Surr: BFB | 92.8 | 80-120 | | %REC | 1 | 3/19/2015 10:05:57 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Xylenes, Total | ND | 0.057 | | mg/Kg | 1 | 3/19/2015 10:05:57 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 10:05:57 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 11:59:35 AM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-16 N Wall Deep

Project: Lateral C-7

Collection Date: 3/18/2015 1:49:00 PM

Lab ID: 1503845-003

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 11:28:54 AM | 18221 |
| Surr: DNOP | 121 | 63.5-128 | | %REC | 1 | 3/19/2015 11:28:54 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Surr: BFB | 93.4 | 80-120 | | %REC | 1 | 3/19/2015 10:34:46 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Xylenes, Total | ND | 0.061 | | mg/Kg | 1 | 3/19/2015 10:34:46 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 10:34:46 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 12:12:00 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**Lab Order **1503845**Date Reported: **3/23/2015****CLIENT:** Souder, Miller and Associates**Client Sample ID:** SC-17 N Deep Base**Project:** Lateral C-7**Collection Date:** 3/18/2015 1:52:00 PM**Lab ID:** 1503845-004**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|---------------|-----------|-------------|--------------|-----------|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:01:59 PM | 18221 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/19/2015 12:01:59 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Surr: BFB | 93.6 | 80-120 | | %REC | 1 | 3/19/2015 2:53:25 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/19/2015 2:53:25 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/19/2015 2:53:25 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 12:49:13 PM | 18226 |

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

| | | | | |
|--------------------|----------|---|-----------|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-18 S Deep Base

Project: Lateral C-7

Collection Date: 3/18/2015 1:55:00 PM

Lab ID: 1503845-005

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 12:29:22 PM | 18221 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/19/2015 12:29:22 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.3 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Surr: BFB | 94.3 | 80-120 | | %REC | 1 | 3/19/2015 11:03:30 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Toluene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Ethylbenzene | ND | 0.033 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Xylenes, Total | ND | 0.066 | | mg/Kg | 1 | 3/19/2015 11:03:30 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 107 | 80-120 | | %REC | 1 | 3/19/2015 11:03:30 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:01:38 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-19 S Deep Wall

Project: Lateral C-7

Collection Date: 3/18/2015 1:58:00 PM

Lab ID: 1503845-006

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 10:38:27 AM | 18221 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/19/2015 10:38:27 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 2.8 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Surr: BFB | 93.5 | 80-120 | | %REC | 1 | 3/19/2015 11:32:18 AM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Toluene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Ethylbenzene | ND | 0.028 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Xylenes, Total | ND | 0.056 | | mg/Kg | 1 | 3/19/2015 11:32:18 AM | 18213 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 3/19/2015 11:32:18 AM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:14:02 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-20 S Back

Project: Lateral C-7

Collection Date: 3/18/2015 2:01:00 PM

Lab ID: 1503845-007

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 10:59:55 AM | 18221 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/19/2015 10:59:55 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Surr: BFB | 92.4 | 80-120 | | %REC | 1 | 3/19/2015 7:11:46 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/19/2015 7:11:46 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 7:11:46 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:26:27 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order 1503845
Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-21 S Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:04:00 PM

Lab ID: 1503845-008

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 11:21:29 AM | 18221 |
| Surr: DNOP | 98.4 | 63.5-128 | | %REC | 1 | 3/19/2015 11:21:29 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.1 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Surr: BFB | 93.7 | 80-120 | | %REC | 1 | 3/19/2015 12:01:01 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Toluene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Ethylbenzene | ND | 0.031 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Xylenes, Total | ND | 0.062 | | mg/Kg | 1 | 3/19/2015 12:01:01 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 12:01:01 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:38:51 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-22 NE Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:07:00 PM

Lab ID: 1503845-009

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 11:42:50 AM | 18221 |
| Surr: DNOP | 102 | 63.5-128 | | %REC | 1 | 3/19/2015 11:42:50 AM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Surr: BFB | 93.4 | 80-120 | | %REC | 1 | 3/19/2015 7:40:31 PM | R24929 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Xylenes, Total | ND | 0.064 | | mg/Kg | 1 | 3/19/2015 7:40:31 PM | R24929 |
| Surr: 4-Bromofluorobenzene | 108 | 80-120 | | %REC | 1 | 3/19/2015 7:40:31 PM | R24929 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 1:51:16 PM | 18226 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-23 NE Wall 2**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:10:00 PM**Lab ID:** 1503845-010**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|----------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 12:04:23 PM | 18221 |
| Surr: DNOP | 99.1 | 63.5-128 | | %REC | 1 | 3/19/2015 12:04:23 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:03:40 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Xylenes, Total | ND | 0.071 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 99.1 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 102 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: Toluene-d8 | 88.1 | 70-130 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/19/2015 3:02:05 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 3:02:05 PM | R24920 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-24 E Wall Deep

Project: Lateral C-7

Collection Date: 3/18/2015 2:13:00 PM

Lab ID: 1503845-011

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|--------------|-----------------------|-------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | Analyst: JME | | |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:25:48 PM | 18221 |
| Surr: DNOP | 101 | 63.5-128 | | %REC | 1 | 3/19/2015 12:25:48 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | Analyst: NSB | | |
| Gasoline Range Organics (GRO) | ND | 2.9 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Surr: BFB | 94.5 | 80-120 | | %REC | 1 | 3/19/2015 12:29:43 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | Analyst: NSB | | |
| Benzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Toluene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Ethylbenzene | ND | 0.029 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Xylenes, Total | ND | 0.058 | | mg/Kg | 1 | 3/19/2015 12:29:43 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 3/19/2015 12:29:43 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | Analyst: LGT | | |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:16:05 PM | 18226 |

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

| | | | | | |
|-------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 11 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-25 E Wall Deep South**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:16:00 PM**Lab ID:** 1503845-012**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 12:47:18 PM | 18221 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 3/19/2015 12:47:18 PM | 18221 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Surr: BFB | 94.0 | 80-120 | | %REC | 1 | 3/19/2015 12:58:28 PM | 18213 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Xylenes, Total | ND | 0.065 | | mg/Kg | 1 | 3/19/2015 12:58:28 PM | 18213 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 3/19/2015 12:58:28 PM | 18213 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:28:29 PM | 18226 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

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Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates**Client Sample ID:** SC-26 E Wall S**Project:** Lateral C-7**Collection Date:** 3/18/2015 2:19:00 PM**Lab ID:** 1503845-013**Matrix:** SOIL**Received Date:** 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|----------------------|----|-----------------------|--------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | Analyst: JME | | | |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 1:08:43 PM | 18221 |
| Surr: DNOP | 108 | 63.5-128 | | %REC | 1 | 3/19/2015 1:08:43 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | Analyst: LGT | | | |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 2:40:54 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | Analyst: cadg | | | |
| Benzene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Toluene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Ethylbenzene | ND | 0.035 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Xylenes, Total | ND | 0.070 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.3 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 99.6 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: Toluene-d8 | 94.1 | 70-130 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | Analyst: cadg | | | |
| Gasoline Range Organics (GRO) | ND | 3.5 | | mg/Kg | 1 | 3/19/2015 11:11:41 AM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 11:11:41 AM | R24920 |

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

| | | | | |
|--------------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted-recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-27 E Wall S2

Project: Lateral C-7

Collection Date: 3/18/2015 2:22:00 PM

Lab ID: 1503845-014

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:30:10 PM | 18221 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/19/2015 1:30:10 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:18:06 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Xylenes, Total | ND | 0.060 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 105 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 105 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: Dibromofluoromethane | 107 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: Toluene-d8 | 96.0 | 70-130 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 3/19/2015 11:40:28 AM | R24920 |
| Surr: BFB | 111 | 67.4-150 | | %REC | 1 | 3/19/2015 11:40:28 AM | R24920 |

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

| | | | | | |
|-------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 14 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-28 NW Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:25:00 PM

Lab ID: 1503845-015

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:51:33 PM | 18221 |
| Surr: DNOP | 113 | 63.5-128 | | %REC | 1 | 3/19/2015 1:51:33 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 51 | 30 | | mg/Kg | 20 | 3/19/2015 3:30:30 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Toluene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Ethylbenzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Xylenes, Total | ND | 0.068 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 103 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 101 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: Toluene-d8 | 93.0 | 70-130 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.4 | | mg/Kg | 1 | 3/19/2015 12:09:18 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 12:09:18 PM | R24920 |

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

| | | | | | |
|-------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 15 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-29 NW Wall 2

Project: Lateral C-7

Collection Date: 3/18/2015 2:28:00 PM

Lab ID: 1503845-016

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|---------------|-----------------------|--------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | Analyst: JME | | |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/19/2015 2:13:13 PM | 18221 |
| Surr: DNOP | 108 | 63.5-128 | | %REC | 1 | 3/19/2015 2:13:13 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | Analyst: LGT | | |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:42:55 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | Analyst: cadg | | |
| Benzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Toluene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Ethylbenzene | ND | 0.036 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Xylenes, Total | ND | 0.072 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 99.4 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 97.7 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: Toluene-d8 | 92.4 | 70-130 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | Analyst: cadg | | |
| Gasoline Range Organics (GRO) | ND | 3.6 | | mg/Kg | 1 | 3/19/2015 12:38:02 PM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/19/2015 12:38:02 PM | R24920 |

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

| | | | | | |
|-------------|---|---|----|--|---------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 16 of 30 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-30 NW Wall 3

Project: Lateral C-7

Collection Date: 3/18/2015 2:31:00 PM

Lab ID: 1503845-017

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 2:34:36 PM | 18221 |
| Surr: DNOP | 110 | 63.5-128 | | %REC | 1 | 3/19/2015 2:34:36 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 3:55:20 PM | 18226 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Toluene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Ethylbenzene | ND | 0.045 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Xylenes, Total | ND | 0.089 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.3 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 94.3 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: Toluene-d8 | 93.6 | 70-130 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.5 | | mg/Kg | 1 | 3/19/2015 1:06:49 PM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/19/2015 1:06:49 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-31 SW Wall

Project: Lateral C-7

Collection Date: 3/18/2015 2:34:00 PM

Lab ID: 1503845-018

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/19/2015 12:56:58 PM | 18221 |
| Surr: DNOP | 113 | 63.5-128 | | %REC | 1 | 3/19/2015 12:56:58 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:32:34 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Toluene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Ethylbenzene | ND | 0.032 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Xylenes, Total | ND | 0.065 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.4 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 93.1 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: Toluene-d8 | 89.5 | 70-130 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.2 | | mg/Kg | 1 | 3/19/2015 1:35:34 PM | R24920 |
| Surr: BFB | 101 | 67.4-150 | | %REC | 1 | 3/19/2015 1:35:34 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-32 SW Wall 2

Project: Lateral C-7

Collection Date: 3/18/2015 2:37:00 PM

Lab ID: 1503845-019

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:24:03 PM | 18221 |
| Surr: DNOP | 116 | 63.5-128 | | %REC | 1 | 3/19/2015 1:24:03 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:44:58 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Xylenes, Total | ND | 0.093 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.6 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.2 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: Toluene-d8 | 93.1 | 70-130 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 3/19/2015 2:04:20 PM | R24920 |
| Surr: BFB | 106 | 67.4-150 | | %REC | 1 | 3/19/2015 2:04:20 PM | R24920 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503845

Date Reported: 3/23/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-33 SW Wall 3

Project: Lateral C-7

Collection Date: 3/18/2015 2:40:00 PM

Lab ID: 1503845-020

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/19/2015 1:51:18 PM | 18221 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/19/2015 1:51:18 PM | 18221 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 4:57:23 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Toluene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Ethylbenzene | ND | 0.034 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Xylenes, Total | ND | 0.067 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: 4-Bromofluorobenzene | 90.8 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: Toluene-d8 | 90.6 | 70-130 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.4 | | mg/Kg | 1 | 3/19/2015 2:33:15 PM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/19/2015 2:33:15 PM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18226 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18226 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735228 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|------------------------------------|----------|--------------|------|----------|------|
| Sample ID | LCS-18226 | | SampType: LCS | | TestCode: EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | | Batch ID: 18226 | | RunNo: 24944 | | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 735229 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 15 | 1.5 | 15.00 | 0 | 96.7 | 90 | 110 | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18230 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18230 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735257 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|-----------|----------------|-----------|----------|-----------|--------------------------|----------|--------|-------|
| Sample ID | LCS-18230 | | | SampType: | LCS | | TestCode: | EPA Method 300.0: Anions | | | |
| Client ID: | LCSS | | | Batch ID: | 18230 | | RunNo: | 24944 | | | |
| Prep Date: | 3/19/2015 | | | Analysis Date: | 3/19/2015 | | SeqNo: | 735258 | | Units: | mg/Kg |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 90 | 110 | | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18221 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18221 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734182 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 9.7 | | 10.00 | | 97.4 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18221 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18221 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734183 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.00 | 0 | 101 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.4 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18201 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18201 | RunNo: | 24912 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734292 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 12 | | 10.00 | | 124 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18211 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18211 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734296 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 9.6 | | 10.00 | | 95.6 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503845-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-14 N Wall | Batch ID: | 18221 | RunNo: | 24912 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734579 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 52 | 10 | 50.15 | 0 | 104 | 29.2 | 176 | | | |
| Surr: DNOP | 5.3 | | 5.015 | | 106 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503845-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-14 N Wall | Batch ID: | 18221 | RunNo: | 24912 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734670 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 53 | 10 | 50.35 | 0 | 106 | 29.2 | 176 | 2.39 | 23 | |
| Surr: DNOP | 5.4 | | 5.035 | | 107 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18211 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18211 | | RunNo: 24910 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734679 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 4.6 | | 5.000 | | 91.0 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18201 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18201 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734682 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 5.0 | | 5.000 | | 99.7 | 63.5 | 128 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18213 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18213 | RunNo: | 24929 | | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/19/2015 | SeqNo: | 734777 | 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 | 930 | | 1000 | | 93.4 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | LCS-18213 | | SampType: LCS | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | | Batch ID: 18213 | | RunNo: 24929 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734778 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 27 | 5.0 | 25.00 | 0 | 107 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 100 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|--------|----------------|-----------|-------------|-----------|----------------------------------|-----------|--------|----------|------|
| Sample ID | B24 | SampType: | MBLK | | TestCode: | EPA Method 8015D: Gasoline Range | | | | |
| Client ID: | PBS | Batch ID: | R24929 | | RunNo: | 24929 | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | | SeqNo: | 734794 | | 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 | 940 | | 1000 | | 93.8 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|---------------|--------------------------|-----------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | 2.5UG GRO LCS | SampType: LCS | | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: R24929 | | | RunNo: 24929 | | | | | |
| Prep Date: | | Analysis Date: 3/19/2015 | | | SeqNo: 734795 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 5.0 | 25.00 | 0 | 97.8 | 64 | 130 | | | |
| Surr: BFB | 1000 | | 1000 | | 101 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-------------------|-----|--------------------------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | 1503845-004AMS | | SampType: MS | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | SC-17 N Deep Base | | Batch ID: R24929 | | RunNo: 24929 | | | | | |
| Prep Date: | | | Analysis Date: 3/19/2015 | | SeqNo: 734797 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 16 | 3.3 | 16.71 | 0 | 92.8 | 47.9 | 144 | | | |
| Surr: BFB | 660 | | 668.4 | | 99.2 | 80 | 120 | | | |

