

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

State of New Mexico
Energy Minerals and Natural Resources

Form C-141
Revised August 8, 2011

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

Submit 1 Copy to appropriate District Office in accordance with 19-15-29 NMAC.

Release Notification and Corrective Action

OPERATOR

Initial Report Final Report

| | |
|--|--|
| Name of Company Frontier Field Services, LLC | Contact John Prentiss |
| Address 65 Mercado Street, Suite 250, Durango, CO 81301 | Telephone No. 575-676-3528 |
| Facility Name Anderson Ranch Discharge Line - #1 | Facility Type Condensate transport line |
| Surface Owner Frontier Field Services, LLC | Mineral Owner |
| API No. N/A | |

LOCATION OF RELEASE

| | | | | | | | | |
|-------------|-------------------|--------------------|-----------------|---------------|------------------|---------------|----------------|-------------------|
| Unit Letter | Section 14 | Township 16 | Range 32 | Feet from the | North/South Line | Feet from the | East/West Line | County Lea |
|-------------|-------------------|--------------------|-----------------|---------------|------------------|---------------|----------------|-------------------|

Latitude 32.936766 N Longitude -103.734009 W

NATURE OF RELEASE

| | | |
|--|--|---|
| Type of Release Historic LOPC of condensate from buried pipeline | Volume of Release Estimated 20bbl subsurface | Volume Recovered: Excavation underway. |
| Source of Release Historic pinhole leak discovered in buried heavy condensate pipeline | Date and Hour of Occurrence Historic | Date and Hour of Discovery 1/30/15 |
| Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required | If YES, To Whom? Tomáš Oberding - NMOCD | |
| By Whom? Greg Busch - EHS Technician III | Date and Hour 1/30/15 @ 16:08 | |
| Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, Volume Impacting the Watercourse. RECEIVED | |
| If a Watercourse was Impacted, Describe Fully.* N/A | By OCD; Dr. Oberding at 11:01 am, Apr 14, 2015 | |

Describe Cause of Problem and Remedial Action Taken.*
On 1/30/2015 Frontier Field Services discovered a historic release along the Anderson Ranch Pipeline. Frontier estimated the release to exceed 5bbl and prior notifications to/from NMOCD w/instructions, was given and followed.

Excavation commenced to delineate and remove contaminated soils and to restore integrity of the pipeline.

Describe Area Affected and Cleanup Action Taken.*
Approximately 1029 yd³ have been excavated from the area surrounding the pipeline. The excavated material was transported to R-360 for disposal on 2/17/15 to 3/18/15. Analytical samples were taken on 3/16-23/15, to demonstrate Chlorides, TPH, BTEX, and Benzene levels. A 20mil liner was placed under the pipeline for added protection. The area has been backfilled with clean soil. The completion date is 3/24-26/15.

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 | |
| | Hydrologist | |
| Printed Name: Harley Everhart | Approved by Environmental Specialist: | |
| Title: EHS Technician III | Approval Date: 04/14/2015 | Expiration Date: /// |
| E-mail Address: heverhart@akaenergy.com | Conditions of Approval: /// | Attached <input type="checkbox"/> |
| Date: 04/10/2015 | Phone: 575-513-4922 | IRP-3543 |

* Attach Additional Sheets If Necessary



March 20, 2015

HARLEY EVERHART
FRONTIER FIELD SERVICES
4200 SKELLY DRIVE, SUITE 700
TULSA, OK 74135

RE: ANDERSON RANCH REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/16/15 11:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

| | |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#4-01 (H500713-01)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | 0.217 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | 0.139 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | 2.50 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | 2.85 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 160 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 93.1 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | |
| DRO >C10-C28 | 4970 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | |

Surrogate: 1-Chlorooctane 118 % 47.2-157
Surrogate: 1-Chlorooctadecane 154 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#4-02 (H500713-02)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | 0.318 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | 0.383 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | 2.94 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | 3.64 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 192 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 119 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | |
| DRO >C10-C28 | 5870 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | |

Surrogate: 1-Chlorooctane 126 % 47.2-157

Surrogate: 1-Chlorooctadecane 152 % 52.1-176

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#4-03 (H500713-03)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | 0.209 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | 0.211 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | 2.29 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | 2.71 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 146 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 64.0 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 107 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | |
| DRO >C10-C28 | 4940 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | |

