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DELINEATION INVESTIGATION REPORT

Triple A Federal #2 Site Release Lea County, New Mexico

December 15, 2016

Prepared for:

Siana Operating LLC 12012 Wickchester Lane, Ste 410 Houston, Texas 77079

Prepared by:

Charger Services, Inc. 3300 N. A Street, Bldg 7 Midland, Texas 79705

Coty Woolf

Coty Woolf

Environmental Professional

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1.0 EXECUTIVE SUMMARY

This report is submitted to Siana Operating LLC (Siana), by Charger Services, Inc., (Charger), to present the delineation investigation of a crude oil and produced water spill at the Triple A Federal #2 Site, located in Lea County, New Mexico. The spill occurred before March 24, 2016, because of equipment failure. An unknown quantity of oil and produced water were lost at the Site and covering approximately 8,700 sq. ft. of the facility. Zero bbl of oil and water were recovered with unknown total lost.

On March 24, 2016, Charger personnel arrived at the Curry State #5 Site to initiate an investigation into the release. While at the site, Charger personnel collected photo documentation of the incident and established a work plan with Siana field personnel.

On October 11, 2016, October 19, 2016, and March 22, 2017, Charger personnel delineated the Site. The samples were analyzed for BTEX, TPH, and Chlorides. The laboratory ran samples consecutively until below NMOCD action limits for each sample point.

Remediation recommendations will be submitted in a separate proposal.

2.0 INTRODUCTON

This report is submitted to Siana Operating LLC (Siana), by Charger Services, Inc., (Charger), to present the delineation investigation of a crude oil and produced water spill at the Triple A Federal #2 Site, located in Lea County, New Mexico. The spill occurred before March 24, 2016, because of equipment failure. An unknown quantity of oil and produced water were lost at the Site and covering approximately 8,700 sq. ft. of the facility. Zero bbl of oil and water were recovered with unknown total lost. The geodetic position for the spill is 32°19'1.81"N, 103°27'20.54"W. Figure 1 presents a topographic map. Figure 2 presents an aerial map.

2.1 Setting

The setting is as follows:

- The Site is located approximately 19 miles southwest of Eunice, in Lea County, New Mexico;
- The elevation is approximately 3,380 feet above mean sea level (MSL);
- The topography is slightly undulating and slopes to the east;
- The nearest water well is located about 0.6 miles northeast and is undocumented;
- The closet surface water feature is a playa lake (seasonal) located about 3.1 miles east of the Site;
- Runoff is to the north and east.

3.0 SPILL INVESTIGATION

On March 24, 2016, Charger personnel arrived at the Site to initiate an investigation into the crude oil and produced water release. While at the Site, Charger personnel collected photo documentation of the releases and established a work plan.

On October 11, 2016, October 19, 2016, and March 22, 2017, Charger personnel used an air rotary drill to collect soil samples at six (6) boring locations. The samples were collected at 2 ft, 5ft, 10 ft, etc. to 100 foot below ground surface (bgs) and analyzed by Permian Basin Environmental Lab, LP, (PBELAB) for total petroleum hydrocarbons (TPH) by method 8015M, BTEX by method 8021B, and Chlorides by method E-300.

The laboratory reported chlorides concentrations above the NMOCD action level of 250 milligrams per kilogram (mg/kg) in samples down to 100 ft bgs. Table 1 presents a summary of the laboratory analysis. Appendix B presents the laboratory reports.

4.0 RECOMMENDATION

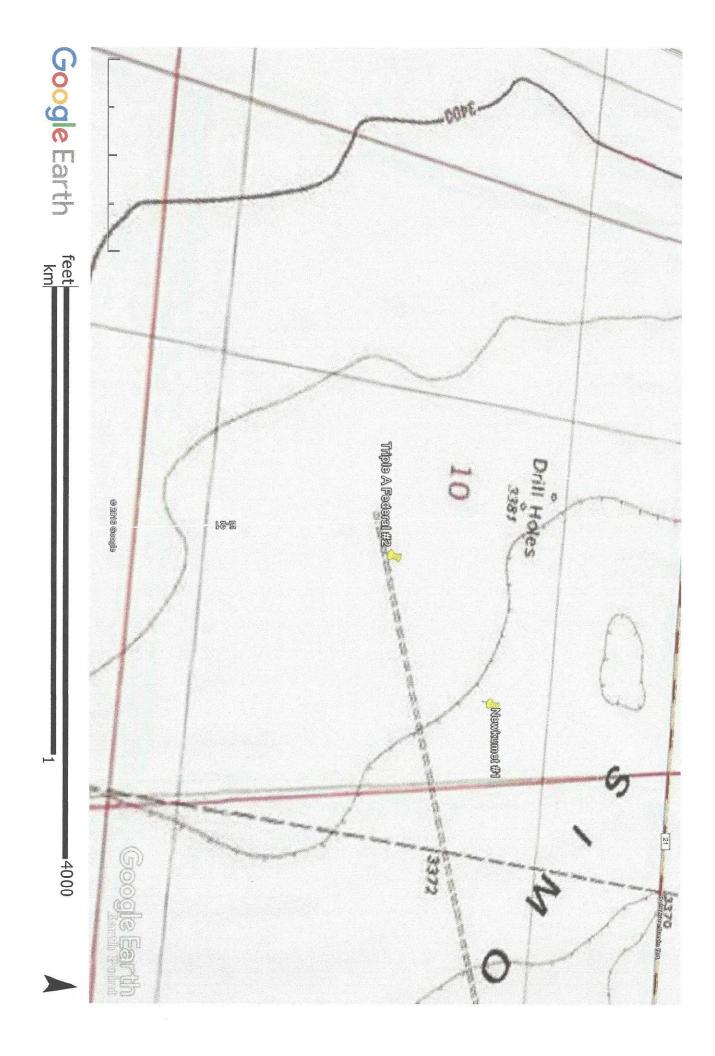
Remediation recommendations will be submitted in a separate proposal.

TABLES

| Boring | Depth | Date | Chloride | Benzene | Toluene | Ethylbenzene | Xylene | GRO | DRO | Oil | Total TPH |
|-----------------|-----------------|------------|-----------|-----------|----------|--------------|------------|----------|----------|------------|-------------------|
| | Feet BGS | | mg/Kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/Kg | | | The second second |
| RRAL: | | | China Lan | | 1070 | 6/6 | 1 1116/116 | 1 mg/ng | mg/Kg | mg/Kg | mg/Kg 5,000 |
| SB-1 | 2 - 3 | 10/11/2016 | 27 | <0.00111 | <0.00222 | <0.00111 | <0.00222 | <27.778 | <27.778 | <27.778 | <27.778 |
| | 5 - 6 | 10/11/2016 | 274 | | | 42 | _ | | | | 0 |
| SB-1' | 5 - 6 | 3/22/2017 | | <0.00115 | <0.00230 | <0.00115 | <0.00230 | <28.7 | <28.7 | <28.7 | <28.7 |
| | 10 - 11 | 10/11/2016 | 2,760 | - | | | _ | _ | _ | | 0 |
| SB-1' | 10 - 11 | 3/22/2017 | | <0.00119 | <0.00238 | <0.00119 | <0.00238 | <29.8 | <29.8 | <29.8 | <29.8 |
| | 15 - 16 | 10/11/2016 | 6,650 | | | | - | | | | 0 |
| | 20 - 21 | 10/11/2016 | 5,600 | | | | | | | | 0 |
| | 25 - 26 | 10/11/2016 | 4,220 | - | - | | | | | _ | 0 |
| | 30 - 31 | 10/11/2016 | 4,790 | - | - | | | | | - | 0 |
| | 35 - 36 | 10/11/2016 | 4,880 | - | - | | - | | | | 0 |
| | 40 - 41 | 10/11/2016 | 7,720 | - | | | - | *** | | | 0 |
| | 45 - 46 | 10/11/2016 | 6,960 | | | | - | | 122 | | 0 |
| | 50 - 51 | 10/11/2016 | 6,090 | - | | | _ | | | | 0 |
| | 55 - 56 | 10/11/2016 | 10,800 | - | | | - | | | | 0 |
| | 60 - 61 | 10/11/2016 | 12,200 | | | | _ | | | | 0 |
| | 65 - 66 | 10/11/2016 | 17,100 | | - | | | | | _ | 0 |
| | 70 - 71 | 10/11/2016 | 11,100 | | (1-4-1) | | | | - | - | 0 |
| | 75 - 76 | 10/11/2016 | 10,100 | | | 122 | | 1_ | | | 0 |
| | 80 - 81 | 10/11/2016 | 12,200 | - | | | - | | | | 0 |
| | 85 - 86 | 10/11/2016 | 9,720 | 200 | - | - | - | | | | 0 |
| | 90 - 91 | 10/11/2016 | 8,230 | II AND | - | - | | | | | 0 |
| | 95 - 96 | 10/11/2016 | 9,770 | | - | - | - | | - | | 0 |
| | 100 - 101 | 10/11/2016 | 10,600 | 1227 | - | - | | - | - | | 0 |
| | | | | | | | | | | | |
| SB-2 | 2 - 3 | 10/11/2016 | 204 | <0.00111 | <0.00222 | <0.00111 | <0.00222 | <27.778 | <27.778 | <27.778 | <27.778 |
| | 5 - 6 | 10/11/2016 | 250 | 15770 | - | | | <32.051 | <32.051 | <32.051 | <32.051 |
| SB-2' | 5 - 6 | 3/22/2017 | | <0.00119 | <0.00238 | <0.00119 | <0.00238 | <29.8 | <29.8 | <29.8 | <29.8 |
| | 10 - 11 | 10/11/2016 | 59 | 00 | | | | 12 | _ | | 0 |
| SB-2' | 10 - 11 | 3/22/2017 | | <0.00111 | <0.00222 | <0.00111 | <0.00222 | <27.8 | <27.8 | <27.8 | <27.8 |
| | 15 - 16 | 10/11/2016 | 141 | | - | 3-2 | | | | | 0 |
| | | | | | | | | 1 | | | |
| SB-3 | 2 - 3 | 10/19/2016 | <1.03 | <0.00103 | <0.00206 | < 0.00103 | <0.00206 | <25.8 | <25.8 | <25.8 | <25.8 |
| | 5 - 6 | 10/19/2016 | <1.09 | <0.00109 | <0.00217 | <0.00109 | <0.00217 | <27.2 | <27.2 | <27.2 | <27.2 |
| | 10 - 11 | 10/19/2016 | 437 | | | _ | - | | - | - | 0 |
| SB-3' | 10 - 11 | 3/22/2017 | | <0.00111 | <0.00222 | <0.00111 | <0.00222 | <27.8 | <27.8 | <27.8 | <27.58 |
| | 15 - 16 | 10/19/2016 | 107 | | - | | | | | - | 0 |
| | 20 - 21 | 10/19/2016 | 176 | | | | | | _ | - | 0 |
| | | | | | | | | | | | |
| SB-4 | 2 - 3 | 10/19/2016 | <1.05 | <0.00105 | <0.00211 | <0.00105 | <0.00211 | <26.3 | <26.3 | <26.3 | <26.3 |
| | 5 - 6 | 10/19/2016 | <1.04 | - | | | | | - | 22 | 0 |
| SB-4' | 5 - 6 | 3/22/2017 | - | <0.00119 | <0.00238 | <0.00119 | <0.00238 | <29.8 | <29.8 | <29.8 | <29.8 |
| | 10 - 11 | 10/19/2016 | 28 | | - | | | _ | | - | 0 |
| SB-4' | 10 - 11 | 3/22/2017 | | <0,00111 | <0.00222 | <0.00111 | <0.00222 | <27.8 | <27.8 | <27.8 | <27.8 |
| | | | | | | | | | | | |
| SB-5 | 2 - 3 | 10/19/2016 | <1.06 | <0.00106 | <0.00213 | <0.00106 | <0.00213 | <26.6 | <26.6 | <26.6 | <26.6 |
| | 5 - 6 | 10/19/2016 | <1.05 | | | | 227 | | - | | 0 |
| SB-5' | 5 - 6 | 3/22/2017 | | <<0.00111 | <0.00222 | <0.00111 | <0.00222 | <27.8 | <27.8 | <27.8 | <27.8 |
| | 10 - 11 | 10/19/2016 | 31 | | | | 221 | | | | 0 |
| SB-5' | 10 - 11 | 3/22/2017 | - | <0.00114 | <0.00227 | <0.00114 | <0.000227 | <28.4 | <28.4 | <28.4 | <28.4 |
| SB-6 | 2-3 | 10/19/2016 | <1.05 | <0.00105 | <0.00211 | <0.00105 | <0.00211 | <26.3 | <26.3 | <26.3 | c26 2 |
| | 5 - 6 | 10/19/2016 | 17 | | | | | | 1059-820 | ES14888833 | <26.3 |
| SB-6' | 5-6 | 3/22/2017 | | <0.00115 | <0.00230 | <0.00115 | <0.00230 | <28.7 | -207 | -20.7 | 0 |
| 50,000,000 | 10 - 11 | 10/19/2016 | 19 | | | -0.00115 | | 0.000000 | <28.7 | <28.7 | <28.7 |
| SB-6' | 10 - 11 | 3/22/2017 | | <0.00118 | <0.00235 | <0.00118 | <0.00235 | | -20.4 | | 0 |
| A. 100 Per 1977 | and the same of | | 4000 | | | -0.00110 | V.UU233 | <29.4 | <29.4 | <29.4 | <29.4 |