| | | | | | | | | | | | |
|------------|-------------------|-----|-----------|----------------|-----------|----------|-----------|----------------------------------|----------|--------|-------|
| Sample ID | 1503845-004AMSD | | | SampType: | MSD | | TestCode: | EPA Method 8015D: Gasoline Range | | | |
| Client ID: | SC-17 N Deep Base | | | Batch ID: | R24929 | | RunNo: | 24929 | | | |
| Prep Date: | | | | Analysis Date: | 3/19/2015 | | SeqNo: | 734798 | | Units: | mg/Kg |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-------------------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-004AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | SC-17 N Deep Base | Batch ID: | R24929 | RunNo: | 24929 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734798 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 18 | 3.3 | 16.71 | 0 | 107 | 47.9 | 144 | 14.4 | 29.9 | |
| Surr: BFB | 670 | | 668.4 | | 101 | 80 | 120 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|-----------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | MB-18213 | | SampType: MBLK | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | | Batch ID: 18213 | | RunNo: 24929 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734804 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 107 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | LCS-18213 | | SampType: LCS | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | | Batch ID: 18213 | | RunNo: 24929 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734805 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.0 | 0.050 | 1.000 | 0 | 103 | 76.6 | 128 | | | |
| Toluene | 0.98 | 0.050 | 1.000 | 0 | 97.8 | 75 | 124 | | | |
| Ethylbenzene | 0.97 | 0.050 | 1.000 | 0 | 96.8 | 79.5 | 126 | | | |
| Xylenes, Total | 2.9 | 0.10 | 3.000 | 0 | 96.7 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 113 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|--------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | B24 | | SampType: MBLK | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | | Batch ID: R24929 | | RunNo: 24929 | | | | | |
| Prep Date: | | | Analysis Date: 3/19/2015 | | SeqNo: 734825 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 107 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|----------------|-------|--------------------------|-------------|---------------------------------------|----------|--------------|------|----------|------|
| Sample ID | 100NG BTEX LCS | | SampType: LCS | | TestCode: EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | | Batch ID: R24929 | | RunNo: 24929 | | | | | |
| Prep Date: | | | Analysis Date: 3/19/2015 | | SeqNo: 734826 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 115 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 110 | 75 | 124 | | | |
| Ethylbenzene | 1.1 | 0.050 | 1.000 | 0 | 110 | 79.5 | 126 | | | |
| Xylenes, Total | 3.3 | 0.10 | 3.000 | 0 | 109 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 112 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|----------------------------|----------------|--------------------------|-----------|---------------------------------------|------|--------------|-----------|------|----------|------|
| Sample ID | 1503845-007AMS | SampType: MS | | TestCode: EPA Method 8021B: Volatiles | | | | | | |
| Client ID: | SC-20 S Back | Batch ID: R24929 | | RunNo: 24929 | | | | | | |
| Prep Date: | | Analysis Date: 3/19/2015 | | SeqNo: 734829 | | Units: mg/Kg | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.37 | 0.032 | 0.6414 | 0.005728 | 56.3 | 69.2 | 126 | | | S |
| Toluene | 0.34 | 0.032 | 0.6414 | 0.006138 | 52.5 | 65.6 | 128 | | | S |
| Ethylbenzene | 0.35 | 0.032 | 0.6414 | 0 | 54.5 | 65.5 | 138 | | | S |
| Xylenes, Total | 1.0 | 0.064 | 1.924 | 0 | 53.4 | 63 | 139 | | | S |
| Surr: 4-Bromofluorobenzene | 0.72 | | 0.6414 | | 112 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------------|----------------|-----------|---------------------------------------|--------|--------------|-----------|------|----------|------|
| Sample ID | 1503845-007AMSD | SampType: | MSD | TestCode: EPA Method 8021B: Volatiles | | | | | | |
| Client ID: | SC-20 S Back | Batch ID: | R24929 | RunNo: 24929 | | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734830 | Units: mg/Kg | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.73 | 0.032 | 0.6414 | 0.005728 | 114 | 69.2 | 126 | 66.7 | 18.5 | R |
| Toluene | 0.69 | 0.032 | 0.6414 | 0.006138 | 106 | 65.6 | 128 | 66.6 | 20.6 | R |
| Ethylbenzene | 0.69 | 0.032 | 0.6414 | 0 | 107 | 65.5 | 138 | 65.1 | 20.1 | R |
| Xylenes, Total | 2.0 | 0.064 | 1.924 | 0 | 107 | 63 | 139 | 66.4 | 21.1 | R |
| Surr: 4-Bromofluorobenzene | 0.75 | | 0.6414 | | 116 | 80 | 120 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------|---------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType | MBLK | TestCode | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID | PBS | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/19/2015 | SeqNo | 734835 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.47 | | 0.5000 | | 93.0 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.53 | | 0.5000 | | 106 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.48 | | 0.5000 | | 96.2 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.50 | | 0.5000 | | 101 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|---------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 100ng lcs | SampType | LCS | TestCode | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID | LCSS | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/19/2015 | SeqNo | 734836 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 107 | 70 | 130 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 109 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.49 | | 0.5000 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.49 | | 0.5000 | | 98.0 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|---------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 1503845-013a ms | SampType | MS | TestCode | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID | SC-26 E Wall S | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/19/2015 | SeqNo | 734841 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.78 | 0.035 | 0.7047 | 0 | 111 | 57.8 | 132 | | | |
| Toluene | 0.75 | 0.035 | 0.7047 | 0 | 106 | 54.8 | 139 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.34 | | 0.3524 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.34 | | 0.3524 | | 97.8 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.35 | | 0.3524 | | 100 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.33 | | 0.3524 | | 94.2 | 70 | 130 | | | |

| | | | | | | | | | | |
|------------|------------------|---------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 1503845-013a msd | SampType | MSD | TestCode | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID | SC-26 E Wall S | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/20/2015 | SeqNo | 734842 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 0.75 | 0.035 | 0.7047 | 0 | 107 | 57.8 | 132 | 4.12 | 20 | |
| Toluene | 0.71 | 0.035 | 0.7047 | 0 | 101 | 54.8 | 139 | 4.92 | 20 | |

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|------------------|----------------|-----------|-------------|--|----------|-----------|------|----------|------|
| Sample ID | 1503845-013a msd | SampType: | MSD | TestCode: | EPA Method 8260B: Volatiles Short List | | | | | |
| Client ID: | SC-26 E Wall S | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/20/2015 | SeqNo: | 734842 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: 1,2-Dichloroethane-d4 | 0.34 | | 0.3524 | | 97.7 | 70 | 130 | 0 | 0 | |
| Surr: 4-Bromofluorobenzene | 0.35 | | 0.3524 | | 100 | 70 | 130 | 0 | 0 | |
| Surr: Dibromofluoromethane | 0.37 | | 0.3524 | | 104 | 70 | 130 | 0 | 0 | |
| Surr: Toluene-d8 | 0.33 | | 0.3524 | | 94.2 | 70 | 130 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503845

23-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|--------|---------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType | MBLK | TestCode | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID | PBS | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/19/2015 | SeqNo | 734871 | 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 | 490 | | 500.0 | | 97.6 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|---------------|---------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 2.5ug gro lcs | SampType | LCS | TestCode | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID | LCSS | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/19/2015 | SeqNo | 734872 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 100 | 79.9 | 135 | | | |
| Surr: BFB | 500 | | 500.0 | | 99.7 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------------|---------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-014a ms | SampType | MS | TestCode | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID | SC-27 E Wall S2 | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/20/2015 | SeqNo | 734876 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 14 | 3.0 | 15.11 | 0 | 93.3 | 65.2 | 156 | | | |
| Surr: BFB | 330 | | 302.1 | | 108 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|------------------|---------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1503845-014a msd | SampType | MSD | TestCode | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID | SC-27 E Wall S2 | Batch ID | R24920 | RunNo | 24920 | | | | | |
| Prep Date: | | Analysis Date | 3/20/2015 | SeqNo | 734877 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 13 | 3.0 | 15.11 | 0 | 89.3 | 65.2 | 156 | 4.34 | 20 | |
| Surr: BFB | 320 | | 302.1 | | 107 | 67.4 | 150 | 0 | 0 | |

Qualifiers:

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- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503845

RcptNo: 1

Received by/date: AS 03/19/15

Logged By: Anne Thorne 3/19/2015 8:05:00 AM

Completed By: Anne Thorne 3/19/2015

Reviewed By: [Signature]

03/19/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

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

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp °C | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|---------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.3 | Good | Yes | | | |

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway
Farmington NM 87401

Phone #: 505 325 7535

Email or Fax#: Steve.Moskal@Soudersmills.com

QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)

Accreditation
☐ NELAP ☐ Other _____

EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Same Day

Project Name:
Lateral C-7

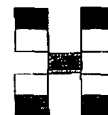
Project #:
N20609

Project Manager:
Steve Moskal

Sampler:
J. Sprague

On Ice: ☒ Yes ☐ No

Sample Temperature: 13



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO / HRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 chlorides | Air Bubbles (Y or N) |
|-------|------|--------|-------------------------|----------------------|-------------------|----------|-------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 11/18 | 1343 | Soil | SC-14 N wall | 1402 1 Meq/L HCl | MeOH | 1503845 | X | X | X | | | | | | | | | X | |
| | 1346 | | SC-15 N Bench | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1349 | | SC-16 N wall deep | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1352 | | SC-17 N Deep Base | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1355 | | SC-18 S Deep Base | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1358 | | SC-19 S Deep wall | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1401 | | SC-20 S Bench | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1404 | | SC-21 S wall | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1407 | | SC-22 NE wall | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1410 | | SC-23 W wall 2 | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1413 | | SC-24 E wall Deep | | | 1503845 | X | X | X | | | | | | | | | X | |
| | 1416 | | SC-25 E wall Deep South | | | 1503845 | X | X | X | | | | | | | | | X | |

Date: 11/18 Time: 1900 Relinquished by: Jesse Sprague

Date: 11/18 Time: 1900 Received by: Christa Wapler

Date: 11/15 Time: 2005 Relinquished by: Christa Wapler

Date: 11/15 Time: 0805 Received by: Chris Sprague

Remarks: Invoice Enterprise

Please copy Jesse.sprague@soudersmills.com

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farmington NM 87401

Phone #: 505 325 7535

Email or Fax#: Steven.moskal@spodermiller.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☐ Standard

☒ Rush Same day

Project Name:

Lateral C-7

Project #:

N20809

Project Manager:

Steve Moskal

Sampler:

J. Sprague

On Ice:

☒ Yes

☐ No

Sample Temperature:

13



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX + MTBE + TPH (Gas only) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRO) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 chlorides | Air Bubbles (Y or N) |
|------|------|--------|-------------------|----------------------|-------------------|----------|------------------------------|------------------------------|-----------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| -18 | 1419 | soil | SC-26 E wall 5 | 1402 Koch kit | MeOH | 1503845 | -013 | X | X | | | | | | | | | X | |
| | 1422 | | SC-27 E wall 5 2 | | | | -014 | X | X | | | | | | | | | X | |
| | 1425 | | SC-28 NW wall | | | | -015 | X | X | | | | | | | | | X | |
| | 1428 | | SC-29 NW wall 2 | | | | -016 | X | X | | | | | | | | | X | |
| | 1431 | | SC-30 NW wall 3 | | | | -017 | X | X | | | | | | | | | X | |
| | 1434 | | SC-31 SW wall | | | | -018 | X | X | | | | | | | | | X | |
| | 1437 | | SC-32 SW wall 2 | | | | -019 | X | X | | | | | | | | | X | |
| | 1440 | | SC-33 SW wall 3 | | | | -020 | X | X | | | | | | | | | X | |

Date: -18 Time: 1900 Relinquished by: J-ES

Received by: Christophe Date: 3/18/15 Time: 1900

Remarks: Invoice Enterprise

Date: 3/18/15 Time: 2005 Relinquished by: Christophe

Received by: Steve Date: 03/19 Time:

Please copy Jesse.Sprague@spodermiller.com



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

March 25, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX

RE: Lateral C-7

OrderNo.: 1503850

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/19/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-34 250-300' W Bar ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:43:00 PM

Lab ID: 1503850-001

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/20/2015 8:27:48 AM | 18222 |
| Surr: DNOP | 115 | 63.5-128 | | %REC | 1 | 3/20/2015 8:27:48 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Toluene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Ethylbenzene | ND | 0.048 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 97.6 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.3 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: Dibromofluoromethane | 103 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: Toluene-d8 | 91.9 | 70-130 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.8 | | mg/Kg | 1 | 3/20/2015 1:34:51 AM | R24920 |
| Surr: BFB | 104 | 67.4-150 | | %REC | 1 | 3/20/2015 1:34:51 AM | R24920 |

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

| | | | | | |
|-------------|---|---|----|--|--------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 1 of 12 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-35 200-250" W Bar ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:46:00 PM

Lab ID: 1503850-002

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 14 | 9.8 | | mg/Kg | 1 | 3/20/2015 9:32:22 AM | 18222 |
| Surr: DNOP | 118 | 63.5-128 | | %REC | 1 | 3/20/2015 9:32:22 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 100 | 30 | | mg/Kg | 20 | 3/19/2015 5:59:26 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Toluene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Ethylbenzene | ND | 0.045 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Xylenes, Total | ND | 0.089 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.4 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 96.2 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: Dibromofluoromethane | 102 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: Toluene-d8 | 92.9 | 70-130 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.5 | | mg/Kg | 1 | 3/20/2015 2:03:39 AM | R24920 |
| Surr: BFB | 114 | 67.4-150 | | %REC | 1 | 3/20/2015 2:03:39 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-36 150-200' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:49:00 PM

Lab ID: 1503850-003

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/20/2015 9:53:49 AM | 18222 |
| Surr: DNOP | 107 | 63.5-128 | | %REC | 1 | 3/20/2015 9:53:49 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Toluene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Ethylbenzene | ND | 0.058 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Xylenes, Total | ND | 0.12 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 96.3 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 96.0 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: Dibromofluoromethane | 100 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: Toluene-d8 | 89.2 | 70-130 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 5.8 | | mg/Kg | 1 | 3/20/2015 2:32:28 AM | R24920 |
| Surr: BFB | 101 | 67.4-150 | | %REC | 1 | 3/20/2015 2:32:28 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Page 3 of 12

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-37 100-150' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:52:00 PM

Lab ID: 1503850-004

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 11 | 10 | | mg/Kg | 1 | 3/20/2015 12:23:20 PM | 18222 |
| Surr: DNOP | 106 | 63.5-128 | | %REC | 1 | 3/20/2015 12:23:20 PM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 33 | 30 | | mg/Kg | 20 | 3/19/2015 6:11:51 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Toluene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Ethylbenzene | ND | 0.039 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Xylenes, Total | ND | 0.079 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 95.9 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: Dibromofluoromethane | 106 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: Toluene-d8 | 92.2 | 70-130 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.9 | | mg/Kg | 1 | 3/20/2015 3:01:16 AM | R24920 |
| Surr: BFB | 106 | 67.4-150 | | %REC | 1 | 3/20/2015 3:01:16 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-38 50-100' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:55:00 PM

Lab ID: 1503850-005

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 41 | 9.8 | | mg/Kg | 1 | 3/20/2015 9:22:36 AM | 18222 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/20/2015 9:22:36 AM | 18222 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Toluene | 0.047 | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Ethylbenzene | ND | 0.043 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Xylenes, Total | ND | 0.086 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 95.4 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 98.7 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: Dibromofluoromethane | 99.1 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: Toluene-d8 | 89.0 | 70-130 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | 11 | 4.3 | | mg/Kg | 1 | 3/20/2015 3:30:05 AM | R24920 |
| Surr: BFB | 109 | 67.4-150 | | %REC | 1 | 3/20/2015 3:30:05 AM | R24920 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-39 0-50' W Bar Ditch

Project: Lateral C-7

Collection Date: 3/18/2015 2:58:00 PM

Lab ID: 1503850-006

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 3/20/2015 9:49:48 AM | 18222 |
| Surr: DNOP | 116 | 63.5-128 | | %REC | 1 | 3/20/2015 9:49:48 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/19/2015 6:24:15 PM | 18230 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Toluene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Ethylbenzene | ND | 0.037 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Xylenes, Total | ND | 0.074 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 102 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 98.8 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: Dibromofluoromethane | 104 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: Toluene-d8 | 91.1 | 70-130 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 3.7 | | mg/Kg | 1 | 3/20/2015 3:58:53 AM | R24920 |
| Surr: BFB | 108 | 67.4-150 | | %REC | 1 | 3/20/2015 3:58:53 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Analytical Report

Lab Order 1503850

Date Reported: 3/25/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-40 Background