Surrogate: 1-Chlorooctane 124 % 47.2-157

Surrogate: 1-Chlorooctadecane 142 % 52.1-176

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#4-04 (H500713-04)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | 0.149 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | 0.092 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | 1.56 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | 1.80 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 127 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 32.0 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 61.0 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | |
| DRO >C10-C28 | 3020 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | |

Surrogate: 1-Chlorooctane 102 % 47.2-157

Surrogate: 1-Chlorooctadecane 122 % 52.1-176

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* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#5-01 (H500713-05)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 117 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 64.0 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | 74.0 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | | |
| DRO >C10-C28 | 7360 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | | |

Surrogate: 1-Chlorooctane 129 % 47.2-157

Surrogate: 1-Chlorooctadecane 171 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#5-02 (H500713-06)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | 0.222 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | 0.085 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | 0.908 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | 1.21 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 116 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 112 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | 45.3 | 10.0 | 03/18/2015 | ND | 200 | 100 | 200 | 0.434 | |
| DRO >C10-C28 | 6820 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 1.78 | |

Surrogate: 1-Chlorooctane 109 % 47.2-157

Surrogate: 1-Chlorooctadecane 167 % 52.1-176

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#5-03 (H500713-07)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 105 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 128 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/18/2015 | ND | 200 | 99.8 | 200 | 4.57 | | |
| DRO >C10-C28 | 2170 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 2.49 | | |

Surrogate: 1-Chlorooctane 96.0 % 47.2-157

Surrogate: 1-Chlorooctadecane 118 % 52.1-176

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#9-01 (H500713-08)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 108 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 1580 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/18/2015 | ND | 200 | 99.8 | 200 | 4.57 | |
| DRO >C10-C28 | 77.5 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 2.49 | |

Surrogate: 1-Chlorooctane 90.9 % 47.2-157

Surrogate: 1-Chlorooctadecane 86.7 % 52.1-176

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#9-02 (H500713-09)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 848 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/18/2015 | ND | 200 | 99.8 | 200 | 4.57 | | |
| DRO >C10-C28 | 858 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 2.49 | | |

Surrogate: 1-Chlorooctane 92.5 % 47.2-157

Surrogate: 1-Chlorooctadecane 96.0 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#9-03 (H500713-10)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| Chloride | 576 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | |
|------------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier |
| GRO C6-C10 | <10.0 | 10.0 | 03/18/2015 | ND | 200 | 99.8 | 200 | 4.57 | |
| DRO >C10-C28 | 672 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 2.49 | |

Surrogate: 1-Chlorooctane 97.3 % 47.2-157

Surrogate: 1-Chlorooctadecane 97.2 % 52.1-176

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|---------------|
| Received: | 03/16/2015 | Sampling Date: | 03/16/2015 |
| Reported: | 03/20/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | NOT GIVEN | Sample Received By: | Jodi Henson |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR#9-04 (H500713-11)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|-------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/19/2015 | ND | 2.17 | 108 | 2.00 | 2.16 | | |
| Toluene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.95 | 97.6 | 2.00 | 0.782 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/19/2015 | ND | 1.93 | 96.6 | 2.00 | 1.69 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/19/2015 | ND | 5.85 | 97.6 | 6.00 | 1.86 | | |
| Total BTEX | <0.300 | 0.300 | 03/19/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | 1490 | 16.0 | 03/18/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/18/2015 | ND | 200 | 99.8 | 200 | 4.57 | | |
| DRO >C10-C28 | 256 | 10.0 | 03/18/2015 | ND | 213 | 106 | 200 | 2.49 | | |

Surrogate: 1-Chlorooctane 92.4 % 47.2-157

Surrogate: 1-Chlorooctadecane 99.9 % 52.1-176

Cardinal Laboratories

* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Frontier Field Services (AEP Energy) P.O. #: ANALYSIS REQUEST

Project Manager: Company:

Address: Maljamar State: NM Zip: Attn:

Phone #: 575 513 4922 Fax #: Address: City:

Project #: AR# 9 Project Owner: State: Zip:

Project Name: Anderson Ranch Remediation Phone #:

Project Location: Anderson Ranch #9 Fax #:

Sampler Name: Harley Sorbetta

FOR LAB USE ONLY

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX | | | | | | | DATE | TIME | Total BTEX | Total TPH | Chlorines |
|----------|-------------|-------------------|--------------|-------------|------------|------|-----|--------|---------|------------|---------|-------|------------|-----------|-----------|
| | | | | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER : | ACID/BASE: | | | | | |
| 8 | AR#9-01 | Y | 1 | Y | | | | | | | 3-16-15 | 03:45 | Y | Y | Y |
| 9 | AR#9-02 | Y | 1 | Y | | | | | | | 3-16-15 | 07:47 | Y | Y | Y |
| 10 | AR#9-03 | Y | 1 | Y | | | | | | | 3-16-15 | 07:48 | Y | Y | Y |
| 11 | AR#9-04 | Y | 1 | Y | | | | | | | 3-16-15 | 07:55 | Y | Y | Y |

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Relinquished By: [Signature] Date: 3-16-15 Received By: Debi Jensen Time: 11:50

Delivered By: (Circle One) UPS Sample Condition: Intact CHECKED BY: [Signature]

Sampler - UPS - Bus - Other: UPS Cool Intact Yes No Yes No

REMARKS: c-mail results
neverhaft@akacenergy.com

Phone Result: Yes No Add'l Phone #:

Fax Result: Yes No Add'l Fax #:

† Card. cannot accept verbal changes. Please fax written changes to (575) 393-2326