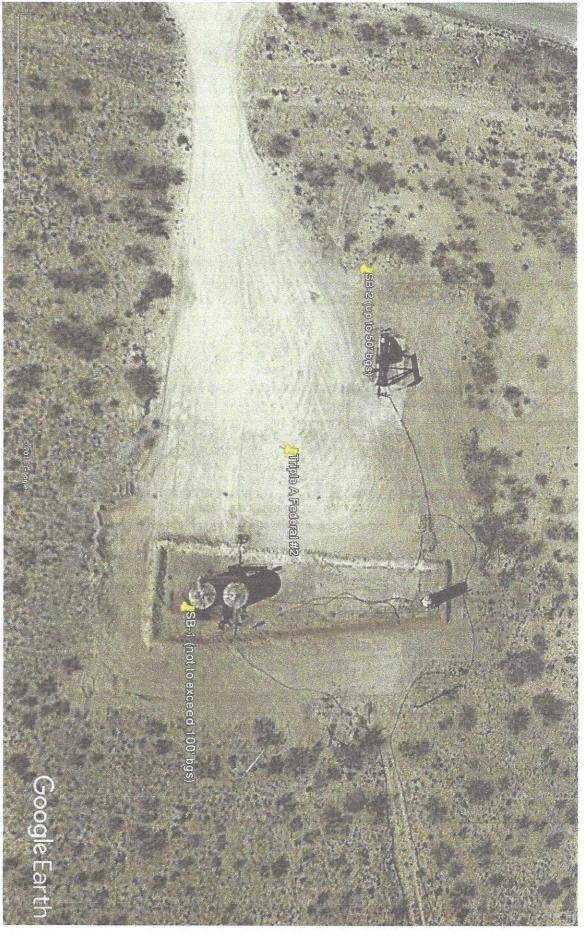
Nates: Analysis performed by Prmian Basin Environmental Lab, Midland, Texas
Samples analyzed via EPA method SW-8015M (TPH) and SW-300 (chloride).
Depth measurements are in feet below ground surface (bgs).
All concentrations are in milligrams per kilogram (mg/Kg) equivalent to parts per million (ppm).

FIGURES





feet meters



80

200



Appendix A

Site Name:

Siana Triple A Fed #2

Job Number: Driller: 16-0401

Drill Method: Latitude: Scarborough Drilling

Air Rotary 32°19'1.81"N Location:

Lea County, NM

Boring ID:

Date:

10/11/2016 A. Pachlhofer

SB-1

Geologist: Longitude:

103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 9:50 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 9:55 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 10:00 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |
| 15 | 10:05 | 0.0 | SM | Light orange to tan | Medium sized sand/25% - 40% fines/silts & clays |
| 20 | 10:10 | 0.0 | SM | Light orange to tan | Medium sized sand/25% - 40% fines/silts & clays |
| 25 | 10:15 | 0.0 | SP | Orange to light orange | Medium to fine sand/little to no silts or clays |
| 30 | 10:20 | 0.0 | SP | Orange to light orange | Medium to fine sand/little to no silts or clays |
| 35 | 10:25 | 0.0 | SP | Orange to light orange | Medium to fine sand/little to no silts or clays |
| 40 | 10:30 | 0.0 | SP | Orange to light orange | Medium to fine sand/little to no silts or clays |
| 45 | 10:35 | 0.0 | SP | Orange to light orange | Medium to fine sand/little to no silts or clays |
| 50 | 10:40 | 0.0 | SP | Lighter orange | Medium to fine sand/little to no silts or clays |
| 55 | 10:45 | 0.0 | SP | Lighter orange | Medium to fine sand/little to no silts or clays |
| 60 | 10:50 | 0.0 | SP | Lighter orange | Fine sand/little to no silts or clays |
| 65 | 11:00 | 0.0 | SP | Light orange to tan | Medium sand/well sorted |
| 70 | 11:05 | 0.0 | SP | Light orange to tan | Medium sand/well sorted |
| 75 | 11:10 | 0.0 | SP | Light orange to tan | Medium sand/well sorted |
| 80 | 11:15 | 0.0 | SP | Light orange to tan | Medium sand/well sorted |
| 85 | 11:20 | 0.0 | SP | Lighter orange | Medium sand with pebbles/may be trash from surface |
| 90 | 11:25 | 0.0 | SP | Light orange to tan | Medium sand with pebbles/may be trash from surface |
| 95 | 11:30 | 0.0 | SP | Light orange to tan | Fine sand/little to no silts or clays |
| 100 | 11:35 | 0.0 | SP | Light orange to tan | Fine sand/little to no silts or clays |

Site Name: Siana Triple A Fed #2 Location: Lea County, NM Job Number: 16-0401 Boring ID: SB-2 Driller: Scarborough Drilling Date: 10/11/2016 Drill Method: Air Rotary Geologist: A. Pachlhofer Latitude: 32°19'1.81"N Longitude: 103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 12:00 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 12:05 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 12:10 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |
| 15 | 12:15 | 0.0 | SM | Light orange to tan | Medium sized sand/25% - 40% fines/silts & clays |

Site Name:

Siana Triple A Fed #2

Job Number: 16-0401 Driller: Scarboro

16-0401 Scarborough Drilling

Drill Method: Latitude:

Air Rotary 32°19'1.81"N Location:

Lea County, NM

Boring ID: Date: SB-3 10/19/2016

Geologist:

A. Pachlhofer

Longitude:

103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 17:30 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 17:35 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 17:55 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |
| 15 | 18:00 | 0.0 | SM | Light orange to tan | Medium sized sand/25% - 40% fines/silts & clays |
| 20 | 18:05 | 0.0 | SM | Light orange to tan | Medium sized sand/25% - 40% fines/silts & clays |

Site Name: Siana Triple A Fed #2 Location: Lea County, NM Job Number: 16-0401 Boring ID: SB-4 Driller: Scarborough Drilling Date: 10/19/2016 Drill Method: Air Rotary Geologist: A. Pachlhofer Latitude: 32°19'1.81"N Longitude: 103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 17:20 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 17:25 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 17:28 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |

Site Name: Siana Triple A Fed #2 Location: Lea County, NM Job Number: 16-0401 Boring ID: SB-5 Driller: Scarborough Drilling Date: 10/19/2016 Drill Method: Air Rotary Geologist: A. Pachlhofer Latitude: 32°19'1.81"N Longitude: 103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 17:10 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 17:15 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 17:18 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |

Site Name: Siana Triple A Fed #2 Location: Lea County, NM Job Number: 16-0401 Boring ID: SB-6 Driller: Scarborough Drilling Date: 10/19/2016 Drill Method: Air Rotary Geologist: A. Pachlhofer Latitude: 32°19'1.81"N Longitude: 103°27'20.54"W

| Depth | Time | PID (ppm) | USCS | Munsell Color | Description |
|---------|-------|--------------|------|-------------------------|---|
| Surface | | | | | |
| 2 | 16:40 | 0.0 | СН | Medium brown/slight red | Organic silt & clays/top soil with angular cobbles of caliche |
| 5 | 16:45 | 0.0 | SM | Pinkish brown | Sand with fines/silts & clays/fine ground caliche |
| 10 | 16:50 | 0.0 | SM | Light orange | Medium sized sand/25% - 40% fines/silts & clays |

Appendix B

PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



Analytical Report

Prepared for:

Coty Woolf Charger Services P.O. Box 53070 Midland, TX 79710

Project: Triple A Fed #2
Project Number: [none]
Location:

Lab Order Number: 6J17004



NELAP/TCEQ # T104704156-16-6

Report Date: 11/02/16

Charger Services P.O. Box 53070 Midland TX, 79710 Project: Triple A Fed #2

Project Number: [none]
Project Manager: Coty Woolf

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|------------|---------------|--------|----------------|------------------|
| SB-1 (2) | 6J17004-01 | Soil | 10/11/16 09:50 | 10-14-2016 16:18 |
| SB-1 (5) | 6J17004-02 | Soil | 10/11/16 09:55 | 10-14-2016 16:18 |
| SB-1 (10) | 6J17004-03 | Soil | 10/11/16 10:00 | 10-14-2016 16:18 |
| SB-1 (15) | 6J17004-04 | Soil | 10/11/16 10:05 | 10-14-2016 16:18 |
| SB-1 (20) | 6J17004-05 | Soil | 10/11/16 10:10 | 10-14-2016 16:18 |
| SB-1 (25) | 6J17004-06 | Soil | 10/11/16 10:15 | 10-14-2016 16:18 |
| SB-1 (30) | 6J17004-07 | Soil | 10/11/16 10:20 | 10-14-2016 16:18 |
| SB-1 (35) | 6J17004-08 | Soil | 10/11/16 10:25 | 10-14-2016 16:18 |
| SB-1 (40) | 6J17004-09 | Soil | 10/11/16 10:30 | 10-14-2016 16:18 |
| SB-1 (45) | 6J17004-10 | Soil | 10/11/16 10:35 | 10-14-2016 16:18 |
| SB-1 (50) | 6J17004-11 | Soil | 10/11/16 10:40 | 10-14-2016 16:18 |
| SB-1 (55) | 6J17004-12 | Soil | 10/11/16 10:45 | 10-14-2016 16:18 |
| SB-1 (60) | 6J17004-13 | Soil | 10/11/16 10:50 | 10-14-2016 16:18 |
| SB-1 (65) | 6J17004-14 | Soil | 10/11/16 11:00 | 10-14-2016 16:18 |
| SB-1 (70) | 6J17004-15 | Soil | 10/11/16 11:05 | 10-14-2016 16:18 |
| SB-1 (75) | 6J17004-16 | Soil | 10/11/16 11:10 | 10-14-2016 16:18 |
| SB-1 (80) | 6J17004-17 | Soil | 10/11/16 11:15 | 10-14-2016 16:18 |
| SB-1 (85) | 6J17004-18 | Soil | 10/11/16 11:20 | 10-14-2016 16:18 |
| SB-1 (90) | 6J17004-19 | Soil | 10/11/16 11:25 | 10-14-2016 16:18 |
| SB-1 (95) | 6J17004-20 | Soil | 10/11/16 11:30 | 10-14-2016 16:18 |
| SB-1 (100) | 6J17004-21 | Soil | 10/11/16 11:35 | 10-14-2016 16:18 |
| SB-2 (2) | 6J17004-22 | Soil | 10/11/16 12:00 | 10-14-2016 16:18 |
| SB-2 (5) | 6J17004-23 | Soil | 10/11/16 12:05 | 10-14-2016 16:18 |
| SB-2 (10) | 6J17004-24 | Soil | 10/11/16 12:10 | 10-14-2016 16:18 |
| SB-2 (15) | 6J17004-25 | Soil | 10/11/16 12:15 | 10-14-2016 16:18 |
| | | | | |