Project: Lateral C-7

Collection Date: 3/18/2015 3:01:00 PM

Lab ID: 1503850-007

Matrix: SOIL

Received Date: 3/19/2015 8:05:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.9 | | mg/Kg | 1 | 3/20/2015 10:16:54 AM | 18222 |
| Surr: DNOP | 114 | 63.5-128 | | %REC | 1 | 3/20/2015 10:16:54 AM | 18222 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | ND | 30 | | mg/Kg | 20 | 3/24/2015 10:51:49 AM | 18295 |
| EPA METHOD 8260B: VOLATILES SHORT LIST | | | | | | | Analyst: cadg |
| Benzene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Toluene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Ethylbenzene | ND | 0.046 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Xylenes, Total | ND | 0.091 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: 1,2-Dichloroethane-d4 | 98.0 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: 4-Bromofluorobenzene | 104 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: Dibromofluoromethane | 101 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: Toluene-d8 | 88.0 | 70-130 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |
| EPA METHOD 8015D MOD: GASOLINE RANGE | | | | | | | Analyst: cadg |
| Gasoline Range Organics (GRO) | ND | 4.6 | | mg/Kg | 1 | 3/20/2015 4:27:37 AM | R24920 |
| Surr: BFB | 110 | 67.4-150 | | %REC | 1 | 3/20/2015 4:27:37 AM | R24920 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18230 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18230 | | RunNo: | 24944 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 735257 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|------------------------------------|----------|--------------|------|----------|------|
| Sample ID | LCS-18230 | | SampType: LCS | | TestCode: EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | | Batch ID: 18230 | | RunNo: 24944 | | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 735258 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 92.5 | 90 | 110 | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|--------------------------|------|--------------|------|--|
| Sample ID | MB-18295 | | SampType: | MBLK | | TestCode: | EPA Method 300.0: Anions | | | | |
| Client ID: | PBS | | Batch ID: | 18295 | | RunNo: | 25049 | | | | |
| Prep Date: | 3/24/2015 | | Analysis Date: | 3/24/2015 | | SeqNo: | 739028 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Chloride | ND | 1.5 | | | | | | | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|------------------------------------|----------|--------------|------|----------|------|
| Sample ID | LCS-18295 | | SampType: LCS | | TestCode: EPA Method 300.0: Anions | | | | | |
| Client ID: | LCSS | | Batch ID: 18295 | | RunNo: 25049 | | | | | |
| Prep Date: | 3/24/2015 | | Analysis Date: 3/24/2015 | | SeqNo: 739029 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.9 | 90 | 110 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|----------|------|-------|
| Sample ID | MB-18222 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | | Batch ID: | 18222 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734184 | | Units: | | mg/Kg |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | | |
| Surr: DNOP | 11 | | 10.00 | | 110 | 63.5 | 128 | | | | |

| | | | | | | | | | | | |
|-----------------------------|-----------|-----|----------------|-------------|------|-----------|---|------|--------------|------|--|
| Sample ID | LCS-18222 | | SampType: | LCS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | LCSS | | Batch ID: | 18222 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/19/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734185 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Diesel Range Organics (DRO) | 53 | 10 | 50.00 | 0 | 107 | 67.8 | 130 | | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 98.5 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|-----------|---|-----------|------|----------|------|
| Sample ID | MB-18200 | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | Batch ID: | 18200 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/19/2015 | | SeqNo: | 734189 | Units: | %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 11 | | 10.00 | | 108 | 63.5 | 128 | | | |

| | | | | | | | | | | | |
|------------|-----------|-----|----------------|-------------|------|-----------|---|------|-------------|------|--|
| Sample ID | LCS-18200 | | SampType: | LCS | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | LCSS | | Batch ID: | 18200 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: | 3/19/2015 | | SeqNo: | 734192 | | Units: %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Surr: DNOP | 4.9 | | 5.000 | | 98.9 | 63.5 | 128 | | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|-----------|---|-----------|------|----------|------|
| Sample ID | MB-18201 | SampType: | MBLK | | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | |
| Client ID: | PBS | Batch ID: | 18201 | | RunNo: | 24912 | | | | |
| Prep Date: | 3/18/2015 | Analysis Date: | 3/19/2015 | | SeqNo: | 734292 | Units: | %REC | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 12 | | 10.00 | | 124 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|------------|-----------|-----|--------------------------|-------------|---|----------|-------------|------|----------|------|
| Sample ID | LCS-18201 | | SampType: LCS | | TestCode: EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | | Batch ID: 18201 | | RunNo: 24912 | | | | | |
| Prep Date: | 3/18/2015 | | Analysis Date: 3/19/2015 | | SeqNo: 734682 | | Units: %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: DNOP | 5.0 | | 5.000 | | 99.7 | 63.5 | 128 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503850-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-34 250-300' W B | Batch ID: | 18222 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/20/2015 | SeqNo: | 735108 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.25 | 6.442 | 86.3 | 29.2 | 176 | | | |
| Surr: DNOP | 5.3 | | 5.025 | | 106 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503850-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-34 250-300' W B | Batch ID: | 18222 | RunNo: | 24910 | | | | | |
| Prep Date: | 3/19/2015 | Analysis Date: | 3/20/2015 | SeqNo: | 735109 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 45 | 9.9 | 49.70 | 6.442 | 78.2 | 29.2 | 176 | 9.42 | 23 | |
| Surr: DNOP | 5.4 | | 4.970 | | 108 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|--------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Sample ID: 5mL rb | SampType: MBLK | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | | | |
| Client ID: PBS | Batch ID: R24920 | RunNo: 24920 | | | | | | | | |
| Prep Date: | Analysis Date: 3/19/2015 | SeqNo: 734835 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.47 | | 0.5000 | | 93.0 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.53 | | 0.5000 | | 106 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.48 | | 0.5000 | | 96.2 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.50 | | 0.5000 | | 101 | 70 | 130 | | | |

| | | | | | | | | | | |
|-----------------------------|--------------------------|--|-----------|-------------|------|----------|-----------|------|----------|------|
| Sample ID: 100ng lcs | SampType: LCS | TestCode: EPA Method 8260B: Volatiles Short List | | | | | | | | |
| Client ID: LCSS | Batch ID: R24920 | RunNo: 24920 | | | | | | | | |
| Prep Date: | Analysis Date: 3/19/2015 | SeqNo: 734836 Units: mg/Kg | | | | | | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 107 | 70 | 130 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 109 | 70 | 130 | | | |
| Surr: 1,2-Dichloroethane-d4 | 0.49 | | 0.5000 | | 97.6 | 70 | 130 | | | |
| Surr: 4-Bromofluorobenzene | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |
| Surr: Dibromofluoromethane | 0.49 | | 0.5000 | | 98.0 | 70 | 130 | | | |
| Surr: Toluene-d8 | 0.51 | | 0.5000 | | 102 | 70 | 130 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503850

25-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|--------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 5mL rb | SampType: | MBLK | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734871 | 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 | 490 | | 500.0 | | 97.6 | 67.4 | 150 | | | |

| | | | | | | | | | | |
|-------------------------------|---------------|----------------|-----------|-------------|--------------------------------------|----------|-----------|------|----------|------|
| Sample ID | 2.5ug gro lcs | SampType: | LCS | TestCode: | EPA Method 8015D Mod: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | R24920 | RunNo: | 24920 | | | | | |
| Prep Date: | | Analysis Date: | 3/19/2015 | SeqNo: | 734872 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 100 | 79.9 | 135 | | | |
| Surr: BFB | 500 | | 500.0 | | 99.7 | 67.4 | 150 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503850

RcptNo: 1

Received by/date: At 03/19/15

Logged By: Anne Thorne 3/19/2015 8:05:00 AM

Completed By: Anne Thorne 3/19/2015

Reviewed By: [Signature] 03/19/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

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

17. Additional remarks:

18. Cooler Information

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

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway
Farmington, NM 87401

Phone #: 505 325 3535

Email or Fax #: Steve.Moskal@Soudemiller.com

IA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☒ NELAP ☐ Other _____

☒ EDD (Type) _____

Turn-Around Time:
☐ Standard ☒ Rush Next Day

Project Name:
Lateral C-7

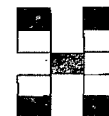
Project #:
N 20609

Project Manager:
Steve Moskal

Sampler:
JS

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| Date | Time | Matrix | Sample Request ID | Container Type and # | Preservative Type | HEAL No. | BTEX (8021) | BTEX + MTBE + TPH (Gas only) | TPH 8015B (GRO / DRG / HRC) | TPH (Method 418.1) | EDB (Method 504.1) | PAH's (8310 or 8270 SIMS) | RCRA 8 Metals | Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄) | 8081 Pesticides / 8082 PCB's | 8260B (VOA) | 8270 (Semi-VOA) | 300.0 Chlorides | Air Bubbles (Y or N) |
|------|------|--------|------------------------------|----------------------|-------------------|----------|-------------|------------------------------|-----------------------------|--------------------|--------------------|---------------------------|---------------|--|------------------------------|-------------|-----------------|-----------------|----------------------|
| 3-18 | 1443 | Soil | SC-34 250-300 W Bar ditch | 1 4oz | — | 1503850 | X | X | X | | | | | | | | | | |
| | 1446 | | SC-35 200-250 W Bar ditch | | | -C02 | X | X | | | | | | | | | | X | |
| | 1449 | | SC-36 150-200 W Bar ditch | | | -C03 | X | X | | | | | | | | | | | |
| | 1452 | | SC-37 100-150 West Bar Ditch | | | -C04 | X | X | | | | | | | | | | X | |
| | 1455 | | SC-38 50-100 West Bar ditch | | | -C05 | X | X | | | | | | | | | | | |
| | 1458 | | SC-39 0-50 West Bar ditch | | | -C06 | X | X | | | | | | | | | | X | |
| | 1501 | | SC-40 Background | | | -C07 | X | X | | | | | | | | | no | X | |

Date: 3-18 Time: 1900 Relinquished by: 9-ES

Date: 3/18/15 Time: 1900 Received by: Christy Wachs

Date: 3/19/15 Time: 0805 Relinquished by: Steve Moskal

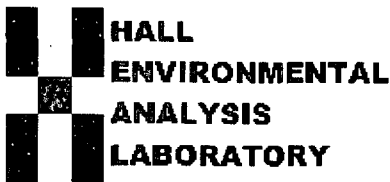
Date: 3/19/15 Time: 0805 Received by: Ch...

Remarks: Invoice Enterprise

Please copy

Jesse.Sprague@Soudemiller.com

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*

March 31, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Lateral C-7

OrderNo.: 1503B68

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/25/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B68

Date Reported: 3/31/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1 @ 1'

Project: Lateral C-7

Collection Date: 3/24/2015 9:30:00 AM

Lab ID: 1503B68-001

Matrix: SOIL

Received Date: 3/25/2015 7:55:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 3/27/2015 3:56:33 PM | 18351 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 3/27/2015 3:56:33 PM | 18351 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Surr: BFB | 89.9 | 80-120 | | %REC | 1 | 3/28/2015 11:09:23 AM | 18355 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Xylenes, Total | ND | 0.097 | | mg/Kg | 1 | 3/28/2015 11:09:23 AM | 18355 |
| Surr: 4-Bromofluorobenzene | 100 | 80-120 | | %REC | 1 | 3/28/2015 11:09:23 AM | 18355 |
| EPA METHOD 300.0: ANIONS | | | | | | | Analyst: LGT |
| Chloride | 39 | 30 | | mg/Kg | 20 | 3/30/2015 3:05:50 PM | 18413 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------|-----------|---------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18413 | SampType | MBLK | TestCode | EPA Method 300.0: Anions | | | | | |
| Client ID | PBS | Batch ID | 18413 | RunNo | 25153 | | | | | |
| Prep Date | 3/30/2015 | Analysis Date | 3/30/2015 | SeqNo | 744362 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | ND | 1.5 | | | | | | | | |

| | | | | | | | | | | |
|-----------|-----------|---------------|-----------|-------------|--------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18413 | SampType | LCS | TestCode | EPA Method 300.0: Anions | | | | | |
| Client ID | LCSS | Batch ID | 18413 | RunNo | 25153 | | | | | |
| Prep Date | 3/30/2015 | Analysis Date | 3/30/2015 | SeqNo | 744363 | Units | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Chloride | 14 | 1.5 | 15.00 | 0 | 95.9 | 90 | 110 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18351 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18351 | RunNo: | 25073 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742950 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 9.7 | | 10.00 | | 97.5 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18351 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18351 | RunNo: | 25073 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742951 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 48 | 10 | 50.00 | 0 | 95.2 | 67.8 | 130 | | | |
| Surr: DNOP | 4.9 | | 5.000 | | 97.7 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503B68-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 @ 1' | Batch ID: | 18351 | RunNo: | 25073 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742952 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 52 | 10 | 49.85 | 0 | 105 | 29.2 | 176 | | | |
| Surr: DNOP | 5.2 | | 4.985 | | 103 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1503B68-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 @ 1' | Batch ID: | 18351 | RunNo: | 25073 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742953 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.20 | 0 | 99.9 | 29.2 | 176 | 4.54 | 23 | |
| Surr: DNOP | 5.2 | | 5.020 | | 104 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18355 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742102 | 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 | 910 | | 1000 | | 91.2 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|--------------------------|-----------|-------------|--|----------|--------------|------|----------|------|
| Sample ID | LCS-18355 | SampType: LCS | | | TestCode: EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: 18355 | | | RunNo: 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: 3/27/2015 | | | SeqNo: 742103 | | Units: mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 24 | 5.0 | 25.00 | 0 | 97.5 | 64 | 130 | | | |
| Surr: BFB | 990 | | 1000 | | 99.2 | 80 | 120 | | | |

Qualifiers:

- | | |
|---|--|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| 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 |
| O RSD is greater than RSDlimit | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B68

31-Mar-15

Client: Souder, Miller and Associates

Project: Lateral C-7

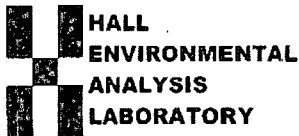
| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18355 | SampType: | MBLK | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742123 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 103 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18355 | SampType: | LCS | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | Batch ID: | 18355 | RunNo: | 25124 | | | | | |
| Prep Date: | 3/26/2015 | Analysis Date: | 3/27/2015 | SeqNo: | 742124 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 110 | 76.6 | 128 | | | |
| Toluene | 1.1 | 0.050 | 1.000 | 0 | 106 | 75 | 124 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 104 | 79.5 | 126 | | | |
| Xylenes, Total | 3.1 | 0.10 | 3.000 | 0 | 103 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 109 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503B68

RcptNo: 1

Received by/date:

L-m

03/25/15

Logged By: Ashley Gallegos

3/25/2015 7:55:00 AM

Ag

Completed By: Ashley Gallegos

3/25/2015 5:58:39 PM

Ag

Reviewed By:

ja

03/24/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐ # of preserved bottles checked for pH: ☐ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐ Checked by: ☐

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 1.7 | Good | Yes | | | |

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

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

OIL CONS. DIV DIST. 3

JUN 02 2015

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Trunk 3C | Facility Type: Natural Gas Gathering Pipeline |

| | | |
|------------------------|------------------------|---------|
| Surface Owner: Private | Mineral Owner: Private | API No. |
|------------------------|------------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|-------------------------|---------------------|--------------------------|-------------------|--------------------|
| Unit Letter B | Section 32 | Township 29N | Range 12W | Feet from the 133 | North South Line | Feet from the 2293 | East West Line | County San Juan |
|------------------|---------------|-----------------|--------------|-------------------------|---------------------|--------------------------|-------------------|--------------------|

Latitude 36.689936 Longitude -108.121466

NATURE OF RELEASE

| | | |
|--|--|--|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: Unknown | Volume Recovered: None |
| Source of Release: Suspected internal corrosion | Date and Hour of Occurrence: 5/12/15 @ 12:45 p.m. | Date and Hour of Discovery: 5/12/15 @ 1:40 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? Thomas Long | Date and Time | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On May 12, 2015 Enterprise technicians discovered a pipeline release on Trunk 3C during a routine pipeline patrol. The line was isolated, blown down, depressurized, locked out and tagged out. A small area of soil staining was observed on the ground surface. The release is suspected to be caused by internal corrosion.

Describe Area Affected and Cleanup Action: The repairs and remediation were completed on 5/28/2015. The subsurface contaminants were removed by mechanical excavation. A "Final" C-141 will be submitted upon receipt of the third party environmental contractor corrective action report.

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.

| | | |
|------------------------------------|--|-----------------------------------|
| Signature: <i>Jon E. Fields</i> | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | Approval Date: 6/9/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 5-27-2015 | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

#NCS 1514151 763

①

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

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

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Lateral 10D-5 | Facility Type: Natural Gas Gathering Pipeline |
| Surface Owner: Navajo Tribe | Mineral Owner: Navajo Tribe |
| API No. | |

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|--------------------------|--------------------------------|-------------------------|------------------------------|--------------------|
| Unit Letter L | Section 12 | Township 26N | Range 12W | Feet from the 2452 | North South Line | Feet from the 195 | East West Line | County San Juan |
|------------------|---------------|-----------------|--------------|--------------------------|--------------------------------|-------------------------|------------------------------|--------------------|

Latitude 36.502164 Longitude 108.071308

OIL CONS. DIV DIST. 3

JUN 15 2015

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release: Unknown | Volume Recovered: None |
| Source of Release: Suspected internal corrosion | Date and Hour of Occurrence: 5/28/2015 @ 5:00 p.m. | Date and Hour of Discovery: 5/28/2015 @ 5:30 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? Thomas Long | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On May 28, 2015, during routine operations a field operation technician identified a natural gas release on the Lateral 10D-5 pipeline. The pipeline was isolated, depressurized, locked out and tagged out. Repairs of the pipeline began June 9, 2015. Subsurface impacts are unknown and will be evaluated during repair activities.