Anderson Ranch Pipeline Leak #4
Date 1/29/2015

N 32.936766
W -103.734009

| | |
|---------|----|
| Section | 14 |
| Town | 16 |
| Range | 32 |



Soil Remediated ~448 Cubic Yards



Laying Plastic



Completed 3/24/15

Anderson Ranch # 4

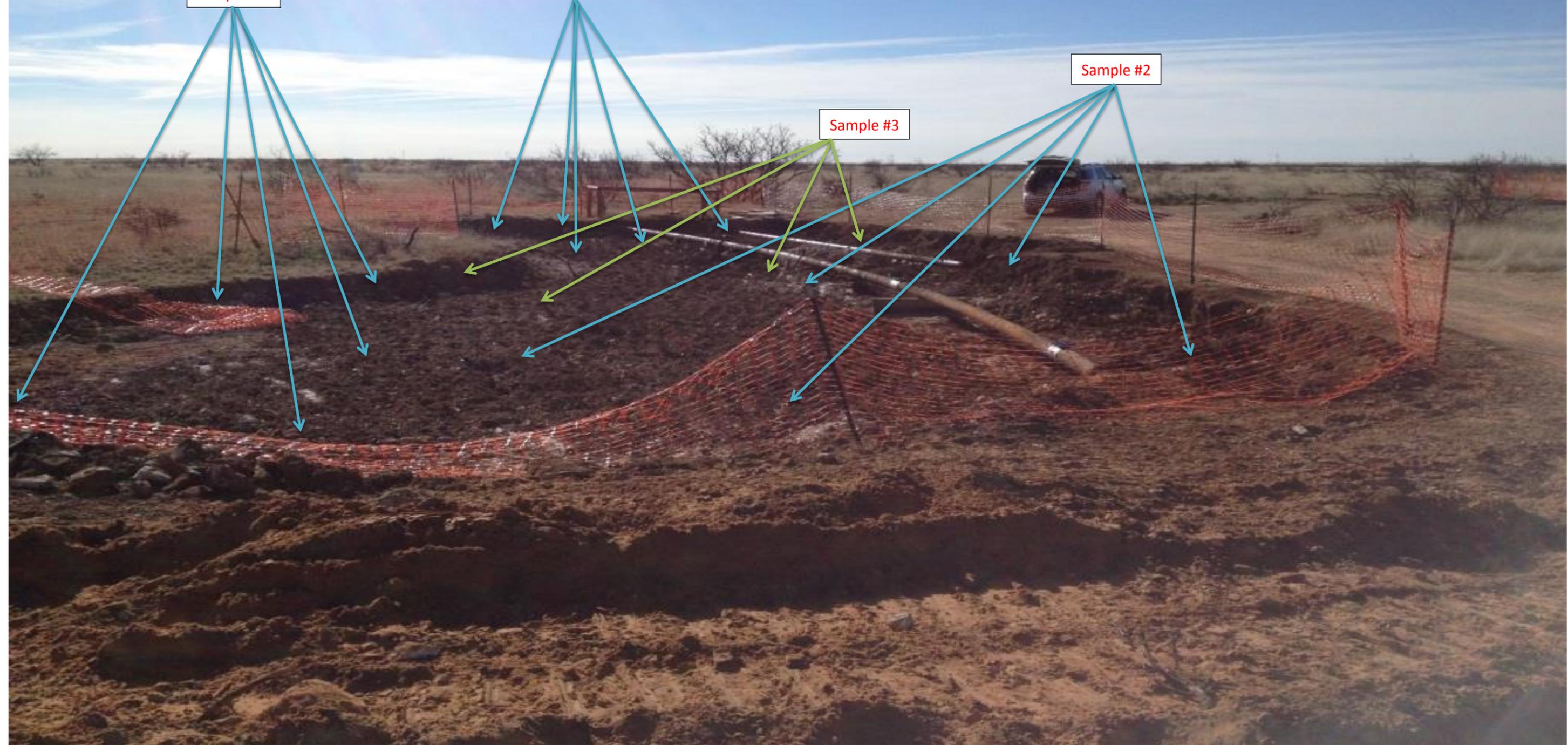


Sample # 1

Sample #4

Sample #3

Sample #2



Anderson Ranch Pipeline Leak #5
Date 1/29/2015

N 32.936338
W -103.734124

| | |
|---------|----|
| Section | 14 |
| Town | 16 |
| Range | 32 |



Soil Remediated ~314 Cubic Yards



Completed 3/24/15

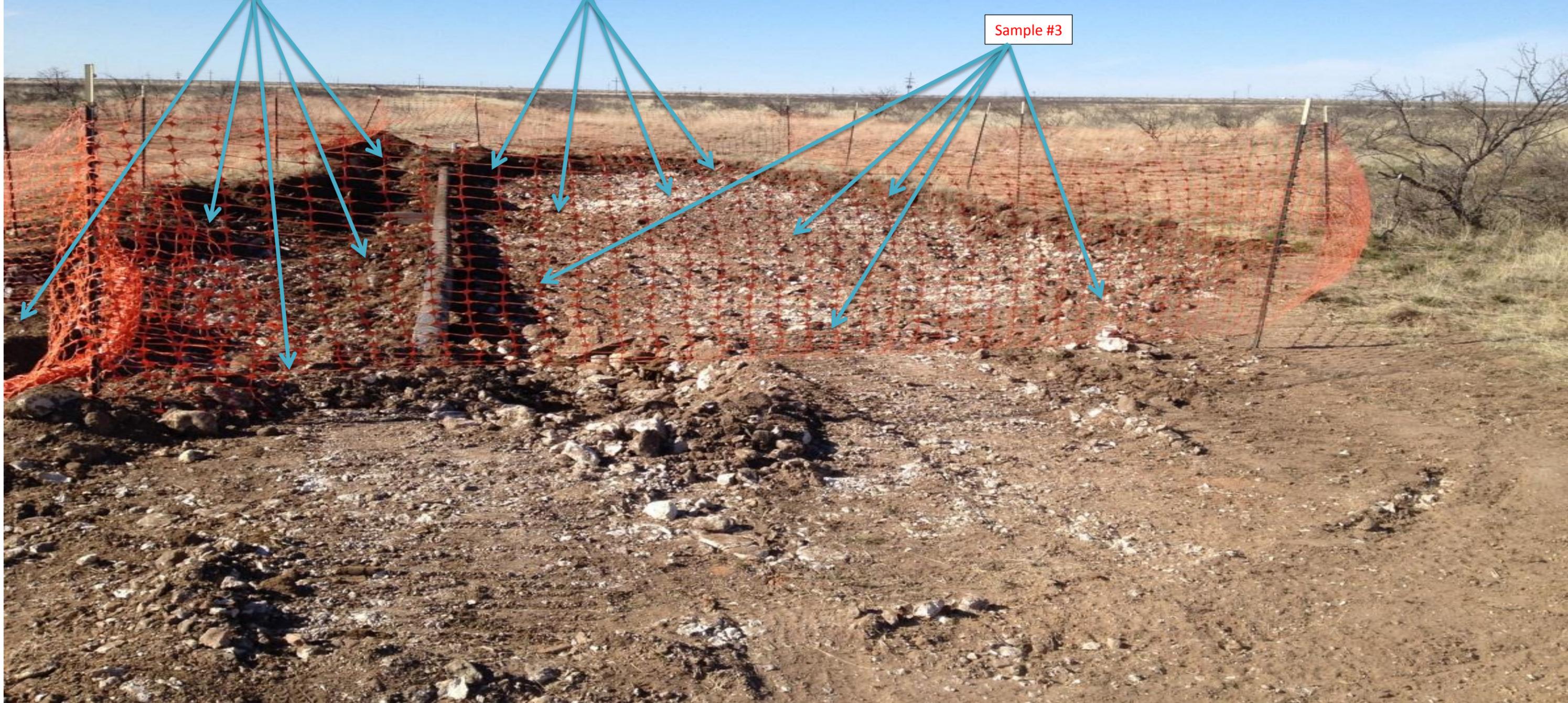
Anderson Ranch # 5



Sample # 1

Sample #2

Sample #3



Anderson Ranch Pipeline Leak #6
Date 1/29/15

N 32.925769
W -103.740254

| | |
|---------|----|
| Section | 14 |
| Town | 16 |
| Range | 32 |



Soil Remediated ~167 Cubic Yards



Completed 3/26/15

Anderson Ranch # 6



Sample #2

Sample # 1

Sample # 3





March 26, 2015

HARLEY EVERHART
FRONTIER FIELD SERVICES
4200 SKELLY DRIVE, SUITE 700
TULSA, OK 74135

RE: ANDERSON RANCH REMEDIATION

Enclosed are the results of analyses for samples received by the laboratory on 03/23/15 10:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

| | |
|------------------|------------------------------|
| Method EPA 552.2 | Haloacetic Acids (HAA-5) |
| Method EPA 524.2 | Total Trihalomethanes (TTHM) |
| Method EPA 524.4 | Regulated VOCs (V1, V2, V3) |

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive.

Celey D. Keene
Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|----------------|
| Received: | 03/23/2015 | Sampling Date: | 03/23/2015 |
| Reported: | 03/26/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | AR #6 | Sample Received By: | Celey D. Keene |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR #6 - #1 (H500768-01)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.93 | 96.3 | 2.00 | 11.0 | | |
| Toluene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.78 | 88.9 | 2.00 | 10.5 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.70 | 84.9 | 2.00 | 13.0 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/24/2015 | ND | 5.10 | 84.9 | 6.00 | 13.9 | | |