Fax: (432) 695-6247

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (2) 6J17004-01 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|----------------------|--------------------|------------|------------|---------|----------|----------|---------------|-------|
| | Pern | nian Basin F | Environmen | tal Lab, l | P. | - | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Toluene | ND | 0.00222 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00222 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 89.5 % | 75-12 | 5 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 74.5 % | 75-12 | 5 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | S-GC |
| C6-C12 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C12-C28 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C28-C35 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 90.1 % | 70-13 | 0 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: o-Terphenyl | | 94.8 % | 70-13 | 0 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | ND | 27.778 | mg/kg dry | 1 | [CALC] | 10/15/16 | 10/18/16 | [CALC] | |
| General Chemistry Parameters by El | PA / Standard Method | s | | | | | | | |
| Chloride | 26.5 | 1.11 | mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 | |
| % Moisture | 10.0 | 0.1 | % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (5) 6J17004-02 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|-----------------------|--------------------|-----------|-------------|--------------|----------|----------|---------------|-------|
| | Permia | n Basin E | Environme | ntal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| C6-C12 | ND | 28.409 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C12-C28 | ND | 28.409 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C28-C35 | ND | 28.409 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 89.9 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: o-Terphenyl | | 94.6 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | ND | 28.409 | mg/kg dry | 1 | [CALC] | 10/15/16 | 10/18/16 | [CALC] | |
| General Chemistry Parameters by El | PA / Standard Methods | | | | | | | | |
| Chloride | 274 | 1.14 | mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 | |
| % Moisture | 12.0 | 0.1 | % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (10) 6J17004-03 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 2760 | 11.5 mg/kg dry | 10 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 13.0 | 0.1 % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (15) 6J17004-04 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 6650 | 27.5 mg/kg dry | 25 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (20) 6J17004-05 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 5600 | 27.8 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 10.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (25) 6J17004-06 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 4220 | 27.8 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 10.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (30) 6J17004-07 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 4790 | 26.9 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 7.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (35) 6J17004-08 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 4880 | 26.3 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 5.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (40) 6J17004-09 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 7720 | 28.1 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 11.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (45) 6J17004-10 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 6960 | 27.5 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (50) 6J17004-11 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 6090 | 27.5 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (55) 6J17004-12 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 10800 | 57.5 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 13.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (60) 6J17004-13 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 12200 | 53.8 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 7.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (65) 6J17004-14 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 17100 | 54.9 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (70) 6J17004-15 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 11100 | 60.2 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 17.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (75) 6J17004-16 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 10100 | 52.1 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 4.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (80) 6J17004-17 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 12200 | 64.9 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 23.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (85) 6J17004-18 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 9720 | 52.1 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 4.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (90) 6J17004-19 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 8230 | 26.3 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 5.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (95) 6J17004-20 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 9770 | 53.2 mg/kg dry | 50 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 6.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-1 (100) 6J17004-21 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 10600 | 34.2 mg/kg dry | 25 | P6K0105 | 11/01/16 | 11/02/16 | EPA 300.0 |
|------------|-------|----------------|----|---------|----------|----------|---------------|
| % Moisture | 27.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-2 (2) 6J17004-22 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|----------------------|--------------------|-----------|-------------|---------|----------|----------|---------------|-------|
| | Perm | nian Basin E | Environme | ıtal Lab, I | P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Toluene | ND | 0.00222 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00222 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00111 | mg/kg dry | 1 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 83.6 % | 75-1 | 25 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 75.2 % | 75-1 | 25 | P6J1907 | 10/19/16 | 10/19/16 | EPA 8021B | |
| C6-C12 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C12-C28 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C28-C35 | ND | 27.778 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 92.0 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: o-Terphenyl | | 97.6 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | ND | 27.778 | mg/kg dry | 1 | [CALC] | 10/15/16 | 10/18/16 | [CALC] | |
| General Chemistry Parameters by EI | PA / Standard Method | s | | | | | | | |
| Chloride | 204 | 1.11 | mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 | |
| % Moisture | 10.0 | 0.1 | % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-2 (5) 6J17004-23 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|-----------------------|--------------------|-----------|-------------|---------|----------|----------|---------------|-------|
| | Permi | an Basin I | Environme | ntal Lab, l | L.P. | | | | |
| Organics by GC | | | | | | | | | |
| C6-C12 | ND | 32.051 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C12-C28 | ND | 32.051 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| >C28-C35 | ND | 32.051 | mg/kg dry | 1 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: 1-Chlorooctane | | 96.0 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Surrogate: o-Terphenyl | | 99.6 % | 70-1 | 30 | P6J1808 | 10/15/16 | 10/18/16 | TX 1005 | |
| Total Hydrocarbon nC6-nC35 | ND | 32.051 | mg/kg dry | 1 | [CALC] | 10/15/16 | 10/18/16 | [CALC] | |
| General Chemistry Parameters by E | PA / Standard Methods | | | | | | | | |
| Chloride | 250 | 1.28 | mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 | |
| % Moisture | 22.0 | 0.1 | % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-2 (10) 6J17004-24 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 59.0 | 1.11 mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 10.0 | 0.1 % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-2 (15) 6J17004-25 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 141 | 1.15 mg/kg dry | 1 | P6J1702 | 10/17/16 | 10/18/16 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 13.0 | 0.1 % | 1 | P6J1804 | 10/18/16 | 10/18/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------------------|--------|--------------------|-----------|----------------|------------------|-------------|----------------|------|--------------|-------|
| Batch P6J1808 - General Preparation | n (GC) | | | | | | | | | |
| Blank (P6J1808-BLK1) | | | | Prepared: 1 | 0/15/16 A | nalyzed: 10 | /18/16 | | | |
| C6-C12 | ND | 25.000 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.000 | " | | | | | | | |
| >C28-C35 | ND | 25.000 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 101 | | " | 100 | | 101 | 70-130 | | | |
| Surrogate: o-Terphenyl | 53.7 | | " | 50.0 | | 107 | 70-130 | | | |
| LCS (P6J1808-BS1) | | | | Prepared: 1 | 0/15/16 A | nalyzed: 10 | /18/16 | | | |
| C6-C12 | 998 | 25.000 | mg/kg wet | 1000 | | 99.8 | 75-125 | | | |
| >C12-C28 | 928 | 25.000 | " | 1000 | | 92.8 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 118 | | " | 100 | | 118 | 70-130 | | | |
| Surrogate: o-Terphenyl | 51.1 | | " | 50.0 | | 102 | 70-130 | | | |
| LCS Dup (P6J1808-BSD1) | | | | Prepared: 1 | 0/15/16 A | nalyzed: 10 | /18/16 | | | |
| C6-C12 | 957 | 25.000 | mg/kg wet | 1000 | | 95.7 | 75-125 | 4.14 | 20 | |
| >C12-C28 | 867 | 25.000 | " | 1000 | | 86.7 | 75-125 | 6.84 | 20 | |
| Surrogate: 1-Chlorooctane | 113 | | " | 100 | | 113 | 70-130 | | | |
| Surrogate: o-Terphenyl | 49.6 | | " | 50.0 | | 99.3 | 70-130 | | | |
| Batch P6J1907 - General Preparation | n (GC) | | | | | | | | | |
| Blank (P6J1907-BLK1) | | | | Prepared & | : Analyzed: | 10/19/16 | | | | |
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0638 | | " | 0.0800 | | 79.7 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0766 | | " | 0.0800 | | 95.7 | 75-125 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|--|--------|--------------------|-----------|----------------|------------------|----------|----------------|------|--------------|-------|
| Batch P6J1907 - General Preparation (GC) | | | | | | | | | | |
| LCS (P6J1907-BS1) | | | | Prepared & | Analyzed: | 10/19/16 | | | | |
| Benzene | 0.0903 | 0.00100 | mg/kg wet | 0.100 | | 90.3 | 70-130 | | | |
| Toluene | 0.0887 | 0.00200 | " | 0.100 | | 88.7 | 70-130 | | | |
| Ethylbenzene | 0.119 | 0.00100 | " | 0.100 | | 119 | 70-130 | | | |
| Xylene (p/m) | 0.223 | 0.00200 | " | 0.200 | | 112 | 70-130 | | | |
| Xylene (o) | 0.107 | 0.00100 | " | 0.100 | | 107 | 70-130 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0693 | | " | 0.0800 | | 86.6 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0726 | | " | 0.0800 | | 90.7 | 75-125 | | | |
| LCS Dup (P6J1907-BSD1) | | | | Prepared & | Analyzed: | 10/19/16 | | | | |
| Benzene | 0.0936 | 0.00100 | mg/kg wet | 0.100 | | 93.6 | 70-130 | 3.64 | 20 | |
| Toluene | 0.0944 | 0.00200 | " | 0.100 | | 94.4 | 70-130 | 6.21 | 20 | |
| Ethylbenzene | 0.104 | 0.00100 | " | 0.100 | | 104 | 70-130 | 13.1 | 20 | |
| Xylene (p/m) | 0.212 | 0.00200 | " | 0.200 | | 106 | 70-130 | 5.16 | 20 | |
| Xylene (o) | 0.116 | 0.00100 | " | 0.100 | | 116 | 70-130 | 8.18 | 20 | |
| Surrogate: 1,4-Difluorobenzene | 0.0688 | | " | 0.0800 | | 86.0 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0777 | | " | 0.0800 | | 97.1 | 75-125 | | | |
| Matrix Spike (P6J1907-MS1) | Sou | rce: 6J17004 | -01 | Prepared & | Analyzed: | 10/19/16 | | | | |
| Benzene | 0.0715 | 0.00111 | mg/kg dry | 0.111 | ND | 64.4 | 80-120 | | | QM-07 |
| Toluene | 0.0720 | 0.00222 | " | 0.111 | ND | 64.8 | 80-120 | | | QM-07 |
| Ethylbenzene | 0.105 | 0.00111 | " | 0.111 | ND | 94.4 | 80-120 | | | |
| Xylene (p/m) | 0.187 | 0.00222 | " | 0.222 | ND | 84.1 | 80-120 | | | |
| Xylene (o) | 0.0923 | 0.00111 | " | 0.111 | ND | 83.1 | 80-120 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0879 | | " | 0.0889 | | 98.8 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0707 | | " | 0.0889 | | 79.5 | 75-125 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|--------------|-----------|------------|-------------|-------------|---------|--------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J1702 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J1702-BLK1) | | | | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P6J1702-BS1) | | | | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | 400 | 1.00 | mg/kg wet | 400 | | 99.9 | 80-120 | | | |
| LCS Dup (P6J1702-BSD1) | | | | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | 398 | 1.00 | mg/kg wet | 400 | | 99.6 | 80-120 | 0.313 | 20 | |
| Duplicate (P6J1702-DUP1) | Sour | rce: 6J17002 | -01 | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | 935 | 11.1 | mg/kg dry | | 940 | | | 0.569 | 20 | |
| Duplicate (P6J1702-DUP2) | Sour | rce: 6J17004 | -25 | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | 141 | 1.15 | mg/kg dry | | 141 | | | 0.0163 | 20 | |
| Matrix Spike (P6J1702-MS1) | Sou | rce: 6J17002 | -01 | Prepared: | 10/17/16 A | nalyzed: 10 | 0/18/16 | | | |
| Chloride | 1540 | 11.1 | mg/kg dry | 556 | 940 | 108 | 80-120 | | | |
| Batch P6J1804 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J1804-BLK1) | | | | Prepared & | k Analyzed: | 10/18/16 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6J1804-DUP1) | Sour | rce: 6J17004 | -25 | Prepared & | k Analyzed: | 10/18/16 | | | | |
| % Moisture | 13.0 | 0.1 | % | | 13.0 | | | 0.00 | 20 | |
| Duplicate (P6J1804-DUP2) | Sou | rce: 6J17009 | -05 | Prepared & | k Analyzed: | 10/18/16 | | | | |
| % Moisture | ND | 0.1 | % | | ND | | | | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|--------------|-----------|-------------|-------------|-------------|--------|--------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J1804 - *** DEFAULT PREP *** | | | | | | | | | | |
| Duplicate (P6J1804-DUP3) | Sour | ce: 6J17013- | 04 | Prepared & | Analyzed: | 10/18/16 | | | | |
| % Moisture | ND | 0.1 | % | | 8.0 | | | 200 | 20 | |
| Batch P6K0104 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6K0104-BLK1) | | | | Prepared & | Analyzed: | 11/01/16 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6K0104-DUP1) | Sour | ce: 6J31008- | 02 | Prepared & | z Analyzed: | 11/01/16 | | | | |
| % Moisture | 2.0 | 0.1 | % | | 3.0 | | | 40.0 | 20 | |
| Duplicate (P6K0104-DUP2) | Sour | ce: 6J20003- | 13 | Prepared & | Analyzed: | 11/01/16 | | | | |
| % Moisture | 2.0 | 0.1 | % | | 1.0 | | | 66.7 | 20 | |
| Batch P6K0105 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6K0105-BLK1) | | | | Prepared: 1 | 11/01/16 A | nalyzed: 11 | /02/16 | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P6K0105-BS1) | | | | Prepared: 1 | 11/01/16 A | nalyzed: 11 | /02/16 | | | |
| Chloride | 404 | 1.00 | mg/kg wet | 400 | | 101 | 80-120 | | | |
| Duplicate (P6K0105-DUP1) | Sour | ce: 6K01001 | -01 | Prepared: 1 | 11/01/16 A | nalyzed: 11 | /02/16 | | | |
| Chloride | 5.61 | 1.01 | mg/kg dry | | 5.39 | | | 3.86 | 20 | |
| Duplicate (P6K0105-DUP2) | Sour | ce: 6J17004- | 14 | Prepared: 1 | 11/01/16 A | nalyzed: 11 | /02/16 | | | |
| Chloride | 17100 | 54.9 | mg/kg dry | | 17100 | | | 0.0483 | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