Describe Area Affected and Cleanup Action Taken.* A small area of soil staining was observed on the ground surface. Subsurface impacts are unknown and will be evaluated during repair activities.

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.

| | | |
|---|--|-----------------------------------|
| Signature: <i>Jon E. Fields</i> | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | Approval Date: <u>6/22/15</u> | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: <u>6-10-2015</u> Phone: (713)381-6684 | | |

* Attach Additional Sheets If Necessary

#NCS 1517350063

①

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

JUN 26 2015

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

| | |
|--|-------------------------------|
| Name of Company: Williams Four Corners LLC | Contact: Kelsey Christiansen |
| Address: 188 CR 4900, Bloomfield, NM 87413 | Telephone No.: (505) 632-4606 |
| Facility Name: 809 Pipeline | Facility Type: Pipeline |

| | | |
|--------------------|---------------|---------|
| Surface Owner: BLM | Mineral Owner | API No. |
|--------------------|---------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|---------------|------------------|---------------|----------------|--------------------|
| Unit Letter F | Section 28 | Township 27N | Range 10W | Feet from the | North/South Line | Feet from the | East/West Line | County San Juan |
|------------------|---------------|-----------------|--------------|---------------|------------------|---------------|----------------|--------------------|

Latitude 36.57656° N Longitude -107.90356° W

NATURE OF RELEASE

| | | |
|--|---|---|
| Type of Release: Natural Gas | Volume of Release: 1,247 MCF Natural Gas | Volume Recovered: 0 MCF Natural Gas |
| Source of Release: Pinhole | Date and Hour of Occurrence: 06/16/15 at 11:30 AM MST | Date and Hour of Discovery: 06/16/15 at 11:30 AM MST |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Cory Smith, NMOCD Shari Ketcham, BLM | |
| By Whom? Kelsey Christiansen | Date and Hour: 06/17/15 at 7:15 AM MST | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. | |

If a Watercourse was Impacted, Describe Fully.*

Not Applicable

Describe Cause of Problem and Remedial Action Taken.*


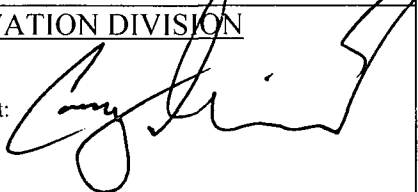
Williams' personnel discovered a pinhole leak on the 809 Pipeline on June 16, 2015. The pipeline was isolated and adjacent well heads were shut in while repairs to the pipeline were made. Approximately 1,247 MCF of natural gas was released.

Describe Area Affected and Cleanup Action Taken.*

Confirmation soil samples will be collected to insure cleanup standards are met.

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.

OIL CONSERVATION DIVISION

| | | |
|---|--|-----------------------------------|
| Signature:  | Approved by Environmental Specialist:  | |
| Printed Name: Kelsey Christiansen | | |
| Title: Environmental Specialist | Approval Date: 7/8/15 | Expiration Date: |
| E-mail Address: kelsey.christiansen@williams.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 06/18/15 Phone: (505) 632-4606 | | |

* Attach Additional Sheets If Necessary

NCS 1517327017

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

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

OIL CONS. DIV DIST. 3

JUN 01 2015

Submit 1 Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Richardson #3 Release Site | Facility Type: Natural Gas Gathering Line |

| | | |
|-----------------------|-----------------------|---------|
| Surface Owner: Navajo | Mineral Owner: Navajo | API No. |
|-----------------------|-----------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|--------------|-----------------|--------------|--------------------------|--------------------------------|--------------------------|------------------------------|--------------------|
| Unit Letter N | Section 2 | Township 27N | Range 13W | Feet from the 1313 | North South Line | Feet from the 2483 | East West Line | County San Juan |
|------------------|--------------|-----------------|--------------|--------------------------|--------------------------------|--------------------------|------------------------------|--------------------|

Latitude 36.600597 Longitude -108.18922

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Natural Gas and Natural | Volume of Release Unknown | Volume Recovered: Unknown |
| Source of Release: Suspected Internal Corrosion | Date and Hour of Occurrence: 3/22/2015 @ 2:50 p.m. | Date and Hour of Discovery: 3/22/2015 @ 3:50 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? | |
| By Whom? | Date and Hour | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On March 22, 2015, Enterprise technicians confirmed a leak on Richardson #3 pipeline. The pipeline was isolated, de-pressurized and lock out tag out was applied. The release was a result of internal corrosion. The pipeline was repaired and remediation of the release was completed on April 9, 2015.

Describe Area Affected and Cleanup Action: The contaminant mass was removed by mechanical excavation. The final excavation measured approximately 32 feet long by 8 feet wide by ranging from 14 to 15 feet deep. Approximately 140 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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.

| | | |
|------------------------------------|--|-----------------------------------|
| Signature: <i>Jon E. Fields</i> | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | Approval Date: 7/10/15 | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: 8/27/2015 | Phone: (713)381-6684 | |

* Attach Additional Sheets If Necessary

#NCS 1512030215

30

OIL CONS. DIV DIST. 3

JUN 01 2015

Richardson Com #3
Pipeline Release Report
Section 2, Township 27N, Range 13W
N36.60057, W108.18922
San Juan County, New Mexico
May 5, 2015

Prepared for:

Enterprise Products Operating, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:

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

**Enterprise Products Operating, LLC
Richardson Com #3
Pipeline Release Report**

Prepared for:

Enterprise Products Operating, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

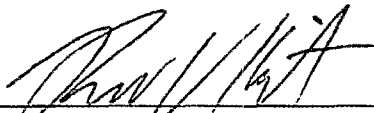
Prepared by:

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



Deborah Watson, PG, Geologist

Reviewed by:



Russell Knight, PG, Principal Hydrogeologist

May 5, 2015

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Appendices

| | |
|------------|--|
| Appendix A | Executed C-138 Solid Waste Acceptance Form |
| Appendix B | Photograph Log |
| Appendix C | Analytical Laboratory Report |

1 Introduction

The Enterprise Products Operating, LLC (Enterprise) Richardson Com #3 pipeline release site is located in Unit Letter N, Section 2, Township 27N, Range 13W in San Juan County, New Mexico along County Road 7100. The pipeline release occurred at a ½-inch corrosion hole along the 4-inch well tie for the Richardson Com #3. The release was discovered on March 22, 2015.

On April 9, 2015, the point of release was identified and repaired. The release consisted of an unknown quantity of natural gas and condensate. Site work included repair of the leaking pipeline and excavation of hydrocarbon impacted soils on April 9, 2015.

A topographic map of the location is included as Figure 1 and an aerial site map is included as Figure 2.

2 Release Summary

Site Name – Richardson Com #3 Pipeline Release

Location – Unit Letter N (SE/SW), Section 2, Township 27N, Range 13W

Release Latitude/Longitude – N36.60057 and W108.18922, respectively

Land Jurisdiction – Navajo Nation Tribal Trust and Fee Land

Date Release Discovered – March 22, 2015

Agency Notification – New Mexico Oil Conservation Division (NMOCD)

Diameter of pipeline – 4-inch

Source of Release – ½ inch corrosion hole along 4-inch pipeline

Release Contents – natural gas and condensate

Release Volume – unknown

NMOCD Site Ranking – 10

Date of Rule Engineering, LLC (Rule) Field Work – April 9, 2015

Subcontractor(s) – West States Energy Contractors, Inc. (West States)

Disposal Facility – Envirotech Land Farm (Permit #NM-01-011)

Amount of Contaminated Soil Excavated/Disposed – 140 cubic yards

3 NMOCD Site Ranking

In accordance with NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993), this site was assigned a ranking score of 10 (Table 1). Based on the ranking score of 10, action levels for remediated soils at the site are as follows: 10 mg/kg benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 1,000 mg/kg total petroleum hydrocarbons (TPH).

Depth to groundwater at the site was estimated to be greater than 100 feet below ground surface (bgs) based on the elevation differential (299 feet) between the release location and the wash in Gallegos Canyon (approximately 2.6 miles to the east).

A review was completed of the New Mexico Office of the State Engineer online New Mexico Water Rights Reporting System and no water wells were identified within a 1,000 feet radius of the location. The closest residence is located 2,250 feet east of the location.

Three unnamed washes, all of which ultimately drain to the West Draw, are located approximately 535 feet north-northeast, 559 feet northeast, and 579 feet southeast of the release location.

4 Field Activities

On March 22, 2015, Enterprise personnel responded to the report of a release along the 4-inch well tie for the Richardson Com #3. Enterprise, West States, and Rule personnel were onsite for the initiation of remediation activities on April 9, 2015. West States provided heavy equipment operation and excavated the petroleum impacted materials from within the release area. Rule personnel provided excavation oversight and conducted field screening during remediation activities. On April 9, 2015, based on visual observation and field screening results, the excavation was halted, and Rule personnel collected five confirmation samples (SC-1 through SC-5) from each of the sidewalls and base of the excavation. Repairs were made at the corrosion hole. Approximately 140 cubic yards of hydrocarbon impacted soils were removed from an area of excavation measuring approximately 32 feet x 8 feet x 14 (to 15) feet in depth. Figure 3 provides the locations and results of the soil samples collected.

A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix A. A photograph log is included in Appendix B.

5 Soil Sampling

Rule collected confirmation soil samples from the sidewalls and base of the excavation. Soil samples SC-1 through SC-5 were collected on April 9, 2015. Each confirmation soil sample (SC-1 through SC-5) is a representative composite of material collected from separate locations within the sample area.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B and TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D. Laboratory analytical results are summarized in Table 2, and the analytical laboratory report is included in Appendix C.

A portion of each composite soil sample was also field screened for volatile organic compounds (VOCs). Field screening for VOC vapors was conducted with a photo-ionization detector (PID). Before beginning field screening, the PID was calibrated with 100 parts per million (ppm) isobutylene gas. Field screening results are summarized in Table 2.

6 Conclusions

The release of unknown quantity of natural gas and condensate occurred at a ½-inch corrosion hole along the 4-inch well tie for the Richardson Com #3. Remedial activities included excavation of 140 cubic yards of hydrocarbon impacted soils along the pipeline. Five confirmation soil samples were collected from the sidewalls and base of the excavation on April 9, 2015, for laboratory analysis of BTEX and TPH. The final excavation measured approximately 32 feet x 8 feet x 14 (to 15) feet in depth.

Laboratory analytical results for soil confirmation samples (SC-1 through SC-5) reported benzene and total BTEX concentrations below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. All soil confirmation samples reported TPH concentrations below the NMOCD action level of 1,000 mg/kg. Action levels are based on a NMOCD site ranking of 10.

Based on laboratory analytical results, no further work is recommended.

7 Closure and Limitations

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

Tables

Table 1. NMOCD Site Ranking Determination
Richardson Com #3 Pipeline Release
San Juan County, New Mexico
Enterprise Products Operating, LLC

| Ranking Criteria | Ranking Score | Site-Based Ranking Score | Basis for Determination | Data Sources |
|--|---------------|--------------------------|---|--|
| Depth to Groundwater | | | | |
| <50 feet | 20 | 0 | Elevation differential between location and wash in Gallegos Canyon east of the location is 299 feet. Location is at a higher elevation. Cathodic report for Navajo D #1 (30-045-06868) located 5,094 feet northeast of location and at a lower elevation reports depth to groundwater at 180 feet. | NMOCD Online database, Hugh Lake Quadrangle, Google Earth, and Visual Inspection |
| 50-99 feet | 10 | | | |
| >100 feet | 0 | | | |
| Wellhead Protection Area | | | | |
| <1,000 feet from a water source, or <200 feet from private domestic water source | 20 (Yes) | 0 | No water source or recorded water wells within 1,000 feet radius of location. | NMOSE NMWRRS, Hugh Lake Quadrangle, Google Earth, and Visual Inspection |
| | 0 (No) | | | |
| Distance to Surface Water Body | | | | |
| <200 horizontal feet | 20 | 10 | Unnamed washes located at 535 feet north-northwest, 559 feet northeast, and 579 feet southeast of the location. Unnamed washes drain to the West Draw and then to wash in Gallegos Canyon. | Hugh Lake Quadrangle, Google Earth, and Visual Inspection |
| 200 to 1,000 horizontal feet | 10 | | | |
| >1,000 horizontal feet | 0 | | | |
| Site Based Total Ranking Score | | 10 | | |

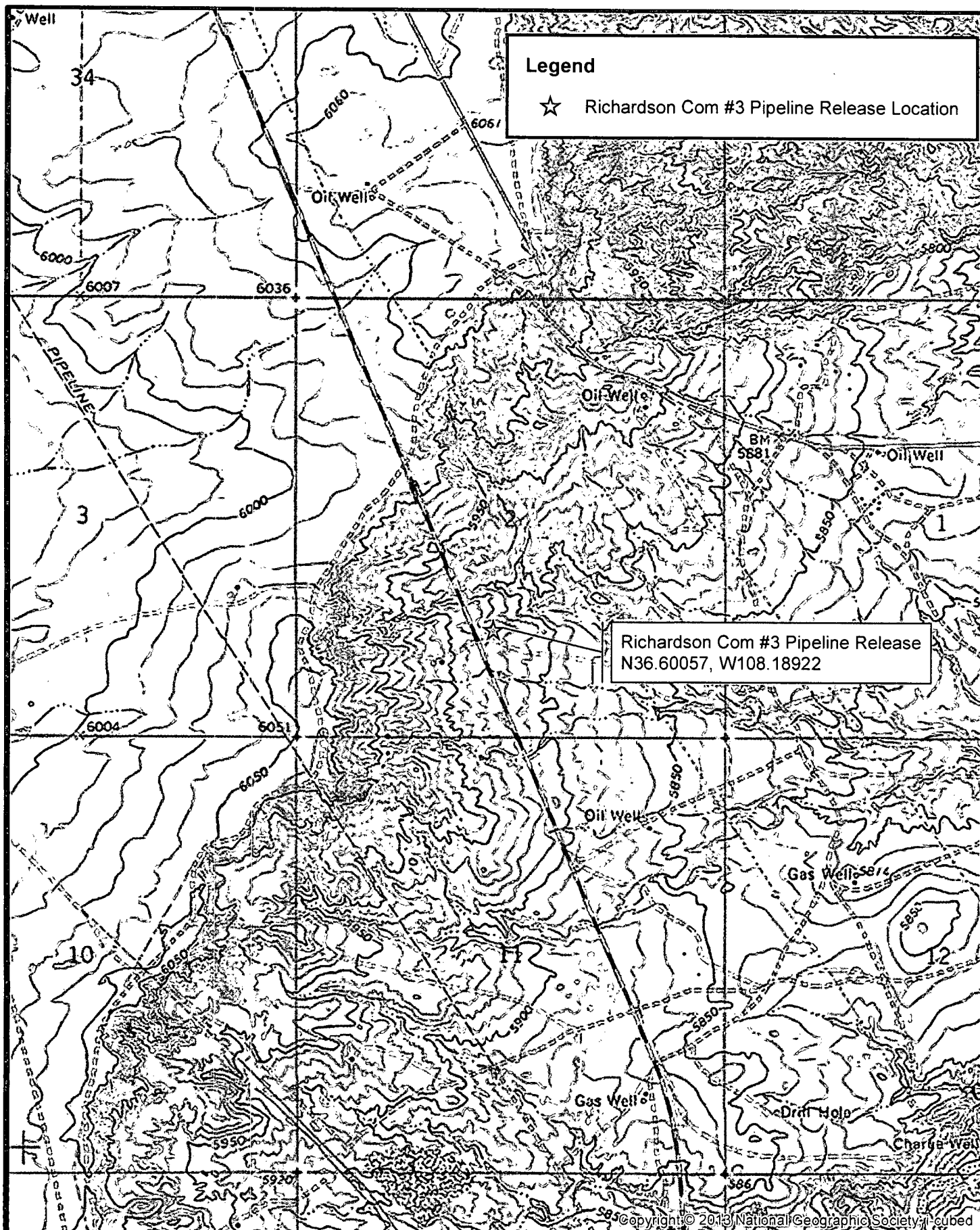
Table 2. Soil Sampling Results-VOCs, Benzene, Total BTEX, and TPH
Richardson Com #3 Pipeline Release
San Juan County, New Mexico
Enterprise Products Operating, LLC

| Sample ID | Date | Location | Sample Depth (ft bgs) | VOCs (PID) (ppm) | Benzene (mg/kg) | Total BTEX (mg/kg) | TPH-GRO | TPH-DRO |
|----------------------|------------|------------|--------------------------|---------------------|--------------------|-----------------------|---------|---------|
| | | | | | | | (mg/kg) | |
| NMOCD Action Levels* | | | | 100 | 10 | 50 | 1,000 | |
| SC-1 | Apr 09, 15 | North Wall | 0 to 15 | 49.5 | <0.050 | <0.249 | <5.0 | <9.6 |
| SC-2 | Apr 09, 15 | South Wall | 0 to 15 | 91.4 | <0.049 | <0.245 | <4.9 | 12 |
| SC-3 | Apr 09, 15 | East Wall | 0 to 14 | 43.6 | <0.049 | <0.245 | <4.9 | <10 |
| SC-4 | Apr 09, 15 | West Wall | 0 to 15 | 42.3 | <0.047 | <0.236 | <4.7 | 14 |
| SC-5 | Apr 09, 15 | Base | 14 to 15 | 2,562 | <0.050 | 6.4 | 110 | 710 |