| Total BTEX | <0.300 | 0.300 | 03/24/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 105 % 61-154

| Chloride, SM4500Cl-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | <16.0 | 16.0 | 03/24/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/24/2015 | ND | 206 | 103 | 200 | 1.02 | | |
| DRO >C10-C28 | 4470 | 10.0 | 03/24/2015 | ND | 224 | 112 | 200 | 2.38 | | |

Surrogate: 1-Chlorooctane 110 % 47.2-157
Surrogate: 1-Chlorooctadecane 163 % 52.1-176

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|----------------|
| Received: | 03/23/2015 | Sampling Date: | 03/23/2015 |
| Reported: | 03/26/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | AR #6 | Sample Received By: | Celey D. Keene |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR #6 - #2 (H500768-02)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.93 | 96.3 | 2.00 | 11.0 | | |
| Toluene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.78 | 88.9 | 2.00 | 10.5 | | |
| Ethylbenzene* | <0.050 | 0.050 | 03/24/2015 | ND | 1.70 | 84.9 | 2.00 | 13.0 | | |
| Total Xylenes* | <0.150 | 0.150 | 03/24/2015 | ND | 5.10 | 84.9 | 6.00 | 13.9 | | |
| Total BTEX | <0.300 | 0.300 | 03/24/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 105 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | <16.0 | 16.0 | 03/24/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/24/2015 | ND | 206 | 103 | 200 | 1.02 | | |
| DRO >C10-C28 | 2660 | 10.0 | 03/24/2015 | ND | 224 | 112 | 200 | 2.38 | | |

Surrogate: 1-Chlorooctane 115 % 47.2-157

Surrogate: 1-Chlorooctadecane 145 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Analytical Results For:

 FRONTIER FIELD SERVICES
 HARLEY EVERHART
 4200 SKELLY DRIVE, SUITE 700
 TULSA OK, 74135
 Fax To: (575) 676-2401

| | | | |
|-------------------|----------------------------|---------------------|----------------|
| Received: | 03/23/2015 | Sampling Date: | 03/23/2015 |
| Reported: | 03/26/2015 | Sampling Type: | Soil |
| Project Name: | ANDERSON RANCH REMEDIATION | Sampling Condition: | Cool & Intact |
| Project Number: | AR #6 | Sample Received By: | Celey D. Keene |
| Project Location: | ANDERSON RANCH | | |