General Chemistry Parameters by EPA / Standard Methods - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|---------|--------|-----------|-------|-------|--------|------|--------|-----|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

Batch P6K0105 - *** DEFAULT PREP ***

| Matrix Spike (P6K0105-MS1) | Source | e: 6K01001-01 | Prepared: 1 | 1/01/16 A | nalyzed: 11 | /02/16 | |
|----------------------------|--------|----------------|-------------|-----------|-------------|--------|--|
| Chloride | 843 | 1.01 mg/kg dry | 1010 | 5.39 | 82.9 | 80-120 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

| | Drew | Darron | | | |
|---------------------|------|--------|-------|-----------|--|
| Report Approved By: | | | Date: | 11/2/2016 | |

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

| Relinquished by: | Relinquished by: | Relinquished | Special instructions: | 0,1 | ور | Ð | ク | [0 | S | Ý | 2 | \mathcal{C} | | LAB#(lab use only) | (lab use only) ORDER #: | Š | T. | Ω | ဂ္ဂ | ဂ္ဂ | <i>727.</i> |
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| emperature opour r ecelved: | by Sampler/Client by Courier? | stody seals on co stody seals on co | ple Containers I | ration/Comme | | | | | | | | | | | | Analyze | Standard | | | | Phone: 43 Sic. |
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| Date | Date | 10/14/16 | | | | | | | | | | | | | | 1 | | | 325-66 | | | hussel Seu | Coly u | CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian B 1400 Rani |
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| $ \Lambda\rangle$ | | | | | | | | | | | | | - | + | ield Filtered otal #. of Containers | | 1, | ~ ≥ | ĺ | 1. | | | Midland, Texas | EQUEST Permian Basin En 1400 Rankin Hwy |
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| °C Factor | | Custody seals on container(s) Custody seals on cooler(s) Custody seals on cooler(s) | 9,5 | _ | + | +- | + | + | + | + | + | - | + | \dashv | | | \dashv | | | | | | 7 | Phone: 432-686-7235 |
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| 2 | | , | | V S | 24 | <u> </u> | 148 | \$ 2 | 7 | | 42 | # P | 1:36 | Time Sampled Field Filtered Total #. of Containers Ice HNO _{3 250,ml Poly} HCl | Preservation | e-mail: Coty. We | Fax No: | | | | AL YSIS REQUEST Permian Basin Em 1400 Rankin Hwy Midland, Texas 7 |
| 10/14/11 | Date | Date | | | | | | | | | | | S | | ation & # of Containers Matrix | bolf @ Augerservices | Re | | | | EQUEST Permian Basin Environmental Lab, LP 1400 Rankin Hwy Midland, Texas 79701 |
| Time lemperature Received: () Adjusted: Q | ime Sample Hand De by Sampler/C by Courier? | <u> </u> | | | | | | | | | | | X | NP=Non-Potable Specify Other TPH by TX 1005 (6015B) 8015M Chloride CTEX by 8021B | TX . | Corn | Report Format: X Standard | PO#: | Project Loc: | Project #: | Ph Project Name: |
| Upon Receipt: | Sample Hand Delivered by Sampler/Client Rep.? by Courier? UPS DHL Redi | Labels on container(s) Custody seals on container(s) Custody seals on cooler(s) | Laboratory Comments: Sample Containers Intact? VOCs Free of Headspace? | | | | | | | | | | | | | Analyze For: | ☐ TRRP | | | | Phone: 432-686-7235 |
| | Ey Lone Star | 文 <u>·</u> :222 | N HA | | | | | | | | | | | Rush 24 48 72 (Pleas Standard | e cali) | | NPDES | | | Р | A age 36 of 38 |

| Penins Base Environmental Lib., LP | | Relinquished by: | Nomin iquisited by: | | Relinauished by: | Special Instructions: | J) (| 30 | 26 | 26 | S | 20 | 25 | 24 | 122 | \mathcal{C} | LAB#(lab use only) | ORDER #: US 19014 | Sampler Signature: | Telephone No: | City/State/Zip: | Company Address: | Company Name | Project Manager: | JPJBJDJLAJB |
|--|----------|------------------|---------------------|-----------------------|------------------|-----------------------|---------|----------|--|--------------|---|---|--------------|-----------|----------|---------------|---|--|--------------------|------------------|-----------------|------------------|--|------------------|--|
| Total Rainfort Hay Midland, Toxas 79791 Proper Name: Frequently Frequently | | Date | Çal | 10/14/16 | Date | | | | | | See | | | . 1 | | | | | /MOS | 25-669 | | | Charle & | Coty h | CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian B 1400 Rani |
| Total Rainfort Hay Midland, Toxas 79791 Proper Name: Frequently Frequently | | Time | | 603 | Time | | 4, | 40 | 35 | 30 | 63 | 24 | 16 | 10 | 5 | | | | | 27 | | | Nicc. | 100/f | \$ΤΟΦΥ |
| Flax No. Field Filtered Midland, Tocas 79701 Project Inc.: Pro | AND O | X | Venetal phy. | 1 | | | 5 | | | | 3 | 9 | - | 7 | , , | 10/11/ | | | | \(\mu_{\cdot\}\) | | | \ \sigma_\chi_\chi_\chi_\chi_\chi_\chi_\chi_\chi | , | RECORD ANI |
| Fleid Filtered Footal A, Orcentainers Left - M, 2616 - Marchita Hub, LP Preservation & F. of Combiners Field Filtered Preservation & F. of Combiners | | | | <u> </u> | | | 12:45 | 12:40 | 12:35 | 12:30 | 12:25 | 12:20 | 12:15 | 12:10 |] / | | Time Sampled | | - e-mail: | Fax No: | | | | | ANALYSIS F |
| Project Name: Fold # 2 Project Loc: Projec | | | | | | | | | | | | | | | | | | 1 | h | 1 | | | | Mid | REQU Perm |
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| Project Name: Fold # 2 Project Loc: Projec | | | | | | | \leq | | F | F | | | | | | \subseteq | | Pie | 7.4 | | | | | , Te | 7 Bas nkin |
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| Project Name: Fold # 2 Project Loc: Projec | 1) | | | | | | | \vdash | ╁┈ | | | - | ┢┈ | | \vdash | - | | ig 8 | 2 | 3 | | | | 797 | viro |
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| Project Name: Type Charactery Comments: BEEX to Sample Format: Report Format: X Standard TRRP NPDES Report Format: X Standard TRRP NPDES TITH BY 1005 (2018): 9021B Analyze For: A | | | | | | | | | | | | | | | | | Na ₂ S ₂ O ₃ |] <u>§</u> | 11 | ` | 1 | | | | nt <u>a</u> |
| Project Name: Type Charactery Comments: BEEX to Sample Format: Report Format: X Standard TRRP NPDES Report Format: X Standard TRRP NPDES TITH BY 1005 (2018): 9021B Analyze For: A | 2 | | | | | | | | | | | | | | | | None 1L Poly | iners | Jed S | | | | ļ | | <u> </u> |
| Project Name: Type Comments: Sample Containers Intered Sample Hand Delivered by Scure? Necetived: Containers Delivered by Sample Hand Delivered by Sample Hand Delivered by Sample Hand Delivered by Sample Containers Delivered by Sample Containers Delivered by Sample Containers Delivered by Sample Hand Delivered by Sample Containers Sample Sample Sample Sample Containers Delivered by Sample Containers Sample | Æ |) Pat | ! | <u> </u> | 힑 | | | _ | ļ | <u> </u> | _ | ļ | | | _ | | | H | Ž | ļ | ļ | ļ | l | ł | Ê |
| Project Loc: Project Loc: Project Loc: Po #: Analyze For: Analyze F | 1/6 | 17. 3000 27. | | P | 9 | | < | - | - | - | - | | _ | | - | N | GW = Groundwater S=Soil/Solid | Matrix | | Repo | | | | 70 | |
| #: Analyze For: Number Comments: Sample Containers Intact? Number Containers Intact. Number Containers Int | 16 | ∏ | | = | | | - | | | | | \vdash | | | | V | | | T 1 | À | | Pro | 70 | rojec | |
| #: Analyze For: Number Comments: Sample Containers Intact? Number Containers Intact. Number Containers Int | 13 | s a | | | 高 | | | | + | + | = | - | = | | E | | | · · · · · · · · · · · · · · · · · · · | 1 7 | ma | ס | <u>60</u> | roje | ž Z | |
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| Rush 24 48 72 (Please call) Rush 24 48 72 (Please call) | ļä | | Samp Souri | y se |) ဂ | 6 CO 5 | | | | | | L | | | | | | | 11 | Star | | | 1 | 2 | 70 |
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| Rush 24 48 72 (Please call) Rush 24 48 72 (Please call) | C | つ9 | lient | n 88 n 88 slive | ner(| eads | 9 | - | ╀ | 1 | | | | | ├_ | <u> </u> | | | ĮŽį | _ | Ì | | | 6 | |
| Rush 24 48 72 (Please call) Rush 24 48 72 (Please call) | ا | , (ece) | PS PS | ntain oler(| 9) | nts: ntag | | + | ╀ | ╂ | \vdash | ╀ | ┼ | ╀ | ╀ | - | | | 릵 | | , | | | D; | 32-6 |
| RP NPD NPD Star Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z | [편] 다 | ΥĒ | د ت | er(s | | 5 ,6 | - | +- | + | + | + | \vdash | + | - | \vdash | - | | ······································ | 11 | | | | | En. | £ 89. |
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| Page 37 of | | | | | | | | | <u> </u> | <u> </u> | | <u></u> | | <u>L.</u> | L | <u></u> | stangara | | | | ı | 1 | Р | age 3 | 7 of 38 |

| Relinquished by: | Relinquished by: | Relinquished by: | Special instructions: | | | | | | | | | 32 58-2 | LAB#(lab use only) | ORDER # 17004 | Sampler Signature: | - | City/State/Zip: | Company Address: | Company Name | Project Manager: | PBDLAS |
|--|--|---|---|----------|--------------|-----------------|------------------------|----------|----------|--------------|----------|--|--|---------------------------------------|--------------------|----------------|-----------------|------------------|--------------|------------------|--|
| Date | C Date | Date | | | | | | | | | | | | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | | 325-669- | | | Charger: | Coty Wo | CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian B 1400 Rani |
| Time | Time | Time Time | | - | <u> </u> | | | | | | - | 8 | Beginning Depth Ending Depth | | 15 | 573 | | | Services | F) | ΤΟΣΥΙ |
| Received by | Received by: | | | | | | | | | | | 0/11/16 | Date Sampled | | | 12 | | | Ö | | RECORD AND A |
| | | | | | | | | | | | | 12:50 | Time Sampled | | e-mail: | Fax No: | | | | M | NALYSIS REO Pe 14 |
| $\parallel \mid \setminus \mid$ | | | | ~ | 23 | 5 | 27 | 3 | 4 | 1/2 | 100 | = | Total #. of Containers | | 5 | 1 | | | | Midland, Texas | EQUEST Permian Basin Environmental Lab, LP 1400 Rankin Hwy |
| | | | | <u></u> | 2 | 2 | ž | 27 | Y | 5 7 | 4 | × | Ice | | 15 | | | | | Ď, T | ST In Ba |
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| | | | | _ | <u> </u> | | | | | | | <u> </u> | нсі | vatio |) oct | | | 1 | | \$ 73 | Wy Env |
| | | | | <u> </u> | <u> </u> | | | _ | \perp | | <u> </u> | <u> </u> | H ₂ SO ₄ | Qo . | 2 | | | | | 79701 | ron |
| | | | | - | - | | | | - | ┿ | ╁ | | NaOH | # of Containers | Oh | İ | | | | | men |
| | | | | \vdash | | | | - | | +- | ┼ | ┢ | Na ₂ S ₂ O ₃ None 1L Poly | - itali | James 1 | | | | | | |
| | _ | | | - | - | | | - | - | ╁ | +- | ├ | NaOH/ZnAc | - 8 | 20 | 1 | | | 1 | | ab, |
| F ame | Date | Date | | - | | | | | \dashv | + | ╁ | ┢ | DW=Drinking Water SL=Sludge | +1 | Services | ı | İ | 1 | 1 | ı | 두 |
| 1 | | | | | 2 | 7 | Y | 1 | 4 | \checkmark | 4 | ~ | GW = Groundwater S=Soil/Solid | Matrix | 5 | 20 | | | | | |
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| Time | Time | Time | | _ | _ | | \square | | | 1 | _ | | TPH by TX 1005 (8015B) 8015M | | 62 | Report Format: | | Project Loc: | Pro | Project Name: | |
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| 11 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | nple Hand I by Sampler by Courier? | eals eals | ය මැති ර | - | | | $\vdash \vdash \vdash$ | \dashv | \dashv | +- | + | - | | | | Standard | | | - | 1-7 | 身 |
| | Sample Hand Delivered by Sampler/Client Rep. ? by Courier? UPS C | Labels on container(s) Custody seals on container(s) Custody seals on cooler(s) | Laboratory Comments: Sample Containers Intac VOCs Free of Headspace | 100000 | | | H | \vdash | + | 1 | + | | | | Analyze | ard | | | | 12 | Phone: |
| Re | HER HER | | dspa | | | | \square | \top | \top | 1 | T | | | | | | | | | 200 | |
| n | ი გ ი | ainer (s) | Sample Containers Intact? VOCs Free of Headspace? | | | | | | \top | 1 | | | | | F G | | | | | 12 | 2-686 |
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| C Facto | 도 | (S) | | | | | | | | | | | L | | | ~ | | l l | 1 | 17 | 7: |
| eceipt: C Factor | PHL ? | (s) | 194 | | | | | | | \perp | | | | | | TRRP | | | | 7 | 432-686-7235 |
| ipt: c c.Factor // | OHL F | °S YX€ | | | | | | | | | | | | | | 2 | | | | A Fe | 7235 |
| ipt: c C Factor M | |)(S | | | | | | | | | | | | | | | | | | A Fed | 7235 |
| ipt: C C Factor M(X) | |)Q | | | | | | | | | | | | | | | | | | A | -7235 |
| ipt: c c Factor M | OHL FOR LO | (6) (7) (4) (8) (8) | | | | | | | | | | | Rush 24 48 72 (Pleas Standard | se call) | | | | | | A Fed#2 | 7723 6 88 of 38 |

PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



Analytical Report

Prepared for:

Coty Woolf Charger Services P.O. Box 53070 Midland, TX 79710

Project: Siana Triple A Fed #2
Project Number: [none]
Location:

Lab Order Number: 6J21007



NELAP/TCEQ # T104704156-16-6

Report Date: 03/17/17

Charger Services P.O. Box 53070

Midland TX, 79710

Project: Siana Triple A Fed #2

Project Number: [none] Project Manager: Coty Woolf

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|-------------|---------------|--------|----------------|------------------|
| SB-3 (2') | 6J21007-01 | Soil | 10/19/16 17:30 | 10-21-2016 08:15 |
| SB-3 (5') | 6J21007-02 | Soil | 10/19/16 17:35 | 10-21-2016 08:15 |
| SB-3 (10') | 6J21007-03 | Soil | 10/19/16 17:55 | 10-21-2016 08:15 |
| SB-4 (2') | 6J21007-04 | Soil | 10/19/16 17:20 | 10-21-2016 08:15 |
| SB-4 (5') | 6J21007-05 | Soil | 10/19/16 17:25 | 10-21-2016 08:15 |
| SB-5 (2') | 6J21007-06 | Soil | 10/19/16 17:10 | 10-21-2016 08:15 |
| SB-5 (5') | 6J21007-07 | Soil | 10/19/16 17:15 | 10-21-2016 08:15 |
| SB-6 (2') | 6J21007-08 | Soil | 10/19/16 16:40 | 10-21-2016 08:15 |
| SB-6 (5') | 6J21007-09 | Soil | 10/19/16 16:45 | 10-21-2016 08:15 |
| SB-6 (10') | 6J21007-10 | Soil | 10/19/16 16:50 | 10-21-2016 08:15 |
| SB-3 (15ft) | 7C13017-01 | Soil | 10/19/16 18:00 | 03-13-2017 16:25 |
| SB-3 (20ft) | 7C13017-02 | Soil | 10/19/16 18:05 | 03-13-2017 16:25 |
| SB-4 (10ft) | 7C13017-03 | Soil | 10/19/16 17:28 | 03-13-2017 16:25 |
| SB-5 (10ft) | 7C13017-04 | Soil | 10/19/16 17:18 | 03-13-2017 16:25 |

Fax: (432) 695-6247

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-3 (2') 6J21007-01 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|------------|--------------------|------------|-------------|-----------|----------|----------|---------------|-------|
| | Per | mian Basin E | Environmer | ıtal Lab, I | P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00103 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Toluene | ND | 0.00206 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00103 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00206 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00103 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 86.0 % | 75-1 | 25 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 82.0 % | 75-1 | 25 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| General Chemistry Parameters by EPA / Stan | dard Metho | ds | | | | | | | |
| Chloride | ND | 1.03 | mg/kg dry | 1 | P6J2506 | 10/25/16 | 10/27/16 | EPA 300.0 | |
| % Moisture | 3.0 | 0.1 | % | 1 | P6J2502 | 10/25/16 | 10/25/16 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by EP | A Method 8 | 015M | | | | | | | |
| C6-C12 | ND | 25.8 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| >C12-C28 | ND | 25.8 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| >C28-C35 | ND | 25.8 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 84.3 % | 70-1 | 30 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 100 % | 70-1 | 30 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 25.8 | mg/kg dry | 1 | [CALC] | 10/24/16 | 10/24/16 | calc | |

1400 Rankin HWY Midland, TX 79701 432-686-7235

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-3 (5') 6J21007-02 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|--|--------------|---------------------|------------|-------------|-----------|----------|----------|---------------|-------|
| | Per | mian Basin E | Environmen | ıtal Lab, l | P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00109 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Toluene | ND | 0.00217 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00109 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00217 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00109 | mg/kg dry | 1 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 81.8 % | 75-1 | 25 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 67.9 % | 75-1 | 25 | P6J2603 | 10/25/16 | 10/25/16 | EPA 8021B | S-GC |
| General Chemistry Parameters by EPA / Sta | ndard Metho | ds | | | | | | | |
| Chloride | ND | 1.09 | mg/kg dry | 1 | P6J2506 | 10/25/16 | 10/27/16 | EPA 300.0 | |
| % Moisture | 8.0 | 0.1 | % | 1 | P6J2502 | 10/25/16 | 10/25/16 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by E | PA Method 80 | 015M | | | | | | | |
| C6-C12 | ND | 27.2 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| >C12-C28 | ND | 27.2 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| >C28-C35 | ND | 27.2 | mg/kg dry | 1 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 88.7 % | 70-1 | 30 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 105 % | 70-1 | 30 | P6J2602 | 10/24/16 | 10/24/16 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 27.2 | mg/kg dry | 1 | [CALC] | 10/24/16 | 10/24/16 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-3 (10') 6J21007-03 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 437 | 1.23 mg/kg dry | 1 | P6J2506 | 10/25/16 | 10/27/16 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 19.0 | 0.1 % | 1 | P6J2502 | 10/25/16 | 10/25/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-4 (2') 6J21007-04 (Soil)

| Austra | D 14 | Reporting | TILLIA | Dilectic | Detal | D | A l 1 | Makad | No |
|--|---------------|--------------|------------|-------------|--------------|----------|----------|---------------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
| | Perr | nian Basin F | Environmer | ıtal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| Toluene | ND | 0.00211 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 33.9 % | 75-1 | 25 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | S-GC |
| Surrogate: 1,4-Difluorobenzene | | 76.7 % | 75-1 | 25 | P6J2807 | 10/28/16 | 10/28/16 | EPA 8021B | |
| General Chemistry Parameters by EPA / Sta | andard Method | ls | | | | | | | |
| Chloride | ND | 1.05 | mg/kg dry | 1 | P6J2506 | 10/25/16 | 10/27/16 | EPA 300.0 | |
| % Moisture | 5.0 | 0.1 | % | 1 | P6J2502 | 10/25/16 | 10/25/16 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by I | EPA Method 80 |)15M | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P6K0106 | 10/28/16 | 10/29/16 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P6K0106 | 10/28/16 | 10/29/16 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P6K0106 | 10/28/16 | 10/29/16 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 89.5 % | 70-1 | 30 | P6K0106 | 10/28/16 | 10/29/16 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 99.1 % | 70-1 | 30 | P6K0106 | 10/28/16 | 10/29/16 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 10/28/16 | 10/29/16 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-4 (5') 6J21007-05 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | ND | 1.04 mg/kg dry | 1 | P6K0207 | 11/02/16 | 11/03/16 | EPA 300.0 |
|------------|-----|----------------|---|---------|----------|----------|---------------|
| % Moisture | 4.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-5 (2') 6J21007-06 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|-----------------|--------------------|------------|------------|--------------|----------|----------|---------------|-------|
| | Pern | nian Basin E | Environmen | tal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00106 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Toluene | ND | 0.00213 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00106 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00213 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00106 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 76.9 % | 75-1. | 25 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 35.6 % | 75-1. | 25 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | S-GC |
| General Chemistry Parameters by EPA / S | Standard Method | ls | | | | | | | |
| Chloride | ND | 1.06 | mg/kg dry | 1 | P6J3104 | 10/31/16 | 11/01/16 | EPA 300.0 | |
| % Moisture | 6.0 | 0.1 | % | 1 | P6J3101 | 10/31/16 | 10/31/16 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by | y EPA Method 80 | 15M | | | | | | | |
| C6-C12 | ND | 26.6 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| >C12-C28 | ND | 26.6 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| >C28-C35 | ND | 26.6 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 76.1 % | 70-1. | 30 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 92.6 % | 70-1. | 30 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.6 | mg/kg dry | 1 | [CALC] | 10/31/16 | 10/31/16 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-5 (5') 6J21007-07 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | ND | 1.05 mg/kg dry | 1 | P6K0207 | 11/02/16 | 11/03/16 | EPA 300.0 |
|------------|-----|----------------|---|---------|----------|----------|---------------|
| % Moisture | 5.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-6 (2') 6J21007-08 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|--------------|--------------------|------------|-------------|--------------|----------|----------|---------------|-------|
| | Per | mian Basin E | Environmer | ıtal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Toluene | ND | 0.00211 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Ethylbenzene | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00211 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Xylene (o) | ND | 0.00105 | mg/kg dry | 1 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 35.0 % | 75-1 | 25 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | S-GC |
| Surrogate: 1,4-Difluorobenzene | | 76.4 % | 75-1 | 25 | P6J2807 | 10/28/16 | 10/29/16 | EPA 8021B | |
| General Chemistry Parameters by EPA / Sta | ndard Metho | ds | | | | | | | |
| Chloride | ND | 1.05 | mg/kg dry | 1 | P6J3104 | 10/31/16 | 11/01/16 | EPA 300.0 | |
| % Moisture | 5.0 | 0.1 | % | 1 | P6J3101 | 10/31/16 | 10/31/16 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by E | PA Method 80 | 015M | | | | | | | |
| C6-C12 | ND | 26.3 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| >C12-C28 | ND | 26.3 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| >C28-C35 | ND | 26.3 | mg/kg dry | 1 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 74.0 % | 70-1 | 30 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 91.3 % | 70-1 | 30 | P6K0204 | 10/31/16 | 10/31/16 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.3 | mg/kg dry | 1 | [CALC] | 10/31/16 | 10/31/16 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-6 (5') 6J21007-09 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 17.7 | 1.30 mg/kg dry | 1 | P6K0207 | 11/02/16 | 11/03/16 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 23.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-6 (10') 6J21007-10 (Soil)

| | | | | | | | | | I . |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 19.0 | 1.10 mg/kg dry | 1 | P6K0207 | 11/02/16 | 11/03/16 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 9.0 | 0.1 % | 1 | P6K0104 | 11/01/16 | 11/01/16 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-3 (15ft) 7C13017-01 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 107 | 1.06 mg/kg dry | 1 | P7C1603 | 03/16/17 | 03/16/17 | EPA 300.0 |
|------------|-----|----------------|---|---------|----------|----------|---------------|
| % Moisture | 6.0 | 0.1 % | 1 | P7C1703 | 03/17/17 | 03/17/17 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-3 (20ft) 7C13017-02 (Soil)

| | | Reporting | | | | | | | |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 176 | 1.08 mg/kg dry | 1 | P7C1603 | 03/16/17 | 03/16/17 | EPA 300.0 |
|------------|-----|----------------|---|---------|----------|----------|---------------|
| % Moisture | 7.0 | 0.1 % | 1 | P7C1703 | 03/17/17 | 03/17/17 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-4 (10ft) 7C13017-03 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 28.2 | 1.04 mg/kg dry | 1 | P7C1603 | 03/16/17 | 03/16/17 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 4.0 | 0.1 % | 1 | P7C1703 | 03/17/17 | 03/17/17 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-5 (10ft) 7C13017-04 (Soil)

| | | | | | | | | | 1 |
|---------|--------|-----------|-------|----------|-------|----------|----------|--------|-------|
| | | Reporting | | | | | | | |
| Analyte | Result | Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |

Permian Basin Environmental Lab, L.P.

| Chloride | 30.6 | 1.04 mg/kg dry | 1 | P7C1603 | 03/16/17 | 03/16/17 | EPA 300.0 |
|------------|------|----------------|---|---------|----------|----------|---------------|
| % Moisture | 4.0 | 0.1 % | 1 | P7C1703 | 03/17/17 | 03/17/17 | % calculation |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|---------|--------|-----------|-------|-------|--------|------|--------|-----|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

| Blank (P6J2603-BLK1) | | | | Prepared & | Analyzed: | 10/25/16 | | | | |
|---------------------------------|--------|-------------|-----------|------------|-----------|----------|--------|------|----|-------|
| Benzene | ND | 0.00100 | mg/kg wet | 1 | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0670 | | " | 0.0600 | | 112 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0543 | | " | 0.0600 | | 90.4 | 75-125 | | | |
| LCS (P6J2603-BS1) | | | | Prepared & | Analyzed: | 10/25/16 | | | | |
| Benzene | 0.0876 | 0.00100 | mg/kg wet | 0.100 | | 87.6 | 70-130 | | | |
| Toluene | 0.0846 | 0.00200 | " | 0.100 | | 84.6 | 70-130 | | | |
| Ethylbenzene | 0.102 | 0.00100 | " | 0.100 | | 102 | 70-130 | | | |
| Xylene (p/m) | 0.192 | 0.00200 | " | 0.200 | | 96.2 | 70-130 | | | |
| Xylene (o) | 0.0892 | 0.00100 | " | 0.100 | | 89.2 | 70-130 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0721 | | " | 0.0600 | | 120 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0466 | | " | 0.0600 | | 77.8 | 75-125 | | | |
| LCS Dup (P6J2603-BSD1) | | | | Prepared & | Analyzed: | 10/25/16 | | | | |
| Benzene | 0.0942 | 0.00100 | mg/kg wet | 0.100 | | 94.2 | 70-130 | 7.30 | 20 | |
| Toluene | 0.0903 | 0.00200 | " | 0.100 | | 90.3 | 70-130 | 6.47 | 20 | |
| Ethylbenzene | 0.117 | 0.00100 | " | 0.100 | | 117 | 70-130 | 13.7 | 20 | |
| Xylene (p/m) | 0.211 | 0.00200 | " | 0.200 | | 106 | 70-130 | 9.31 | 20 | |
| Xylene (o) | 0.0962 | 0.00100 | " | 0.100 | | 96.2 | 70-130 | 7.59 | 20 | |
| Surrogate: 4-Bromofluorobenzene | 0.0553 | | " | 0.0600 | | 92.2 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0768 | | " | 0.0600 | | 128 | 75-125 | | | S-GC |
| Matrix Spike (P6J2603-MS1) | Sour | ce: 6J21002 | -03 | Prepared & | Analyzed: | 10/25/16 | | | | |
| Benzene | 0.176 | 0.00105 | mg/kg dry | 0.211 | ND | 83.4 | 80-120 | | | |
| Toluene | 0.177 | 0.00211 | " | 0.211 | 0.00151 | 83.5 | 80-120 | | | |
| Ethylbenzene | 0.200 | 0.00105 | " | 0.211 | 0.00275 | 93.5 | 80-120 | | | |
| Xylene (p/m) | 0.342 | 0.00211 | " | 0.421 | 0.0133 | 78.1 | 80-120 | | | QM-07 |
| Xylene (o) | 0.154 | 0.00105 | " | 0.211 | 0.0377 | 55.1 | 80-120 | | | QM-07 |
| Surrogate: 1,4-Difluorobenzene | 0.0741 | | " | 0.0632 | | 117 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0508 | | " | 0.0632 | | 80.5 | 75-125 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| Amalista | D 1. | Reporting | TT5 | Spike | Source | 0/BEC | %REC | DDD | RPD | NT-4- |
|--|--------|----------------|-----------|------------|-------------|----------|--------|------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J2603 - General Preparation (GC) | | | | | | | | | | |
| Matrix Spike Dup (P6J2603-MSD1) | Sou | ırce: 6J21002- | -03 | Prepared & | & Analyzed: | 10/25/16 | | | | |
| Benzene | 0.159 | 0.00105 | mg/kg dry | 0.211 | ND | 75.5 | 80-120 | 9.90 | 20 | QM-0 |
| Toluene | 0.155 | 0.00211 | " | 0.211 | 0.00151 | 73.0 | 80-120 | 13.4 | 20 | QM-0 |
| Ethylbenzene | 0.174 | 0.00105 | " | 0.211 | 0.00275 | 81.6 | 80-120 | 13.6 | 20 | |
| Xylene (p/m) | 0.295 | 0.00211 | " | 0.421 | 0.0133 | 67.0 | 80-120 | 15.3 | 20 | QM-0 |
| Xylene (o) | 0.131 | 0.00105 | " | 0.211 | 0.0377 | 44.2 | 80-120 | 22.0 | 20 | QM-0 |
| Surrogate: 1,4-Difluorobenzene | 0.0783 | | " | 0.0632 | | 124 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0469 | | " | 0.0632 | | 74.2 | 75-125 | | | S-G |
| Blank (P6J2807-BLK1) Benzene | ND | 0.00100 | mø/kø wet | Prepared & | & Analyzed: | 10/28/16 | | | | |
| Batch P6J2807 - General Preparation (GC) | | | | | | | | | | |
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0286 | | " | 0.0800 | | 35.8 | 75-125 | | | S-G |
| Surrogate: 1,4-Difluorobenzene | 0.0615 | | " | 0.0800 | | 76.9 | 75-125 | | | |
| LCS (P6J2807-BS1) | | | | Prepared & | & Analyzed: | 10/28/16 | | | | |
| Benzene | 0.0847 | 0.00100 | mg/kg wet | 0.100 | | 84.7 | 70-130 | | | |
| Toluene | 0.0880 | 0.00200 | " | 0.100 | | 88.0 | 70-130 | | | |
| Ethylbenzene | 0.0930 | 0.00100 | " | 0.100 | | 93.0 | 70-130 | | | |
| Xylene (p/m) | 0.171 | 0.00200 | " | 0.200 | | 85.4 | 70-130 | | | |
| Xylene (o) | 0.0828 | 0.00100 | " | 0.100 | | 82.8 | 70-130 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0748 | | " | 0.0800 | | 93.5 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0263 | | " | 0.0800 | | 32.8 | 75-125 | | | S-G |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--|--------|---------------|-----------|-------------|-------------|-------------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J2807 - General Preparation (GC) | | | | | | | | | | |
| LCS Dup (P6J2807-BSD1) | | | | Prepared & | analyzed: | 10/28/16 | | | | |
| Benzene | 0.0846 | 0.00100 | mg/kg wet | 0.100 | | 84.6 | 70-130 | 0.154 | 20 | |
| Toluene | 0.0882 | 0.00200 | " | 0.100 | | 88.2 | 70-130 | 0.204 | 20 | |
| Ethylbenzene | 0.0893 | 0.00100 | " | 0.100 | | 89.3 | 70-130 | 4.10 | 20 | |
| Xylene (p/m) | 0.166 | 0.00200 | " | 0.200 | | 83.1 | 70-130 | 2.70 | 20 | |
| Xylene (o) | 0.0850 | 0.00100 | " | 0.100 | | 85.0 | 70-130 | 2.68 | 20 | |
| Surrogate: 4-Bromofluorobenzene | 0.0259 | | " | 0.0800 | | 32.4 | 75-125 | | | S-GO |
| Surrogate: 1,4-Difluorobenzene | 0.0754 | | " | 0.0800 | | 94.2 | 75-125 | | | |
| Matrix Spike (P6J2807-MS1) | Sou | ırce: 6J21004 | -04 | Prepared: 1 | 10/28/16 A | nalyzed: 10 | /29/16 | | | |
| Benzene | 0.164 | 0.00143 | mg/kg dry | 0.286 | ND | 57.3 | 80-120 | | | QM-0 |
| Toluene | 0.160 | 0.00286 | " | 0.286 | ND | 56.1 | 80-120 | | | QM-07 |
| Ethylbenzene | 0.149 | 0.00143 | " | 0.286 | ND | 52.3 | 80-120 | | | QM-07 |
| Xylene (p/m) | 0.253 | 0.00286 | " | 0.571 | ND | 44.3 | 80-120 | | | QM-07 |
| Xylene (o) | 0.111 | 0.00143 | " | 0.286 | ND | 38.7 | 80-120 | | | QM-07 |
| Surrogate: 4-Bromofluorobenzene | 0.0390 | | " | 0.114 | | 34.1 | 75-125 | | | S-GO |
| Surrogate: 1,4-Difluorobenzene | 0.113 | | " | 0.114 | | 99.2 | 75-125 | | | |
| Matrix Spike Dup (P6J2807-MSD1) | Sou | ırce: 6J21004 | -04 | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| Benzene | 0.163 | 0.00143 | mg/kg dry | 0.286 | ND | 57.2 | 80-120 | 0.227 | 20 | QM-07 |
| Toluene | 0.154 | 0.00286 | " | 0.286 | ND | 53.8 | 80-120 | 4.12 | 20 | QM-07 |
| Ethylbenzene | 0.138 | 0.00143 | " | 0.286 | ND | 48.3 | 80-120 | 7.95 | 20 | QM-07 |
| Xylene (p/m) | 0.234 | 0.00286 | " | 0.571 | ND | 40.9 | 80-120 | 8.03 | 20 | QM-07 |
| Xylene (o) | 0.100 | 0.00143 | " | 0.286 | ND | 35.0 | 80-120 | 9.94 | 20 | QM-07 |
| Surrogate: 1,4-Difluorobenzene | 0.105 | | " | 0.114 | | 91.8 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0377 | | " | 0.114 | | 33.0 | 75-125 | | | S-GO |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|----------------|-----------|-------------|-------------|-------------|---------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J2502 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J2502-BLK1) | | | | Prepared & | Analyzed: | 10/25/16 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6J2502-DUP1) | Soui | rce: 6J21001-0 | 03 | Prepared & | Analyzed: | 10/25/16 | | | | |
| % Moisture | 12.0 | 0.1 | % | | 12.0 | | | 0.00 | 20 | |
| Duplicate (P6J2502-DUP2) | Sour | rce: 6J21008-0 | 04 | Prepared & | z Analyzed: | 10/25/16 | | | | |
| % Moisture | 2.0 | 0.1 | % | | 1.0 | | | 66.7 | 20 | |
| Duplicate (P6J2502-DUP3) | Sour | rce: 6J21013-0 | 03 | Prepared & | . Analyzed: | 10/25/16 | | | | |
| % Moisture | 13.0 | 0.1 | % | | 13.0 | | | 0.00 | 20 | |
| Duplicate (P6J2502-DUP4) | Sour | ce: 6J24001-0 | 08 | Prepared & | Analyzed: | 10/25/16 | | | | |
| % Moisture | 9.0 | 0.1 | % | | 8.0 | | | 11.8 | 20 | |
| Batch P6J2506 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J2506-BLK1) | | | | Prepared: 1 | 10/25/16 A | nalyzed: 10 | 0/26/16 | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P6J2506-BS1) | | | | Prepared: 1 | 10/25/16 A | nalyzed: 10 | 0/26/16 | | | |
| Chloride | 413 | 1.00 | mg/kg wet | 400 | | 103 | 80-120 | | | |
| LCS Dup (P6J2506-BSD1) | | | | Prepared: 1 | 10/25/16 A | nalyzed: 10 | 0/26/16 | | | |
| Chloride | 414 | 1.00 | mg/kg wet | 400 | | 103 | 80-120 | 0.181 | 20 | |
| Duplicate (P6J2506-DUP1) | Sour | rce: 6J21004-0 | 01 | Prepared: 1 | 10/25/16 A | nalyzed: 10 | 0/26/16 | | | |
| Chloride | 2.47 | 1.35 | mg/kg dry | | ND | | | | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|-------------|-----------|------------|-------------|-------------|--------|--------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J2506 - *** DEFAULT PREP *** | | | | | | | | | | |
| Duplicate (P6J2506-DUP2) | Sour | ce: 6J21006 | -03 | Prepared: | 10/25/16 A | nalyzed: 10 | /26/16 | | | |
| Chloride | 3.21 | 1.05 | mg/kg dry | | 3.57 | | | 10.6 | 20 | |
| Matrix Spike (P6J2506-MS1) | Sour | ce: 6J21004 | -01 | Prepared: | 10/25/16 A | nalyzed: 10 | /26/16 | | | |
| Chloride | 1070 | 1.35 | mg/kg dry | 1350 | ND | 79.0 | 80-120 | | | QM-07 |
| Batch P6J3101 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J3101-BLK1) | | | | Prepared & | ն Analyzed: | 10/31/16 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6J3101-DUP1) | Sour | ce: 6J28004 | -04 | Prepared & | k Analyzed: | 10/31/16 | | | | |
| % Moisture | 3.0 | 0.1 | % | | 3.0 | | | 0.00 | 20 | |
| Duplicate (P6J3101-DUP2) | Sour | ce: 6J28009 | -04 | Prepared & | k Analyzed: | 10/31/16 | | | | |
| % Moisture | 8.0 | 0.1 | % | | 8.0 | | | 0.00 | 20 | |
| Batch P6J3104 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6J3104-BLK1) | | | | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | ND | 1.00 | mg/kg wet | * | | <u> </u> | | | | |
| LCS (P6J3104-BS1) | | | | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | 381 | 1.00 | mg/kg wet | 400 | | 95.2 | 80-120 | | | |
| LCS Dup (P6J3104-BSD1) | | | | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | 381 | 1.00 | mg/kg wet | 400 | | 95.2 | 80-120 | 0.0315 | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|---------------|-----------|------------|-------------|-------------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6J3104 - *** DEFAULT PREP *** | | | | | | | | | | |
| Duplicate (P6J3104-DUP1) | Sou | rce: 6J28002- | -01 | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | 901 | 10.6 | mg/kg dry | | 893 | | | 0.973 | 20 | |