Notes: VOCs - volatile organic compounds
PID - photo-ionization detector
ft bgs - feet below ground surface
ppm - parts per million
mg/kg - milligrams/kilograms

BTEX - benzene, toluene, ethylbenzene, and xylenes
TPH-GRO - total petroleum hydrocarbons-gasoline range organics
TPH-DRO - total petroleum hydrocarbons-diesel range organics
*NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (1993)

Figures



Rule Engineering, LLC
Solutions to Regulations for Industry

0 1,000 2,000 3,000 4,000 Feet

Location
N-2-27N-13W
N36.60057, W108.18922
San Juan County, New Mexico

Topographic Map
Enterprise Products
Richardson Com #3
Pipeline Release

Date: 5/1/2015 File: 150427 Topo Map

Figure: 1

Legend



Richardson Com #3 Pipeline Release Location



HWY 302

Sources: Esri, DigitalGlobe, GeoEye, Ikonos, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, ICP, swisstopo, and the GIS User Community

Rule Engineering, LLC
Solutions to Regulations for Industry

0 25 50 75 100 Feet

Location
N-2-27N-13W
N36.60057, W108.18922
San Juan County, New Mexico

Aerial Site Map
Enterprise Products
Richardson Com #3
Pipeline Release

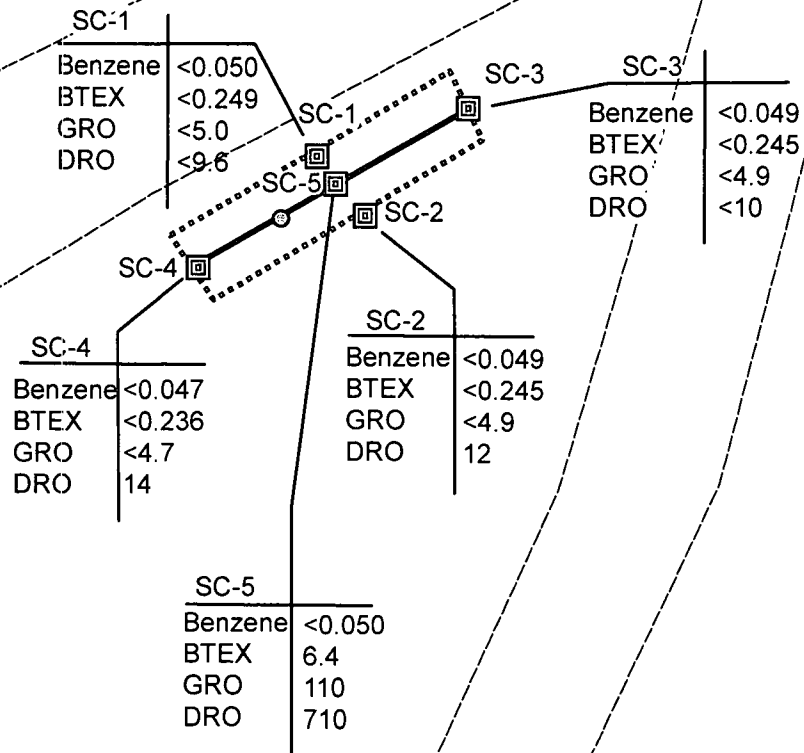
Date: 5/1/2015 File: 150427 Aerial Map

Figure: 2

Legend

- Release Point
- ▣ Soil Sample
- Exposed Pipeline
- Excavation
- - - Road

BTEX= benzene, toluene, ethylbenzene, and xylenes
 GRO= gasoline range organics
 DRO= diesel range organics
 Samples collected April 9, 2015.
 Results in mg/kg.



Appendix A

Executed C-138 Solid Waste
Acceptance Form

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-138
Revised August 1, 2011
*Surface Waste Management Facility Operator
and Generator shall maintain and make this
documentation available for Division inspection.

97257-0701

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

| |
|--|
| 1. Generator Name and Address: Enterprise Field Services, LLC, 614 Reilly Avenue, Farmington, NM 87401 |
| 2. Originating Site: Richardson #3 Pipeline Release Site |
| 3. Location of Material (Street Address, City, State or ULSTR): UL N Section 2 T27N, R13W; 36.600598, -108.189110 |
| 4. Source and Description of Waste: Hydrocarbon impacted soil associated with the remediation of a natural gas pipeline release. |
| 5. Estimated Volume <u>50</u> ^{yd³} bbls Known Volume (to be entered by the operator at the end of the haul) <u>140</u> ^{yd³} bbls |
| 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS I, <u>Thomas Long</u> representative or authorized agent for <u>Enterprise Field Services, LLC</u> do hereby PRINT & SIGN NAME COMPANY NAME certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification) <input checked="" type="checkbox"/> RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. <u>Operator Use Only: Waste Acceptance Frequency</u> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Per Load <input type="checkbox"/> RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items) <input type="checkbox"/> MSDS Information <input type="checkbox"/> RCRA Hazardous Waste Analysis <input type="checkbox"/> Process Knowledge <input type="checkbox"/> Other (Provide description in Box 4) GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS I, <u>Thomas Long</u> <u>4-9-15</u> , representative for <u>Enterprise Field Services, LLC</u> authorize Envirotech, Inc. to Generator Signature complete the required testing/sign the Generator Waste Testing Certification. <u>Kendra Runung</u> representative for <u>Envirotech, Inc.</u> do hereby certify that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC. |
| 6. Transporter: To be determined. <u>HBL, Doug Foutz</u> |

OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: Envirotech, Inc. Soil Remediation Facility * Permit #: NM 01-0011

Address of Facility: Hilltop, NM

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

Waste Acceptance Status:

☒ APPROVED

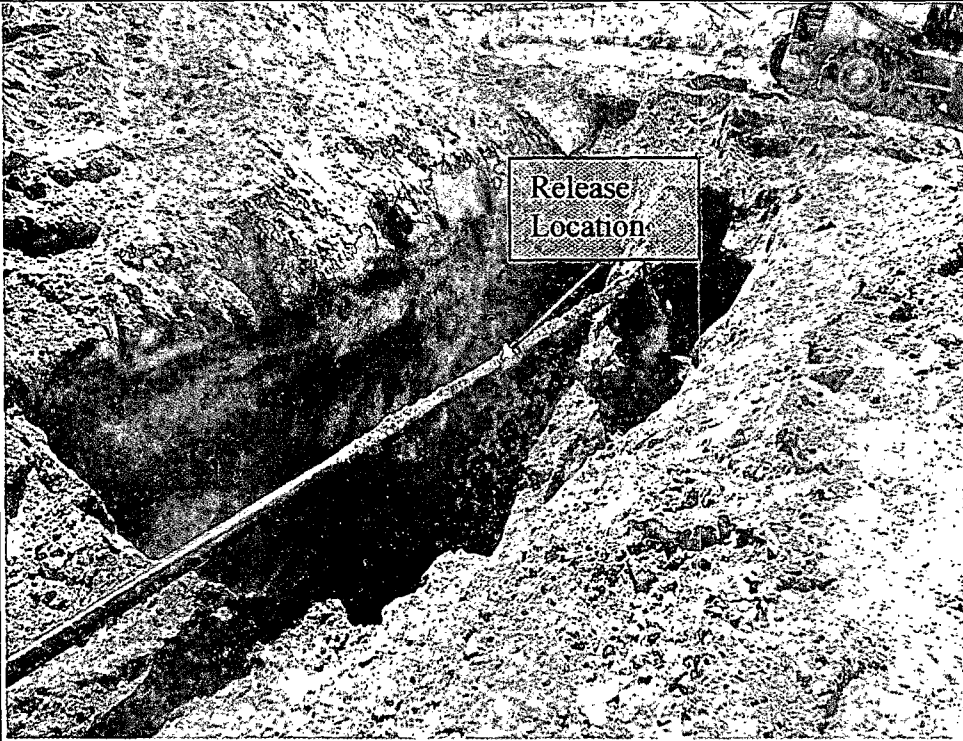
☐ DENIED (Must Be Maintained As Permanent Record)

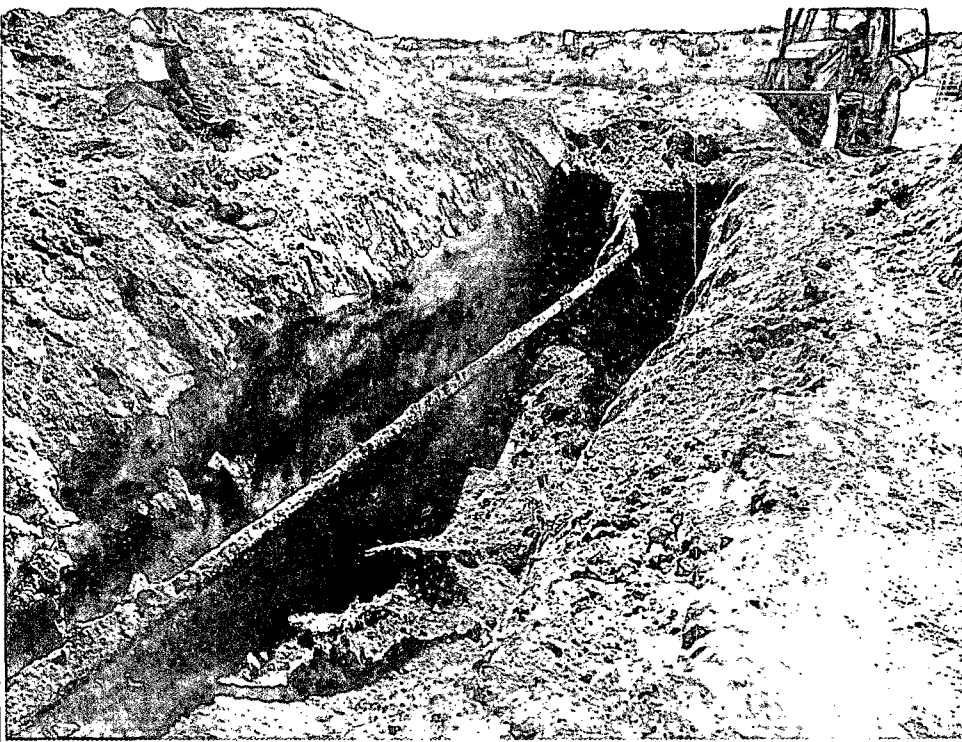
PRINT NAME: Kendra Runung TITLE: Waste Coordinator DATE: 4/9/15
SIGNATURE: Kendra Runung TELEPHONE NO.: (505) 632-0615
Surface Waste Management Facility Authorized Agent

Appendix B

Photograph Log

Photograph Log
Richardson Com #3 Pipeline Release
Enterprise Products

| | |
|---|--|
| Photograph #1 |  |
| Client: Enterprise Products | |
| Site Name: Richardson Com #3 Pipeline Release | |
| Date Photo Taken: April 9, 2015 | |
| Location: N36.60057, W108.18922 N-02-27N-13W San Juan County, New Mexico | |
| Photo Taken by: Deborah Watson | Description: facing S, looking at excavation and exposed pipeline. |

| | |
|---|--|
| Photograph #2 |  |
| Client: Enterprise Products | |
| Site Name: Richardson Com #3 Pipeline Release | |
| Date Photo Taken: April 9, 2015 | |
| Location: N36.60057, W108.18922 N-02-27N-13W San Juan County, New Mexico | |
| Photo Taken by: Deborah Watson | Description: facing SW, looking at excavation following removal of hydrocarbon impacted soils. Final area of excavation measured 32 feet x 8 feet x 14 (to 15) feet. |

Appendix C

Analytical Laboratory Reports



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

April 14, 2015

Deborah Watson

Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 860-2712
FAX

RE: Enterprise Richardson Com #3 Pipeline Release

OrderNo.: 1504454

Dear Deborah Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/10/2015 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 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 #NM0190

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 1504454

Date Reported: 4/14/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Rule Engineering LLC**Client Sample ID:** SC-1**Project:** Enterprise Richardson Com #3 Pipeline**Collection Date:** 4/9/2015 11:45:00 AM**Lab ID:** 1504454-001**Matrix:** SOIL**Received Date:** 4/10/2015 6:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 9.6 | | mg/Kg | 1 | 4/13/2015 11:31:37 AM | 18609 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 4/13/2015 11:31:37 AM | 18609 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 5.0 | | mg/Kg | 1 | 4/11/2015 2:04:51 PM | 18615 |
| Surr: BFB | 90.6 | 80-120 | | %REC | 1 | 4/11/2015 2:04:51 PM | 18615 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.050 | | mg/Kg | 1 | 4/11/2015 2:04:51 PM | 18615 |
| Toluene | ND | 0.050 | | mg/Kg | 1 | 4/11/2015 2:04:51 PM | 18615 |
| Ethylbenzene | ND | 0.050 | | mg/Kg | 1 | 4/11/2015 2:04:51 PM | 18615 |
| Xylenes, Total | ND | 0.099 | | mg/Kg | 1 | 4/11/2015 2:04:51 PM | 18615 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 4/11/2015 2:04:51 PM | 18615 |

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

| | | | | |
|--------------------|----------|---|-----------|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Analytical Report

Lab Order 1504454

Date Reported: 4/14/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Rule Engineering LLC**Client Sample ID:** SC-2**Project:** Enterprise Richardson Com #3 Pipeline**Collection Date:** 4/9/2015 1:00:00 PM**Lab ID:** 1504454-002**Matrix:** SOIL**Received Date:** 4/10/2015 6:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|---------------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 12 | 9.9 | | mg/Kg | 1 | 4/13/2015 12:35:35 PM | 18609 |
| Surr: DNOP | 97.1 | 63.5-128 | | %REC | 1 | 4/13/2015 12:35:35 PM | 18609 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 4/11/2015 3:30:57 PM | 18615 |
| Surr: BFB | 90.7 | 80-120 | | %REC | 1 | 4/11/2015 3:30:57 PM | 18615 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:30:57 PM | 18615 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:30:57 PM | 18615 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:30:57 PM | 18615 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 4/11/2015 3:30:57 PM | 18615 |
| Surr: 4-Bromofluorobenzene | 103 | 80-120 | | %REC | 1 | 4/11/2015 3:30:57 PM | 18615 |

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

| | | |
|--------------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1504454

Date Reported: 4/14/2015

CLIENT: Rule Engineering LLC

Client Sample ID: SC-3

Project: Enterprise Richardson Com #3 Pipeline

Collection Date: 4/9/2015 1:35:00 PM

Lab ID: 1504454-003

Matrix: SOIL

Received Date: 4/10/2015 6:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | ND | 10 | | mg/Kg | 1 | 4/13/2015 12:57:09 PM | 18609 |
| Surr: DNOP | 105 | 63.5-128 | | %REC | 1 | 4/13/2015 12:57:09 PM | 18609 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 4.9 | | mg/Kg | 1 | 4/11/2015 3:59:45 PM | 18615 |
| Surr: BFB | 89.1 | 80-120 | | %REC | 1 | 4/11/2015 3:59:45 PM | 18615 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:59:45 PM | 18615 |
| Toluene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:59:45 PM | 18615 |
| Ethylbenzene | ND | 0.049 | | mg/Kg | 1 | 4/11/2015 3:59:45 PM | 18615 |
| Xylenes, Total | ND | 0.098 | | mg/Kg | 1 | 4/11/2015 3:59:45 PM | 18615 |
| Surr: 4-Bromofluorobenzene | 101 | 80-120 | | %REC | 1 | 4/11/2015 3:59:45 PM | 18615 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 3 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-4