Sample ID: AR #6 - #3 (H500768-03)

| BTEX 8021B | | mg/kg | | Analyzed By: ms | | | | | | |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Benzene* | <0.500 | 0.500 | 03/24/2015 | ND | 1.93 | 96.3 | 2.00 | 11.0 | | |
| Toluene* | <0.500 | 0.500 | 03/24/2015 | ND | 1.78 | 88.9 | 2.00 | 10.5 | | |
| Ethylbenzene* | <0.500 | 0.500 | 03/24/2015 | ND | 1.70 | 84.9 | 2.00 | 13.0 | | |
| Total Xylenes* | <1.50 | 1.50 | 03/24/2015 | ND | 5.10 | 84.9 | 6.00 | 13.9 | | |
| Total BTEX | <3.00 | 3.00 | 03/24/2015 | ND | | | | | | |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 61-154

| Chloride, SM4500CI-B | | mg/kg | | Analyzed By: AP | | | | | | |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| Chloride | <16.0 | 16.0 | 03/24/2015 | ND | 416 | 104 | 400 | 0.00 | | |

| TPH 8015M | | mg/kg | | Analyzed By: MS | | | | | | |
|------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte | Result | Reporting Limit | Analyzed | Method Blank | BS | % Recovery | True Value QC | RPD | Qualifier | |
| GRO C6-C10 | <10.0 | 10.0 | 03/25/2015 | ND | 189 | 94.4 | 200 | 3.26 | | |
| DRO >C10-C28 | 1730 | 10.0 | 03/25/2015 | ND | 195 | 97.7 | 200 | 5.35 | | |

Surrogate: 1-Chlorooctane 99.5 % 47.2-157
Surrogate: 1-Chlorooctadecane 125 % 52.1-176

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report



Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
 (575) 393-2326 FAX (575) 393-2476

Company Name: Frontier Field Services (Alta Energy)

Project Manager:

Address:

City: Mojave State: NM Zip:

Phone #: 575 513 4922 Fax #:

Project #: AR# 6 Project Owner:

Project Name: Anderson Ranch Oil Remediation

Project Location: AR# 6

Sampler Name: Harley Surrhert

FOR LAB USE ONLY

BILL TO

P.O. #:

Company:

Attn:

Address:

City:

State:

Phone #:

Fax #:

ANALYSIS REQUEST

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP. | # CONTAINERS | MATRIX | | | | | | DATE | TIME | TPH | BTEX | Chlorides |
|----------|-------------|-------------------|--------------|-------------|------------|------|-----|--------|---------|---------|-------|-----|------|-----------|
| | | | | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER : | | | | | |
| H500768 | AR# 6 - #1 | Y | 1 | | | Y | | | | 3-23-15 | 02:06 | Y | Y | Y |
| | AR# 6 - #2 | Y | 1 | | | Y | | | | 3-23-15 | 07:05 | Y | Y | Y |
| | AR# 6 - #3 | Y | 1 | | | Y | | | | 3-23-15 | 07:10 | Y | Y | Y |

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Relinquished By: [Signature]

Date: 3.23.15

Received By: [Signature]

Time: 10:02

Time: 3:23-15

Phone Result: Yes No Add'l Phone #:

Fax Result: Yes No Add'l Fax #:

REMARKS: E-mail Results.

Relinquished By: [Signature]

Date: 3-23-15

Received By: [Signature]

Time: 10:00

Time: 3:23-15

Phone Result: Yes No Add'l Phone #:

Fax Result: Yes No Add'l Fax #:

REMARKS: E-mail Results.

Delivered By: (Circle One)

Sampler - UPS - Bus - Other: 240

#54

* Cardinal cannot accept verbal changes. Please fax written changes to (575) 393-2326

Attached to this Final NMOCD C-141 report includes;

- 1) ~~AR#4_SoilRemediation_SampleLocations_3.16.15~~
- 2) ~~AR#5_SoilRemediation_SampleLocations_3.16.15~~
- 3) ~~AR#6_SoilRemediation_SampleLocations_3.16.15~~
- 4) AR#4_#5_#9_SoilRemediation_CadinalLabs_Samples_3.16.2015
- 5) AR#6_SoilRemediation_CadinalLabs_Samples_3.23.2015
- 6) AR_SoilRemediation_R360_Complete_Manifest_List_2.2015 to 3.2015 (already submitted to NMOCD)
- 7) AR#4_RemediationCompletion_3.24.15
- 8) AR#5_RemediationCompletion_3.24.15
- 9) AR#6_RemediationCompletion_3.26.15