| Duplicate (P6J3104-DUP2) | Sou | rce: 6J26009- | -03 | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | 5000 | 29.1 | mg/kg dry | | 4990 | | | 0.116 | 20 | |
| Matrix Spike (P6J3104-MS1) | Sou | rce: 6J28002- | -01 | Prepared: | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| Chloride | 1860 | 10.6 | mg/kg dry | 1060 | 893 | 90.8 | 80-120 | | | |
| Batch P6K0104 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6K0104-BLK1) | | | | Prepared & | k Analyzed: | 11/01/16 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P6K0104-DUP1) | Sou | rce: 6J31008- | -02 | Prepared & | k Analyzed: | 11/01/16 | | | | |
| % Moisture | 2.0 | 0.1 | % | | 3.0 | | | 40.0 | 20 | |
| Duplicate (P6K0104-DUP2) | Sou | rce: 6J20003- | -13 | Prepared & | k Analyzed: | 11/01/16 | | | | |
| % Moisture | 2.0 | 0.1 | % | | 1.0 | | | 66.7 | 20 | |
| Batch P6K0207 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P6K0207-BLK1) | | | | Prepared: | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P6K0207-BS1) | | | | Prepared: | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | 431 | 1.00 | mg/kg wet | 400 | | 108 | 80-120 | | · | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|--------------|-------------|-------------|-------------|-------------|--------|--------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6K0207 - *** DEFAULT PREP *** | | | | | | | | | | |
| LCS Dup (P6K0207-BSD1) | | | | Prepared: | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | 444 | 1.00 | mg/kg wet | 400 | | 111 | 80-120 | 2.86 | 20 | |
| Duplicate (P6K0207-DUP1) | Sou | rce: 6J21005 | -07 | Prepared: | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | 2080 | 27.5 | mg/kg dry | | 2050 | | | 1.13 | 20 | |
| Duplicate (P6K0207-DUP2) | Sou | rce: 6J28003 | -05 | Prepared: 1 | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | 55.2 | 1.10 | mg/kg dry | | 51.3 | | | 7.30 | 20 | |
| Matrix Spike (P6K0207-MS1) | Sou | rce: 6J21005 | -07 | Prepared: | 11/02/16 A | nalyzed: 11 | /03/16 | | | |
| Chloride | 3330 | 27.5 | mg/kg dry | 1100 | 2050 | 116 | 80-120 | | | |
| Batch P7C1603 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P7C1603-BLK1) | | | | Prepared & | Analyzed: | 03/16/17 | | | | |
| Chloride | ND | 1.00 | mg/kg wet | | | | | | | |
| LCS (P7C1603-BS1) | | | | Prepared & | a Analyzed: | 03/16/17 | | | | |
| Chloride | 403 | 1.00 | mg/kg wet | 400 | | 101 | 80-120 | | | |
| LCS Dup (P7C1603-BSD1) | | | | Prepared & | z Analyzed: | 03/16/17 | | | | |
| Chloride | 403 | 1.00 | mg/kg wet | 400 | | 101 | 80-120 | 0.0993 | 20 | |
| Duplicate (P7C1603-DUP1) | Sou | rce: 7C13014 | I-01 | Prepared & | Analyzed: | 03/16/17 | | | | |
| Chloride | 371 | 1.06 | mg/kg dry | | 369 | | | 0.575 | 20 | |
| Duplicate (P7C1603-DUP2) | Sou | rce: 7C13017 | 7-03 | Prepared & | a Analyzed: | | | | | |
| Chloride | 26.4 | 1.04 | mg/kg dry | | 28.2 | | | 6.72 | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|---|-----------|--------------|-------------|----------|--------|------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P7C1603 - *** DEFAULT PREP *** | | | | | | | | | | |
| Matrix Spike (P7C1603-MS1) | Sou | rce: 7C13014 | -01 | Prepared & | Analyzed: | 03/16/17 | | | | |
| Chloride | 566 | 1.06 | mg/kg dry | 213 | 369 | 92.5 | 80-120 | | | |
| Batch P7C1703 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P7C1703-BLK1) | | | | Prepared & | Analyzed: | 03/17/17 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Blank (P7C1703-BLK2) | | | | Prepared & | Analyzed: | 03/17/17 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P7C1703-DUP1) | Sour | rce: 7C14004 | -12 | Prepared & | z Analyzed: | 03/17/17 | | | | |
| % Moisture | 12.0 | 0.1 | % | | 8.0 | | | 40.0 | 20 | |
| Duplicate (P7C1703-DUP2) | Sou | rce: 7C14007 | -08 | Prepared & | Analyzed: | 03/17/17 | | | | |
| % Moisture | 6.0 | 0.1 | % | | 7.0 | | | 15.4 | 20 | |
| Duplicate (P7C1703-DUP3) | Sou | rce: 7C14011 | -27 | Prepared & | Analyzed: | 03/17/17 | | | | |
| % Moisture | 12.0 | 0.1 | % | | 9.0 | | | 28.6 | 20 | |
| Duplicate (P7C1703-DUP4) | Sou | rce: 7C15004 | -01 | Prepared & | a Analyzed: | 03/17/17 | | | | |
| % Moisture | 1.0 | 0.1 | % | - | 2.0 | | | 66.7 | 20 | |
| Duplicate (P7C1703-DUP5) | Sou | Source: 7C15005-33 Prepared & Analyzed: 03/17/17 | | | | | | | | |
| % Moisture | 16.0 | 0.1 | % | | 15.0 | | | 6.45 | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | ъ . | | g " | 0 | | 0/850 | | DES | |
|---------------------------------|--------|--------------------|-----------|----------------|------------------|----------|----------------|------|--------------|--------|
| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
| zmaryte | Result | Lillit | Units | Level | Result | /UKEC | Lillits | KI D | Liiiit | TYOICS |
| Batch P6J2602 - TX 1005 | | | | | | | | | | |
| Blank (P6J2602-BLK1) | | | | Prepared & | Analyzed: | 10/24/16 | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 78.9 | | " | 100 | | 78.9 | 70-130 | | | |
| Surrogate: o-Terphenyl | 61.0 | | " | 50.0 | | 122 | 70-130 | | | |
| LCS (P6J2602-BS1) | | | | Prepared & | Analyzed: | 10/24/16 | | | | |
| C6-C12 | 1130 | 25.0 | mg/kg wet | 1000 | | 113 | 75-125 | | | |
| >C12-C28 | 956 | 25.0 | " | 1000 | | 95.6 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 93.8 | | " | 100 | | 93.8 | 70-130 | | | |
| Surrogate: o-Terphenyl | 57.0 | | " | 50.0 | | 114 | 70-130 | | | |
| LCS Dup (P6J2602-BSD1) | | | | Prepared & | Analyzed: | 10/24/16 | | | | |
| C6-C12 | 1070 | 25.0 | mg/kg wet | 1000 | | 107 | 75-125 | 4.91 | 20 | |
| >C12-C28 | 945 | 25.0 | " | 1000 | | 94.5 | 75-125 | 1.15 | 20 | |
| Surrogate: 1-Chlorooctane | 96.0 | | " | 100 | | 96.0 | 70-130 | | | |
| Surrogate: o-Terphenyl | 56.2 | | " | 50.0 | | 112 | 70-130 | | | |
| Matrix Spike (P6J2602-MS1) | Sour | rce: 6J21006 | -02 | Prepared & | Analyzed: | 10/24/16 | | | | |
| C6-C12 | 1280 | 36.2 | mg/kg dry | 1450 | 22.9 | 87.0 | 75-125 | | | |
| >C12-C28 | 1150 | 36.2 | " | 1450 | ND | 79.1 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 151 | | " | 145 | | 104 | 70-130 | | | |
| Surrogate: o-Terphenyl | 75.2 | | " | 72.5 | | 104 | 70-130 | | | |
| Matrix Spike Dup (P6J2602-MSD1) | Sour | ce: 6J21006 | -02 | Prepared & | Analyzed: | 10/24/16 | | | | |
| C6-C12 | 1350 | 36.2 | mg/kg dry | 1450 | 22.9 | 91.5 | 75-125 | 5.02 | 20 | |
| >C12-C28 | 1190 | 36.2 | " | 1450 | ND | 82.3 | 75-125 | 3.99 | 20 | |
| Surrogate: 1-Chlorooctane | 156 | | " | 145 | | 108 | 70-130 | | | |
| Surrogate: o-Terphenyl | 78.1 | | " | 72.5 | | 108 | 70-130 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | • | %REC | | RPD | |
|---------------------------------|--------|------------|-----------|-------------|-------------|-------------|--------|-------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6K0106 - TX 1005 | | | | | | | | | | |
| Blank (P6K0106-BLK1) | | | | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 89.3 | | " | 100 | | 89.3 | 70-130 | | | |
| Surrogate: o-Terphenyl | 49.4 | | " | 50.0 | | 98.9 | 70-130 | | | |
| LCS (P6K0106-BS1) | | | | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| C6-C12 | 910 | 25.0 | mg/kg wet | 1000 | | 91.0 | 75-125 | | | |
| >C12-C28 | 860 | 25.0 | " | 1000 | | 86.0 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 104 | | " | 100 | | 104 | 70-130 | | | |
| Surrogate: o-Terphenyl | 42.8 | | " | 50.0 | | 85.5 | 70-130 | | | |
| LCS Dup (P6K0106-BSD1) | | | | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| C6-C12 | 920 | 25.0 | mg/kg wet | 1000 | | 92.0 | 75-125 | 1.08 | 20 | |
| >C12-C28 | 863 | 25.0 | " | 1000 | | 86.3 | 75-125 | 0.436 | 20 | |
| Surrogate: 1-Chlorooctane | 106 | | " | 100 | | 106 | 70-130 | | | |
| Surrogate: o-Terphenyl | 43.6 | | " | 50.0 | | 87.3 | 70-130 | | | |
| Matrix Spike (P6K0106-MS1) | Sourc | e: 6J28002 | -08 | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| C6-C12 | 962 | 26.0 | mg/kg dry | 1040 | 17.2 | 90.7 | 75-125 | | | |
| >C12-C28 | 898 | 26.0 | " | 1040 | 110 | 75.6 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 120 | | " | 104 | | 116 | 70-130 | | | |
| Surrogate: o-Terphenyl | 49.1 | | " | 52.1 | | 94.3 | 70-130 | | | |
| Matrix Spike Dup (P6K0106-MSD1) | Sourc | e: 6J28002 | -08 | Prepared: 1 | 10/28/16 Aı | nalyzed: 10 | /29/16 | | | |
| C6-C12 | 968 | 26.0 | mg/kg dry | 1040 | 17.2 | 91.3 | 75-125 | 0.692 | 20 | |
| >C12-C28 | 913 | 26.0 | " | 1040 | 110 | 77.1 | 75-125 | 1.93 | 20 | |
| Surrogate: 1-Chlorooctane | 120 | | " | 104 | | 115 | 70-130 | | | |
| Surrogate: o-Terphenyl | 48.9 | | " | 52.1 | | 93.9 | 70-130 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|---------------------------------|--------|-------------|-----------|-------------|------------|-------------|--------|------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P6K0204 - TX 1005 | | | | | | | | | | |
| Blank (P6K0204-BLK1) | | | | Prepared & | Analyzed: | 10/31/16 | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 77.0 | | " | 100 | | 77.0 | 70-130 | | | |
| Surrogate: o-Terphenyl | 46.7 | | " | 50.0 | | 93.4 | 70-130 | | | |
| LCS (P6K0204-BS1) | | | | Prepared & | Analyzed: | 10/31/16 | | | | |
| C6-C12 | 941 | 25.0 | mg/kg wet | 1000 | • | 94.1 | 75-125 | | | |
| >C12-C28 | 896 | 25.0 | " | 1000 | | 89.6 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 99.9 | | " | 100 | | 99.9 | 70-130 | | | |
| Surrogate: o-Terphenyl | 42.1 | | " | 50.0 | | 84.2 | 70-130 | | | |
| LCS Dup (P6K0204-BSD1) | | | | Prepared & | Analyzed: | 10/31/16 | | | | |
| C6-C12 | 1030 | 25.0 | mg/kg wet | 1000 | | 103 | 75-125 | 9.33 | 20 | |
| >C12-C28 | 990 | 25.0 | " | 1000 | | 99.0 | 75-125 | 9.91 | 20 | |
| Surrogate: 1-Chlorooctane | 109 | | " | 100 | | 109 | 70-130 | | | |
| Surrogate: o-Terphenyl | 46.1 | | " | 50.0 | | 92.2 | 70-130 | | | |
| Matrix Spike (P6K0204-MS1) | Sour | ce: 6J28010 | -05 | Prepared: 1 | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| C6-C12 | 1190 | 28.1 | mg/kg dry | 1120 | 18.6 | 104 | 75-125 | | | |
| >C12-C28 | 1120 | 28.1 | " | 1120 | 41.1 | 96.2 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 124 | | " | 112 | | 111 | 70-130 | | | |
| Surrogate: o-Terphenyl | 51.4 | | " | 56.2 | | 91.5 | 70-130 | | | |
| Matrix Spike Dup (P6K0204-MSD1) | Sour | ce: 6J28010 | -05 | Prepared: 1 | 10/31/16 A | nalyzed: 11 | /01/16 | | | |
| C6-C12 | 1140 | 28.1 | mg/kg dry | 1120 | 18.6 | 99.5 | 75-125 | 4.32 | 20 | |
| >C12-C28 | 1090 | 28.1 | " | 1120 | 41.1 | 93.7 | 75-125 | 2.60 | 20 | |
| Surrogate: 1-Chlorooctane | 123 | | " | 112 | | 109 | 70-130 | | | |
| Surrogate: o-Terphenyl | 49.9 | | " | 56.2 | | 88.8 | 70-130 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