Project: Enterprise Richardson Com #3 Pipeline

Collection Date: 4/9/2015 2:52:00 PM

Lab ID: 1504454-004

Matrix: SOIL

Received Date: 4/10/2015 6:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 14 | 9.6 | | mg/Kg | 1 | 4/13/2015 1:18:24 PM | 18609 |
| Surr: DNOP | 104 | 63.5-128 | | %REC | 1 | 4/13/2015 1:18:24 PM | 18609 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | ND | 4.7 | | mg/Kg | 1 | 4/11/2015 4:28:33 PM | 18615 |
| Surr: BFB | 90.5 | 80-120 | | %REC | 1 | 4/11/2015 4:28:33 PM | 18615 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.047 | | mg/Kg | 1 | 4/11/2015 4:28:33 PM | 18615 |
| Toluene | ND | 0.047 | | mg/Kg | 1 | 4/11/2015 4:28:33 PM | 18615 |
| Ethylbenzene | ND | 0.047 | | mg/Kg | 1 | 4/11/2015 4:28:33 PM | 18615 |
| Xylenes, Total | ND | 0.095 | | mg/Kg | 1 | 4/11/2015 4:28:33 PM | 18615 |
| Surr: 4-Bromofluorobenzene | 101 | 80-120 | | %REC | 1 | 4/11/2015 4:28:33 PM | 18615 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 4 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1504454

Date Reported: 4/14/2015

CLIENT: Rule Engineering LLC

Client Sample ID: SC-5

Project: Enterprise Richardson Com #3 Pipeline

Collection Date: 4/9/2015 1:48:00 PM

Lab ID: 1504454-005

Matrix: SOIL

Received Date: 4/10/2015 6:00:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: JME |
| Diesel Range Organics (DRO) | 710 | 10 | | mg/Kg | 1 | 4/13/2015 1:39:48 PM | 18609 |
| Surr: DNOP | 103 | 63.5-128 | | %REC | 1 | 4/13/2015 1:39:48 PM | 18609 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: NSB |
| Gasoline Range Organics (GRO) | 110 | 5.0 | | mg/Kg | 1 | 4/11/2015 4:57:17 PM | 18615 |
| Surr: BFB | 640 | 80-120 | S | %REC | 1 | 4/11/2015 4:57:17 PM | 18615 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: NSB |
| Benzene | ND | 0.050 | | mg/Kg | 1 | 4/11/2015 4:57:17 PM | 18615 |
| Toluene | 0.54 | 0.050 | | mg/Kg | 1 | 4/11/2015 4:57:17 PM | 18615 |
| Ethylbenzene | 0.63 | 0.050 | | mg/Kg | 1 | 4/11/2015 4:57:17 PM | 18615 |
| Xylenes, Total | 5.2 | 0.10 | | mg/Kg | 1 | 4/11/2015 4:57:17 PM | 18615 |
| Surr: 4-Bromofluorobenzene | 155 | 80-120 | S | %REC | 1 | 4/11/2015 4:57:17 PM | 18615 |

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

| | | |
|-------------|---|--|
| Qualifiers: | * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| | 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 |
| | O RSD is greater than RSDlimit | P Sample pH Not In Range |
| | R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| | S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504454

14-Apr-15

Client: Rule Engineering LLC

Project: Enterprise Richardson Com #3 Pipeline Release

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-18609 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 18609 | RunNo: | 25459 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/13/2015 | SeqNo: | 753898 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 12 | | 10.00 | | 123 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-18609 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 18609 | RunNo: | 25459 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/13/2015 | SeqNo: | 754238 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 49 | 10 | 50.00 | 0 | 97.8 | 67.8 | 130 | | | |
| Surr: DNOP | 5.6 | | 5.000 | | 113 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1504454-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 18609 | RunNo: | 25459 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/13/2015 | SeqNo: | 754259 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 50 | 10 | 50.81 | 0 | 98.6 | 29.2 | 176 | | | |
| Surr: DNOP | 5.9 | | 5.081 | | 117 | 63.5 | 128 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1504454-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 18609 | RunNo: | 25459 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/13/2015 | SeqNo: | 754260 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 49 | 9.7 | 48.54 | 0 | 101 | 29.2 | 176 | 2.26 | 23 | |
| Surr: DNOP | 5.8 | | 4.854 | | 119 | 63.5 | 128 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504454

14-Apr-15

Client: Rule Engineering LLC

Project: Enterprise Richardson Com #3 Pipeline Release

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18613 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18613 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753290 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB | 890 | | 1000 | | 88.8 | 80 | 120 | | | |

| | | | | | | | | | | |
|------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18613 | SampType: | LCS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | 18613 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753291 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: BFB | 960 | | 1000 | | 96.3 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18615 | SampType: | MBLK | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | PBS | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753308 | 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 | 910 | | 1000 | | 90.7 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18615 | SampType: | LCS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | LCSS | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753309 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 102 | 64 | 130 | | | |
| Surr: BFB | 980 | | 1000 | | 97.8 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|----------------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1504454-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | SC-1 | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753311 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 28 | 4.9 | 24.70 | 0 | 113 | 47.9 | 144 | | | |
| Surr: BFB | 970 | | 988.1 | | 98.4 | 80 | 120 | | | |

| | | | | | | | | | | |
|-------------------------------|-----------------|----------------|-----------|-------------|----------------------------------|----------|-----------|------|----------|------|
| Sample ID | 1504454-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Gasoline Range | | | | | |
| Client ID: | SC-1 | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753312 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Gasoline Range Organics (GRO) | 29 | 4.9 | 24.70 | 0 | 116 | 47.9 | 144 | 3.08 | 29.9 | |
| Surr: BFB | 970 | | 988.1 | | 97.7 | 80 | 120 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1504454

14-Apr-15

Client: Rule Engineering LLC

Project: Enterprise Richardson Com #3 Pipeline Release

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18613 | SampType: | MBLK | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | Batch ID: | 18613 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753332 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 100 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18613 | SampType: | LCS | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | Batch ID: | 18613 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753333 | Units: | %REC | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 107 | 80 | 120 | | | |

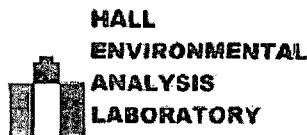
| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | MB-18615 | SampType: | MBLK | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | PBS | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753339 | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 105 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|----------------|-----------|-------------|-----------------------------|----------|-----------|------|----------|------|
| Sample ID | LCS-18615 | SampType: | LCS | TestCode: | EPA Method 8021B: Volatiles | | | | | |
| Client ID: | LCSS | Batch ID: | 18615 | RunNo: | 25449 | | | | | |
| Prep Date: | 4/10/2015 | Analysis Date: | 4/11/2015 | SeqNo: | 753340 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.1 | 0.050 | 1.000 | 0 | 106 | 76.6 | 128 | | | |
| Toluene | 0.97 | 0.050 | 1.000 | 0 | 97.5 | 75 | 124 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 104 | 79.5 | 126 | | | |
| Xylenes, Total | 3.2 | 0.10 | 3.000 | 0 | 106 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.1 | | 1.000 | | 108 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: RULE ENGINEERING LL

Work Order Number: 1504454

Rep: No. 1

Received by/date:

Logged By: Lindsay Mangin

4/10/2015 6:00:00 AM

Completed By: Lindsay Mangin

4/10/2015 7:00:02 AM

Reviewed By:

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 2.8 | Good | Yes | | | |

| Chain-of-Custody Record | | Turn-Around Time: |
|---|---|-------------------|
| Client: <u>Rule Engineering LLC</u> | <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush | |
| Mailing Address: <u>501 Airport Drive</u> | Project Name: <u>Enterprise</u> | |
| <u>Suite 205 Farmington NM 87401</u> | <u>Richardson Com #3 Pipeline Release</u> | |
| Phone #: <u>505 860 2712</u> | Project #: | |
| email or Fax#: <u>d.watson@ruleengineering.com</u> | Project Manager: | |
| QA/QC Package: | <u>Deborah Watson</u> | |
| <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation) | Sampler: <u>D. Watson</u> | |
| Accreditation | On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | |
| <input type="checkbox"/> NELAP <input type="checkbox"/> Other _____ | Sample Temperature: <u>2.8</u> | |
| <input type="checkbox"/> EDD (Type) _____ | | |

☒ Standard ☐ Rush

Enterprise

Project #:

Deborah Watson

Sampler: D Watson

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.8



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

| | | |
|--------|-------|------------------|
| Date: | Time: | Relinquished by: |
| 4-9-15 | 1730 | Deborah Watson |

| | | |
|--------------|------|------|
| Received by: | Date | Time |
|--------------|------|------|

Received by: _____ Date _____ Time _____

Remarks: Bill to Enterprise
Attention! Tom Long

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

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

OIL CONS. DIV DIST. 3

JUN 29 2015

Submit 1 Copy to appropriate District Office
in accordance with 19.15.29 NMAC.

Form C-141
Revised August 8, 2011

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

| | |
|--|---|
| Name of Company: Enterprise Field Services LLC | Contact: Thomas Long |
| Address: 614 Reilly Ave, Farmington, NM 87401 | Telephone No. 505-599-2286 |
| Facility Name: Trunk 3C | Facility Type: Natural Gas Gathering Pipeline |

| | | |
|------------------------|------------------------|---------|
| Surface Owner: Private | Mineral Owner: Private | API No. |
|------------------------|------------------------|---------|

LOCATION OF RELEASE

| | | | | | | | | |
|------------------|---------------|-----------------|--------------|-------------------------|---------------------|--------------------------|-------------------|--------------------|
| Unit Letter B | Section 32 | Township 29N | Range 12W | Feet from the 133 | North South Line | Feet from the 2293 | East West Line | County San Juan |
|------------------|---------------|-----------------|--------------|-------------------------|---------------------|--------------------------|-------------------|--------------------|

Latitude 36.68994 Longitude -108.12146

NATURE OF RELEASE

| | | |
|--|---|--|
| Type of Release: Natural Gas and Natural Gas Liquids | Volume of Release 125.37 MCF Gas; 3-5 BBLs Fluids | Volume Recovered: None |
| Source of Release: Internal corrosion | Date and Hour of Occurrence: 5/12/15 @ 12:45 p.m. | Date and Hour of Discovery: 5/12/15 @ 1:40 p.m. |
| Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required | If YES, To Whom? Courtesy Notification - Cory Smith NMOCD | |
| By Whom? Thomas Long | Date and Time 5/21/2015 @ 2:30 p.m. by phone | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse | |

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action: On May 12, 2015 Enterprise technicians discovered a pipeline release on Trunk 3C during a routine pipeline patrol. The line was isolated, blown down, depressurized, locked out and tagged out. The release was a result of internal corrosion. The pipeline was repaired and remediation of the release was completed on May 21, 2015.

Describe Area Affected and Cleanup Action: The contaminant mass was removed by mechanical excavation. The final excavation measured approximately 20 feet long by 17 feet wide by 7.5 feet deep. Approximately 68 cubic yards of hydrocarbon impacted soil was excavated and transported to a New Mexico Oil Conservation approved land farm facility. A third party corrective action report is included with this "Final" C-141.

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.

| | | |
|---|--|-----------------------------------|
| Signature: <i>Jon Fields</i> | OIL CONSERVATION DIVISION | |
| Printed Name: Jon E. Fields | Approved by Environmental Specialist: <i>[Signature]</i> | |
| Title: Director, Environmental | Approval Date: <i>8/5/15</i> | Expiration Date: |
| E-mail Address: jefields@eprod.com | Conditions of Approval: | Attached <input type="checkbox"/> |
| Date: <i>6-15-2015</i> Phone: (713)381-6684 | | |

* Attach Additional Sheets If Necessary

#NCS 1514151763

27

OIL CONS. DIV DIST. 3

JUN 29 2015

Trunk 3C
Pipeline Release Report
Section 32, Township 29N, Range 12W
N36.68994, W108.12146
San Juan County, New Mexico
May 28, 2015

Prepared for:

Enterprise Products Operating, LLC
614 Reilly Avenue
Farmington, New Mexico 87401

Prepared by:

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

Enterprise Products Operating, LLC Trunk 3C Pipeline Release Report

Prepared for:

Enterprise Products Operating, LLC
614 Reilly Avenue
Farmington, New Mexico 87401


Prepared by:

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



Deborah Watson, PG, Geologist

Reviewed by:



Russell Knight, PG, Principal Hydrogeologist

May 28, 2015

1 Introduction

The Enterprise Products Operating, LLC (Enterprise) Trunk 3C pipeline release site is located in Unit Letter B, Section 32, Township 29N, Range 12W in San Juan County, New Mexico. The pipeline release occurred at a corrosion hole along the 16-inch Trunk 3C pipeline. The release was discovered on May 12, 2015.

On May 21, 2015, the point of release was identified and repaired. The release consisted of an unknown quantity of natural gas and condensate. Site work included repair of the leaking pipeline and excavation of hydrocarbon impacted soils on May 21, 2015.

A topographic map of the location is included as Figure 1 and an aerial site map is included as Figure 2.

2 Release Summary

Site Name – Trunk 3C Pipeline Release

Location – Unit Letter B (NW/NE), Section 32, Township 29N, Range 12W

Release Latitude/Longitude – N36.68994 and W108.12146, respectively

Land Jurisdiction – Private

Date Release Discovered – May 12, 2015

Agency Notification – New Mexico Oil Conservation Division (NMOCD)

Diameter of pipeline – 16-inch

Source of Release – corrosion hole along 16-inch pipeline

Release Contents – natural gas and condensate

Release Volume – unknown

NMOCD Site Ranking – 20

Date of Rule Engineering, LLC (Rule) Field Work – May 21, 2015

Subcontractor(s) – West States Energy Contractors, Inc. (West States)

Disposal Facility – Envirotech Land Farm (Permit #NM-01-011)

Amount of Contaminated Soil Excavated/Disposed – 68 cubic yards

3 NMOCD Site Ranking

In accordance with NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (August 1993), this site was assigned a ranking score of 20 (Table 1). Based on the ranking score of 20, action levels for remediated soils at the site are as follows: 10 mg/kg benzene, 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX), and 100 mg/kg total petroleum hydrocarbons (TPH).

Depth to groundwater at the site was estimated to be between 91 and 98 feet below ground surface (bgs) based on the elevation differential (91 feet) between the release location and the wash in Gallegos Canyon (approximately 0.6 miles to the east) and the elevation differential (98 feet) between the release location and the San Juan River (approximately 0.65 miles to the northwest).

Trunk 3C Pipeline Release Report

A review was completed of the New Mexico Office of the State Engineer online New Mexico Water Rights Reporting System and no water wells were identified within a 1,000 foot radius of the location. Hammond Ditch is located approximately 1,120 feet north of the location.

An unnamed wash is located approximately 780 feet northwest of the location and drains to the San Juan River. An additional surface water feature, an unnamed wash, is located 1,060 feet northwest of the location and drains to the wash in Gallegos Canyon and then to the San Juan River.

4 Field Activities

On May 12, 2015, Enterprise personnel discovered a pipeline leak along the 16-inch Trunk 3C pipeline. Enterprise, West States, and Rule personnel were onsite for remediation activities on May 21, 2015. West States provided heavy equipment operation and excavated the petroleum impacted materials from within the release area. Rule personnel provided excavation oversight and conducted field screening during remediation activities. On May 21, 2015, based on visual observation and field screening results, the excavation was halted, and Rule personnel collected five confirmation samples (SC-1 through SC-5) from each of the sidewalls and base of the excavation. Repairs were made at the corrosion hole. Approximately 68 cubic yards of hydrocarbon impacted soils were removed from an area of excavation measuring approximately 20 feet x 17 feet x 7.5 feet in depth. Figure 3 provides the locations and results of the soil samples collected.

A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix A. A photograph log is included in Appendix B.

5 Soil Sampling

Rule collected confirmation soil samples from the sidewalls and base of the excavation. Soil samples SC-1 through SC-5 were collected on May 21, 2015. Each confirmation soil sample (SC-1 through SC-5) is a representative composite of material collected from five separate locations within the sample area.

Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B and TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D. Laboratory analytical results are summarized in Table 2, and the analytical laboratory report is included in Appendix C.

A portion of each composite soil sample was also field screened for volatile organic compounds (VOCs). Field screening for VOC vapors was conducted with a photo-ionization detector (PID). Before beginning field screening, the PID was calibrated with

A review was completed of the New Mexico Office of the State Engineer online New Mexico Water Rights Reporting System and no water wells were identified within a 1,000 foot radius of the location. Hammond Ditch is located approximately 1,120 feet north of the location.

An unnamed wash is located approximately 780 feet northwest of the location and drains to the San Juan River. An additional surface water feature, an unnamed wash, is located 1,060 feet northwest of the location and drains to the wash in Gallegos Canyon and then to the San Juan River.

4 Field Activities

On May 12, 2015, Enterprise personnel discovered a pipeline leak along the 16-inch Trunk 3C pipeline. Enterprise, West States, and Rule personnel were onsite for remediation activities on May 21, 2015. West States provided heavy equipment operation and excavated the petroleum impacted materials from within the release area. Rule personnel provided excavation oversight and conducted field screening during remediation activities. On May 21, 2015, based on visual observation and field screening results, the excavation was halted, and Rule personnel collected five confirmation samples (SC-1 through SC-5) from each of the sidewalls and base of the excavation. Repairs were made at the corrosion hole. Approximately 68 cubic yards of hydrocarbon impacted soils were removed from an area of excavation measuring approximately 20 feet x 17 feet x 7.5 feet in depth. Figure 3 provides the locations and results of the soil samples collected.

A copy of the executed C-138 Solid Waste Acceptance Form is included in Appendix A. A photograph log is included in Appendix B.

5 Soil Sampling

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Soil samples collected for laboratory analysis were placed into laboratory supplied glassware, labeled, and maintained on ice until delivery to Hall Environmental Analysis Laboratory in Albuquerque, New Mexico. All samples were analyzed for BTEX per U.S. Environmental Protection Agency (USEPA) Method 8021B and TPH for gasoline range organics (GRO) and diesel range organics (DRO) per USEPA Method 8015D. Laboratory analytical results are summarized in Table 2, and the analytical laboratory report is included in Appendix C.

A portion of each composite soil sample was also field screened for volatile organic compounds (VOCs). Field screening for VOC vapors was conducted with a photo-ionization detector (PID). Before beginning field screening, the PID was calibrated with

100 parts per million (ppm) isobutylene gas. Field screening results are summarized in Table 2.

6 Conclusions

The release of unknown quantity of natural gas and condensate occurred at corrosion hole along the 16-inch Trunk 3C pipeline. Remedial activities included excavation of 68 cubic yards of hydrocarbon impacted soils along the pipeline. Five confirmation soil samples were collected from the sidewalls and base of the excavation on May 21, 2015, for laboratory analysis of BTEX and TPH. The final excavation measured approximately 20 feet x 17 feet x 7.5 feet in depth.

Laboratory analytical results for soil confirmation samples (SC-1 through SC-5) reported benzene and total BTEX concentrations below the NMOCD action levels of 10 mg/kg and 50 mg/kg, respectively. All soil confirmation samples reported TPH concentrations below the NMOCD action level of 100 mg/kg. Action levels are based on a NMOCD site ranking of 20.

Based on laboratory analytical results, no further work is recommended.

7 Closure and Limitations

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

Table 1. NMOCD Site Ranking Determination
Trunk 3C Pipeline Release
San Juan County, New Mexico
Enterprise Products Operating, LLC

| Ranking Criteria | Ranking Score | Site-Based Ranking Score | Basis for Determination | Data Sources |
|--|---------------|--------------------------|---|--|
| Depth to Groundwater | | | | |
| <50 feet | 20 | 10 | Elevation differential between location and wash in Gallegos Canyon east of the location is 91 feet. Location is at a higher elevation. Elevation differential between location and the San Juan River is 98 feet. Location is at a higher elevation. | NMOCD Online database, Horn Canyon Quadrangle, Google Earth, and Visual Inspection |
| 50-99 feet | 10 | | | |
| >100 feet | 0 | | | |
| Wellhead Protection Area | | | | |
| <1,000 feet from a water source, or <200 feet from private domestic water source | 20 (Yes) | 0 | No water source or recorded water wells within 1,000 feet radius of location. Hammond Ditch is located 1,120 feet north of the location. | NMOSE NMWRRS, Horn Canyon Quadrangle, Google Earth, and Visual Inspection |
| | 0 (No) | | | |
| Distance to Surface Water Body | | | | |
| <200 horizontal feet | 20 | 10 | Unnamed wash located at 780 feet northwest of location and drains to the San Juan River. An additional unnamed wash is located 1,060 feet northwest of the location and drains to the wash in Gallegos Canyon and then to the San Juan River. The San Juan River is located 0.65 miles northwest of the location. | Horn Canyon Quadrangle, Google Earth, and Visual Inspection |
| 200 to 1,000 horizontal feet | 10 | | | |
| >1,000 horizontal feet | 0 | | | |
| Site Based Total Ranking Score | | 20 | | |

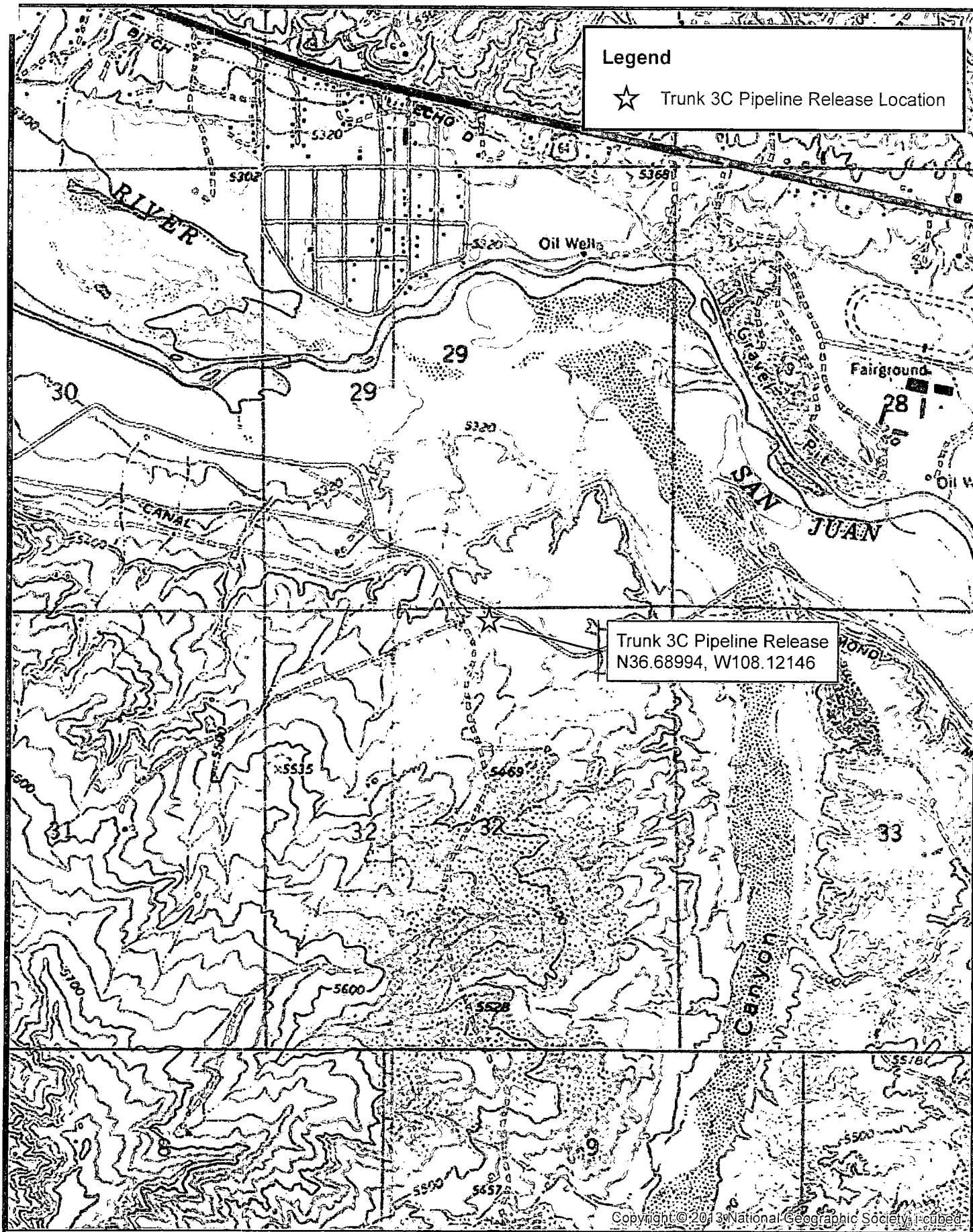
Table 2. Soil Sampling Results-VOCs, Benzene, Total BTEX, and TPH
Trunk 3C Pipeline Release
San Juan County, New Mexico
Enterprise Products Operating, LLC

| Sample ID | Date | Location | Sample Depth (ft bgs) | VOCs (PID) (ppm) | Benzene (mg/kg) | Total BTEX (mg/kg) | TPH-GRO | TPH-DRO |
|----------------------|------------|------------|--------------------------|---------------------|--------------------|-----------------------|---------|---------|
| | | | | | | | (mg/kg) | |
| NMOCD Action Levels* | | | | 100 | 10 | 50 | 100 | |
| SC-1 | May 21, 15 | South Wall | 0 to 7.5 | 3.5 | <0.032 | <0.161 | <3.2 | <10 |
| SC-2 | May 21, 15 | West Wall | 0 to 7.5 | 13.5 | 0.038 | 4.8 | 23 | <9.7 |
| SC-3 | May 21, 15 | East Wall | 0 to 7.5 | 15.3 | <0.038 | <0.191 | <3.8 | <9.7 |
| SC-4 | May 21, 15 | North Wall | 0 to 7.5 | 21.3 | <0.030 | <0.151 | <3.0 | <9.8 |
| SC-5 | May 21, 15 | Base | 7.5 | 13.5 | <0.031 | <0.156 | <3.1 | <9.7 |

Notes: VOCs - volatile organic compounds
PID - photo-ionization detector
ft bgs - feet below ground surface
ppm - parts per million
mg/kg - milligrams/kilograms

BTEX - benzene, toluene, ethylbenzene, and xylenes
TPH-GRO - total petroleum hydrocarbons-gasoline range organics
TPH-DRO - total petroleum hydrocarbons-diesel range organics
*NMOCD Guidelines for Remediation of Leaks, Spills, and Releases (1993)

Figures



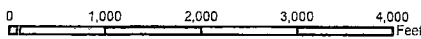
Legend

☆ Trunk 3C Pipeline Release Location

Trunk 3C Pipeline Release
N36.68994, W108.12146

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Rule Engineering, LLC
Solutions to Regulations for Industry



Location
B-32-29N-12W
N36.68994, W108.12146
San Juan County, New Mexico
Date: 5/26/2015 File: 150526 Topo Map

Topographic Map
Enterprise Products
Trunk 3C
Pipeline Release

Figure: 1

Legend



Trunk 3C Pipeline Release Location



Source: Esri, DigitalGlobe, GeoEye, iCubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

IRanle Engineering, LLC
Solutions to Regulations for Industry

0 50 100 150 200 Feet





Location
B-32-29N-12W
N36.68994, W108.12146
San Juan County, New Mexico

Aerial Map
Enterprise Products
Trunk 3C
Pipeline Release

Date: 5/26/2015 File: 150526 Aerial Map

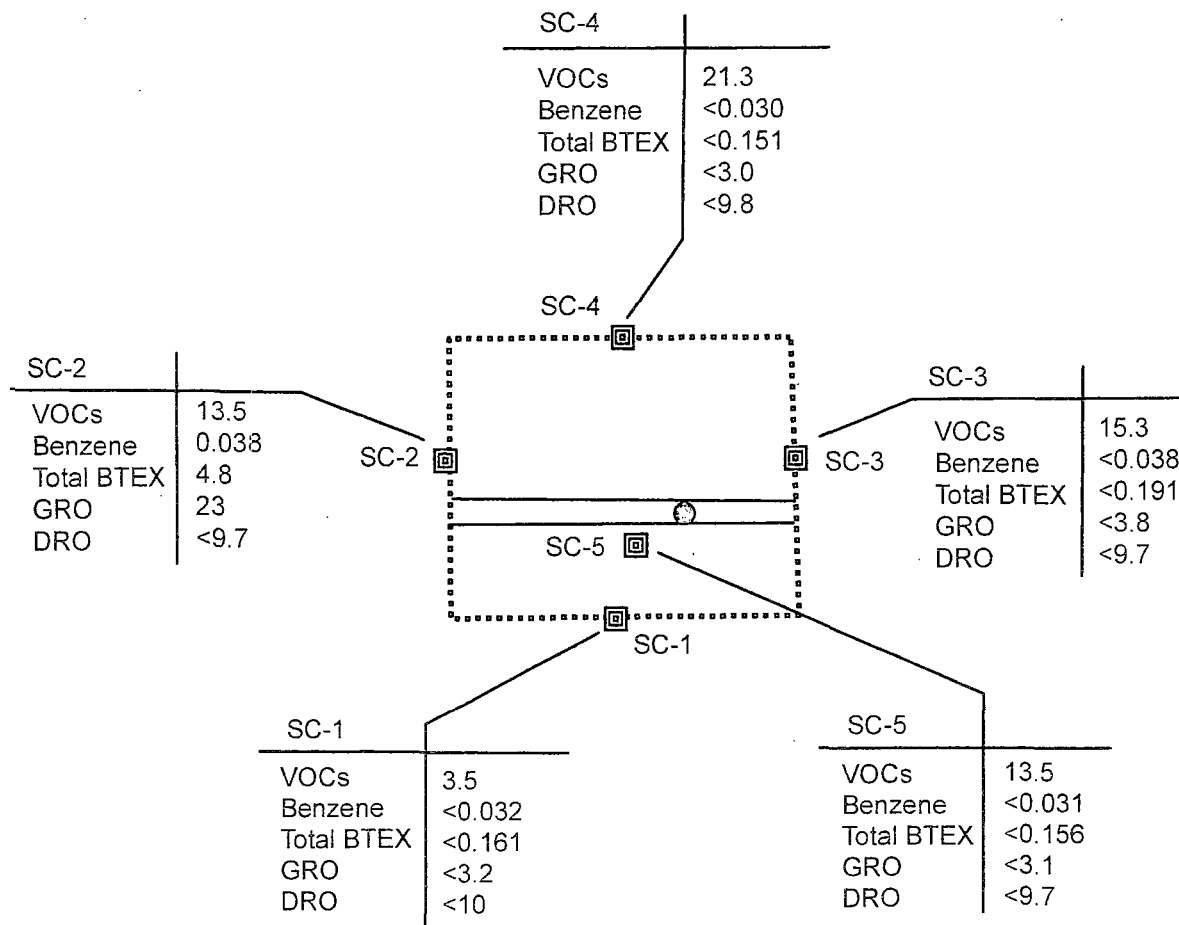
Figure: 2

Legend

-  Soil Sample
-  Trunk 3C Pipeline Release Location
-  Pipeline
-  Excavation

Notes:

VOCs= volatile organic compounds
 BTEX= benzene, toluene, ethylbenzene, and xylenes
 GRO= gasoline range organics
 DRO= diesel range organics
 VOC results in ppm.
 All other results in mg/kg.
 Samples collected May, 2015.



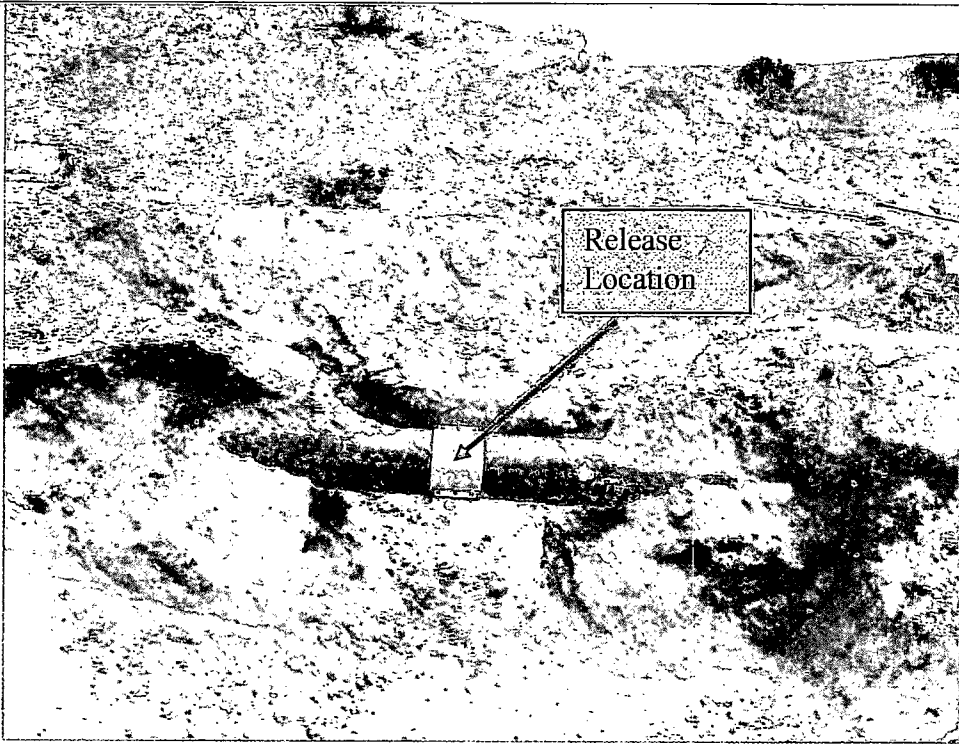
Appendix A


Executed C-138 Solid Waste Acceptance Form

Appendix B

Photograph Log

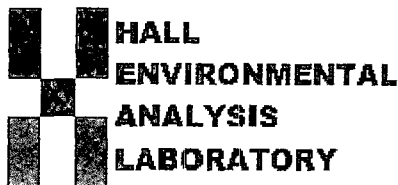
Photograph Log
Trunk 3C Pipeline Release
Enterprise Products

| | |
|---|--|
| Photograph #1 |  |
| Client: Enterprise Products | |
| Site Name: Trunk 3C Pipeline Release | |
| Date Photo Taken: May 21, 2015 | |
| Location: N36.68994, W108.12146 B-32-29N-12W San Juan County, New Mexico | |
| Photo Taken by: Deborah Watson | Description: facing S, looking at excavation and exposed pipeline. |

| | |
|---|--|
| Photograph #2 |  |
| Client: Enterprise Products | |
| Site Name: Trunk 3C Pipeline Release | |
| Date Photo Taken: May 21, 2015 | |
| Location: N36.68994, W108.12146 B-32-29N-12W San Juan County, New Mexico | |
| Photo Taken by: Deborah Watson | Description: facing WSW, looking at excavation following removal of hydrocarbon impacted soils. Final area of excavation measured 20 feet x 17 feet x 7.5 feet in depth. |

Appendix C

Analytical Laboratory Report



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

May 26, 2015

Deborah Watson
Rule Engineering LLC
501 Airport Dr., Ste 205
Farmington, NM 87401
TEL: (505) 860-2712
FAX

RE: Trunk 3C Pipeline

OrderNo.: 1505994

Dear Deborah Watson:

Hall Environmental Analysis Laboratory received 5 sample(s) on 5/22/2015 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 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 #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1505994

Date Reported: 5/26/2015

CLIENT: Rule Engineering LLC

Client Sample ID: SC-2

Project: Trunk 3C Pipeline

Collection Date: 5/21/2015 2:10:00 PM

Lab ID: 1505994-002

Matrix: SOIL

Received Date: 5/22/2015 6:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: KJH |
| Diesel Range Organics (DRO) | ND | 9.7 | | mg/Kg | 1 | 5/22/2015 9:47:47 AM | 19355 |
| Surr: DNOP | 88.0 | 57.9-140 | | %REC | 1 | 5/22/2015 9:47:47 AM | 19355 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: RAA |
| Gasoline Range Organics (GRO) | 23 | 3.3 | | mg/Kg | 1 | 5/22/2015 9:17:28 AM | 19348 |
| Surr: BFB | 126 | 80-120 | S | %REC | 1 | 5/22/2015 9:17:28 AM | 19348 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: RAA |
| Benzene | 0.038 | 0.033 | | mg/Kg | 1 | 5/22/2015 9:17:28 AM | 19348 |
| Toluene | 1.4 | 0.033 | | mg/Kg | 1 | 5/22/2015 9:17:28 AM | 19348 |
| Ethylbenzene | 0.27 | 0.033 | | mg/Kg | 1 | 5/22/2015 9:17:28 AM | 19348 |
| Xylenes, Total | 3.1 | 0.066 | | mg/Kg | 1 | 5/22/2015 9:17:28 AM | 19348 |
| Surr: 4-Biomofluorobenzene | 120 | 80-120 | | %REC | 1 | 5/22/2015 9:17:28 AM | 19348 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Analytical Report

Lab Order 1505994

Date Reported: 5/26/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-3

Project: Trunk 3C Pipeline

Collection Date: 5/21/2015 2:40:00 PM

Lab ID: 1505994-003

Matrix: SOIL

Received Date: 5/22/2015 6:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: KJH |
| Diesel Range Organics (DRO) | ND | 9.7 | | mg/Kg | 1 | 5/22/2015 10:08:59 AM | 19355 |
| Surr: DNOP | 89.3 | 57.9-140 | | %REC | 1 | 5/22/2015 10:08:59 AM | 19355 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: RAA |
| Gasoline Range Organics (GRO) | ND | 3.8 | | mg/Kg | 1 | 5/22/2015 9:46:08 AM | 19348 |
| Surr: BFB | 89.6 | 80-120 | | %REC | 1 | 5/22/2015 9:46:08 AM | 19348 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: RAA |
| Benzene | ND | 0.038 | | mg/Kg | 1 | 5/22/2015 9:46:08 AM | 19348 |
| Toluene | ND | 0.038 | | mg/Kg | 1 | 5/22/2015 9:46:08 AM | 19348 |
| Ethylbenzene | ND | 0.038 | | mg/Kg | 1 | 5/22/2015 9:46:08 AM | 19348 |
| Xylenes, Total | ND | 0.077 | | mg/Kg | 1 | 5/22/2015 9:46:08 AM | 19348 |
| Surr: 4-Bromofluorobenzene | 106 | 80-120 | | %REC | 1 | 5/22/2015 9:46:08 AM | 19348 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1505994

Date Reported: 5/26/2015

CLIENT: Rule Engineering LLC

Client Sample ID: SC-4

Project: Trunk 3C Pipeline

Collection Date: 5/21/2015 3:05:00 PM

Lab ID: 1505994-004

Matrix: SOIL

Received Date: 5/22/2015 6:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: KJH |
| Diesel Range Organics (DRO) | ND | 9.8 | | mg/Kg | 1 | 5/22/2015 10:30:14 AM | 19355 |
| Surr: DNOP | 90.2 | 57.9-140 | | %REC | 1 | 5/22/2015 10:30:14 AM | 19355 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: RAA |
| Gasoline Range Organics (GRO) | ND | 3.0 | | mg/Kg | 1 | 5/22/2015 10:14:52 AM | 19348 |
| Surr: BFB | 89.1 | 80-120 | | %REC | 1 | 5/22/2015 10:14:52 AM | 19348 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: RAA |
| Benzene | ND | 0.030 | | mg/Kg | 1 | 5/22/2015 10:14:52 AM | 19348 |
| Toluene | ND | 0.030 | | mg/Kg | 1 | 5/22/2015 10:14:52 AM | 19348 |
| Ethylbenzene | ND | 0.030 | | mg/Kg | 1 | 5/22/2015 10:14:52 AM | 19348 |
| Xylenes, Total | ND | 0.061 | | mg/Kg | 1 | 5/22/2015 10:14:52 AM | 19348 |
| Surr: 4-Bromofluorobenzene | 104 | 80-120 | | %REC | 1 | 5/22/2015 10:14:52 AM | 19348 |

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

| | | | | | |
|-------------|---|---|----|--|-------------|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank | Page 4 of 8 |
| | 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 | |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range | |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit | |
| | S | Spike Recovery outside accepted recovery limits | | | |

Analytical Report

Lab Order 1505994

Date Reported: 5/26/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Rule Engineering LLC

Client Sample ID: SC-5

Project: Trunk 3C Pipeline

Collection Date: 5/21/2015 3:15:00 PM

Lab ID: 1505994-005

Matrix: SOIL

Received Date: 5/22/2015 6:10:00 AM

| Analyses | Result | RL | Qual | Units | DF | Date Analyzed | Batch |
|--|--------|----------|------|-------|----|-----------------------|--------------|
| EPA METHOD 8015D: DIESEL RANGE ORGANICS | | | | | | | Analyst: KJH |
| Diesel Range Organics (DRO) | ND | 9.7 | | mg/Kg | 1 | 5/22/2015 10:51:25 AM | 19355 |
| Surr: DNOP | 89.7 | 57.9-140 | | %REC | 1 | 5/22/2015 10:51:25 AM | 19355 |
| EPA METHOD 8015D: GASOLINE RANGE | | | | | | | Analyst: RAA |
| Gasoline Range Organics (GRO) | ND | 3.1 | | mg/Kg | 1 | 5/22/2015 10:43:30 AM | 19348 |
| Surr: BFB | 89.6 | 80-120 | | %REC | 1 | 5/22/2015 10:43:30 AM | 19348 |
| EPA METHOD 8021B: VOLATILES | | | | | | | Analyst: RAA |
| Benzene | ND | 0.031 | | mg/Kg | 1 | 5/22/2015 10:43:30 AM | 19348 |
| Toluene | ND | 0.031 | | mg/Kg | 1 | 5/22/2015 10:43:30 AM | 19348 |
| Ethylbenzene | ND | 0.031 | | mg/Kg | 1 | 5/22/2015 10:43:30 AM | 19348 |
| Xylenes, Total | ND | 0.063 | | mg/Kg | 1 | 5/22/2015 10:43:30 AM | 19348 |
| Surr: 4-Bromofluorobenzene | 105 | 80-120 | | %REC | 1 | 5/22/2015 10:43:30 AM | 19348 |

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

| | | | | |
|-------------|---|---|----|--|
| Qualifiers: | * | Value exceeds Maximum Contaminant Level. | B | Analyte detected in the associated Method Blank |
| | 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 |
| | O | RSD is greater than RSDlimit | P | Sample pH Not In Range |
| | R | RPD outside accepted recovery limits | RL | Reporting Detection Limit |
| | S | Spike Recovery outside accepted recovery limits | | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505994

26-May-15

Client: Rule Engineering LLC

Project: Trunk 3C Pipeline

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | MB-19355 | SampType: | MBLK | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | PBS | Batch ID: | 19355 | RunNo: | 26355 | | | | | |
| Prep Date: | 5/22/2015 | Analysis Date: | 5/22/2015 | SeqNo: | 783207 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | ND | 10 | | | | | | | | |
| Surr: DNOP | 9.6 | | 10.00 | | 96.2 | 57.9 | 140 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | LCS-19355 | SampType: | LCS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | LCSS | Batch ID: | 19355 | RunNo: | 26355 | | | | | |
| Prep Date: | 5/22/2015 | Analysis Date: | 5/22/2015 | SeqNo: | 783219 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 42 | 10 | 50.00 | 0 | 83.2 | 67.8 | 130 | | | |
| Surr: DNOP | 4.2 | | 5.000 | | 83.1 | 57.9 | 140 | | | |

| | | | | | | | | | | |
|-----------------------------|----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1505994-001AMS | SampType: | MS | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 19355 | RunNo: | 26355 | | | | | |
| Prep Date: | 5/22/2015 | Analysis Date: | 5/22/2015 | SeqNo: | 783477 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 43 | 10 | 50.20 | 0 | 85.1 | 42.3 | 146 | | | |
| Surr: DNOP | 4.3 | | 5.020 | | 86.4 | 57.9 | 140 | | | |

| | | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------|-------------|---|----------|-----------|------|----------|------|
| Sample ID | 1505994-001AMSD | SampType: | MSD | TestCode: | EPA Method 8015D: Diesel Range Organics | | | | | |
| Client ID: | SC-1 | Batch ID: | 19355 | RunNo: | 26355 | | | | | |
| Prep Date: | 5/22/2015 | Analysis Date: | 5/22/2015 | SeqNo: | 783651 | Units: | mg/Kg | | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Diesel Range Organics (DRO) | 44 | 10 | 50.15 | 0 | 87.0 | 42.3 | 146 | 2.13 | 28.9 | |
| Surr: DNOP | 4.4 | | 5.015 | | 87.4 | 57.9 | 140 | 0 | 0 | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505994

26-May-15

Client: Rule Engineering LLC

Project: Trunk 3C Pipeline

| | | | | | | | | | | | |
|-------------------------------|-----------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|--|
| Sample ID | MB-19348 | | SampType: | MBLK | | TestCode: | EPA Method 8015D: Gasoline Range | | | | |
| Client ID: | PBS | | Batch ID: | 19348 | | RunNo: | 26362 | | | | |
| Prep Date: | 5/21/2015 | | Analysis Date: | 5/22/2015 | | SeqNo: | 783469 | | 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 | 890 | | 1000 | | 89.0 | 80 | 120 | | | | |

| | | | | | | | | | | | |
|-------------------------------|-----------|-----|----------------|-------------|------|-----------|----------------------------------|------|--------------|------|--|
| Sample ID | LCS-19348 | | SampType: | LCS | | TestCode: | EPA Method 8015D: Gasoline Range | | | | |
| Client ID: | LCSS | | Batch ID: | 19348 | | RunNo: | 26362 | | | | |
| Prep Date: | 5/21/2015 | | Analysis Date: | 5/22/2015 | | SeqNo: | 784013 | | Units: mg/Kg | | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual | |
| Gasoline Range Organics (GRO) | 25 | 5.0 | 25.00 | 0 | 99.6 | 64 | 130 | | | | |
| Surr: BFB | 970 | | 1000 | | 97.4 | 80 | 120 | | | | |

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505994

26-May-15

Client: Rule Engineering LLC

Project: Trunk 3C Pipeline

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | MB-19348 | | SampType: | MBLK | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | PBS | | Batch ID: | 19348 | | RunNo: | 26362 | | | |
| Prep Date: | 5/21/2015 | | Analysis Date: | 5/22/2015 | | SeqNo: | 783476 | | 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 | | | | | | | | |
| Xylenes, Total | ND | 0.10 | | | | | | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 104 | 80 | 120 | | | |

| | | | | | | | | | | |
|----------------------------|-----------|-------|----------------|-------------|------|-----------|-----------------------------|------|--------------|------|
| Sample ID | LCS-19348 | | SampType: | LCS | | TestCode: | EPA Method 8021B: Volatiles | | | |
| Client ID: | LCSS | | Batch ID: | 19348 | | RunNo: | 26362 | | | |
| Prep Date: | 5/21/2015 | | Analysis Date: | 5/22/2015 | | SeqNo: | 784022 | | Units: mg/Kg | |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | %RPD | RPDLimit | Qual |
| Benzene | 1.0 | 0.050 | 1.000 | 0 | 101 | 76.6 | 128 | | | |
| Toluene | 0.99 | 0.050 | 1.000 | 0 | 99.0 | 75 | 124 | | | |
| Ethylbenzene | 1.0 | 0.050 | 1.000 | 0 | 102 | 79.5 | 126 | | | |
| Xylenes, Total | 3.0 | 0.10 | 3.000 | 0 | 101 | 78.8 | 124 | | | |
| Surr: 4-Bromofluorobenzene | 1.0 | | 1.000 | | 103 | 80 | 120 | | | |

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: RULE ENGINEERING LL

Work Order Number: 1505994

RcptNo: 1

Received by/date: LM 05/22/15

Logged By: Anne Thorne 5/22/2015 6:10:00 AM

Completed By: Anne Thorne 5/22/2015

Reviewed By: [Signature] 05/22/15

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. 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: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: _____

Date: _____

By Whom: _____

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

| Cooler No | Temp $^{\circ}\text{C}$ | Condition | Seal Intact | Seal No | Seal Date | Signed By |
|-----------|-------------------------|-----------|-------------|---------|-----------|-----------|
| 1 | 3.8 | Good | Yes | | | |

Turn-Around Time:

☐ Standard ☒ Rush Sameday

Project Name: Trunk 3C Pipeline

Project #:

☐ Standard ☒ Rush Saturday

Trunk 3C Pipeline

Project #:

Project Manager:

D Watson

Sampler: D Watson

On Ice ☒ Yes ☐ No


Sample Temperature: 25

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 | 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 | 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440 | 441 | 442 | 443 | 444 | 445 | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

EDD (Type)

[illegible]

| | | |
|--------------|---------|------|
| Received by: | Date | Time |
| Christa Wale | 5/21/18 | 1645 |

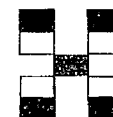
Received by:  Date: 05/22/15 Time: 11:11

Alt: Tom Long

WD: N 21379

Area: 2600

Paykey: RB 21200



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

| | | | | | | |
|--|---|---|---|---|---|--|
| | X | X | X | X | X | BTEX + TPH (Gas only) |
| | | | | | | |
| | X | X | X | X | X | 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 ₃ , NO ₂ , PO ₄ , SO ₄) |
| | | | | | | 8081 Pesticides / 8082 PCB's |
| | | | | | | 8260B (VOA) |
| | | | | | | 8270 (Semi-VOA) |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | Air Bubbles (Y or N) |