BULK Samples received in Bulk soil containers

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

| | Bren | Darron | | | |
|---------------------|------|--------|-------|-----------|--|
| Report Approved By: | | | Date: | 3/17/2017 | |

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

| Relinqu | Relinqu | 70111 | Specia | 5 | ٥ | (A) | ク | 6 | S | Ÿ | ٨ | $\dot{\gamma}$ | - | LAB # (lab use only) | ORDER #: | | | | | | | | • |
|------------------|--|------------|-----------------------|----------|--------------|--|---------------|---------|--|--------------|--|----------------|----------|--------------------------------|---|---------------|--|---------------|-----------------|------------------|--------------|------------------|---|
| Relinquished by: | Relinquished by: | OSA COATES | Special instructions: | 55-6 | 5B-6 | 5B-6 | 58.5 | 58-5 | 58-H | 56-4 | 56.32 | <883 | 583 | FIELL | R#: Q Q Q 1 | oanpo ognamo. | Sampler Signature | Telephone No: | City/State/Zip: | Company Address: | Company Name | Project Manager: | 75351640E |
| Date | Date | 10/21/11 | T Date | | | | | | | | | | | FIELD CODE | | | 4 | 325-669- | | / | Charge Se | Cay w | * |
| | ······································ | 4 | | | - | - | - | | | | | | | Beginning Depth | | W^{-} | P | 3 | | | ervices | NoolF | CUST |
| Time | ime | 2. | | U | UN | 23 | 10 | 13. | H | 13 | 0 | n | 13 | Ending Depth | 1 | | 1 | 38 | | | Z | | YdC |
| Received by | Received by: | * | | 4 | | | | | | | | | 10/19/16 | Date Sampled | | | \ | | | | | | RECORD AI |
| | •• | | | 4. 85 PM | ゴ、よろで 変 | W. Chi.H | 15.16 PM | 5:10 Pm | 5:25 PM | 5:20 PM | 5.96 m | 5:35% | 6:30 PM | Time Sampled | | | e-mail: | Fax No: | | | | | CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST Permian B 1400 Rani |
| $ \mathcal{V} $ | | | | E | | | | | | | | | | Field Filtered |] | G | ` | ſ | | | | Midland, Texas | ≀EQUEST Permian Basin Environmental Lab, LP 1400 Rankin Hwv |
| | | | | - | | | | | | | | | | Total #. of Containers | +- | 1 | 2. Ex | | | | | and | IES: |
| | | | | | - | } | ├- | | | | F- | F | | HNO _{3 250,ml Poly} | - Pe | E | ······································ | | | İ | | Tex | T Basi |
| | | | | - | | ╁ | ╁╌ | - | | | | - | ╁ | HCI | Preservation | | | | | | | | ₹ m |
| | | | | - | ╁ | \vdash | † | | | | T | | <u> </u> | H ₂ SO ₄ | | 1 | 5 | | | | 1 | Ø | Viro |
| | | 1 | 1 | | 1 | | 1 | | 一 | 1 | Г | | | NaOH | &# of Containers</td><td></td><td>D'</td><td></td><td></td><td></td><td>İ</td><td>2</td><td>ă Me</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Na₂S₂O₃</td><td>) age</td><td>1</td><td>£</td><td></td><td></td><td></td><td>Ì</td><td></td><td>intal</td></tr><tr><td>₽</td><td></td><td>ł</td><td>}</td><td></td><td>_</td><td>_</td><td><u> </u></td><td></td><td></td><td></td><td><u> </u></td><td>_</td><td>_</td><td>None 1L Poly</td><td>iners</td><td>1</td><td>ħ</td><td></td><td></td><td></td><td></td><td></td><td>Lab</td></tr><tr><td></td><td>Date</td><td></td><td></td><td>_</td><td><u> </u></td><td><u> </u></td><td> </td><td></td><td></td><td></td><td></td><td><u> </u></td><td>_</td><td>NaOH/ZnAc</td><td>44</td><td></td><td>K.</td><td></td><td>1</td><td>ļ</td><td>l</td><td>1</td><td>, F</td></tr><tr><td></td><td>w</td><td>,</td><td></td><td>4</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td></td><td>_</td><td><u> </u></td><td>N</td><td>DW=Drinking Water SL=Sludge GW = Groundwater S=Soil/Solid</td><td>Matrix</td><td></td><td>るとなっての</td><td>Report Format:</td><td></td><td></td><td></td><td>Ti</td><td></td></tr><tr><td>7 ime</td><td>==</td><td></td><td></td><td></td><td>╀</td><td>┞</td><td>┞</td><td>_</td><td><u> </u></td><td>-</td><td>-</td><td>-</td><td>╀-</td><td>NP=Non-Poteble Specify Other TPH by TX 1005 (8015B 8015M</td><td></td><td>т</td><td>C/3000</td><td>¥</td><td></td><td>Pro</td><td></td><td>Project Name:</td><td></td></tr><tr><td>10 g</td><td>THE STATE OF</td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td><td></td><td>\vdash</td><td>F</td><td>=</td><td></td><td>Chloride Chloride</td><td>·</td><td>11</td><td>8</td><td>OT I</td><td>-</td><td>Project Loc:</td><td>Project #:</td><td>Ç Z</td><td></td></tr><tr><td>> ⊅ ₹</td><td></td><td>်<u>စ</u> လုံ</td><td>. < 0 L</td><td></td><td></td><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td>E</td><td>BTEX by 8021B</td><td></td><td>11</td><td>2</td><td>2</td><td>PO #:</td><td>Loc</td><td><u>c</u> #</td><td>ame</td><td></td></tr><tr><td>Sjust</td><td>g se se</td><td>otsi otsi</td><td></td><td></td><td></td><td>F</td><td>F</td><td></td><td></td><td></td><td>╁╴</td><td> -</td><td> </td><td></td><td></td><td>11</td><td>ķ</td><td>×</td><td>Ï</td><td>Ϊ.</td><td>ļ</td><td>Ϊ.</td><td></td></tr><tr><td>Temperature Received: — Adjusted:</td><td>Sam Cou</td><td>y se</td><td>e Co Free</td><td>9</td><td>T</td><td>1</td><td>T</td><td>1</td><td></td><td></td><td></td><td>_</td><td>1</td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td>11</td><td></td><td>Sta</td><td></td><td></td><td></td><td>1</td><td></td></tr><tr><td>$\mathcal{N} ^2$</td><td>曼克</td><td>als S</td><td></td><td></td><td>T</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>]≥</td><td></td><td>Standard</td><td></td><td></td><td> '</td><td>É</td><td>Pho</td></tr><tr><td>Temperature Upon Receipt: Received:°C Adjusted:°CF</td><td>nple Hand Delivered by Sampler/Client Rep.? by Courier? UPS</td><td>30 CC</td><td>Sample Containers Imact? VOCs Free of Headspace?</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Analyze For:</td><td></td><td>ď</td><td></td><td></td><td></td><td>100</td><td>~ 3.8</td></tr><tr><td> Re</td><td>at Rep</td><td>ontai</td><td>space space</td><td></td><td></td><td></td><td></td><td></td><td>L</td><td></td><td></td><td></td><td></td><td></td><td></td><td>급</td><td></td><td>,</td><td></td><td></td><td></td><td>D</td><td>432-68</td></tr><tr><td>ceipt: °C °C Factor</td><td>ှာ က</td><td>Custody seals on container(s) Custody seals on cooler(s)</td><td>Sample Containers Irract? VOCs Free of Headspace? Fahalt on containers?</td><td></td><td></td><td>_</td><td></td><td><u> </u></td><td>_</td><td><u> </u></td><td>1</td><td><u> </u></td><td><u> </u></td><td></td><td></td><td> ^ </td><td></td><td></td><td></td><td>1</td><td></td><td></td><td>Phone: 432-686-7235</td></tr><tr><td>ğ</td><td>표.</td><td>ات</td><td></td><td>-</td><td>-</td><td>-</td><td>\vdash</td><td><u> </u></td><td>-</td><td>-</td><td>-</td><td></td><td>+-</td><td></td><td></td><td>4 </td><td></td><td>TRRP</td><td></td><td></td><td></td><td>ELD.</td><td>.723</td></tr><tr><td>5</td><td>ر حرات</td><td>-يىد</td><td></td><td>_</td><td>+-</td><td>+</td><td>+</td><td> -</td><td>-</td><td>-</td><td>+</td><td>-</td><td>}-</td><td></td><td><u> </u></td><td> </td><td></td><td>U.</td><td></td><td></td><td></td><td>0</td><td>σī</td></tr><tr><td>b/</td><td>₩.4</td><td>$\angle 4$</td><td></td><td>}</td><td>+</td><td>\vdash</td><td>+</td><td>+-</td><td>\vdash</td><td>\vdash</td><td>\vdash</td><td>\vdash</td><td>╁</td><td></td><td></td><td>1 [</td><td></td><td>П</td><td></td><td></td><td></td><td>A</td><td></td></tr><tr><td>世/</td><td>5 ·</td><td>دى</td><td>^اللالا</td><td>_</td><td>+</td><td>+</td><td>+-</td><td>+</td><td>f</td><td>\vdash</td><td>\vdash</td><td>1</td><td>T</td><td></td><td></td><td>11</td><td></td><td>NPDES</td><td></td><td></td><td></td><td>N</td><td></td></tr><tr><td>C'</td><td>Lone S</td><td>zz</td><td>zzz</td><td></td><td>T</td><td>T</td><td>†</td><td>T</td><td>T</td><td></td><td></td><td></td><td>1</td><td>Rush 24 48 72 (Plea</td><td>se call)</td><td>7</td><td></td><td>ЗЭĞ</td><td></td><td></td><td>1</td><td>1</td><td></td></tr><tr><td></td><td>Star</td><td></td><td></td><td>1</td><td>+</td><td>1</td><td>1</td><td>1</td><td>1</td><td>T</td><td>1</td><td>1</td><td>1</td><td>Standard</td><td>7</td><td></td><td></td><td>0,</td><td>1</td><td>}</td><td>F</td><td>Page 2</td><td>9 of 30</td></tr></tbody></table> | | | | | | | | |



City/State/Zip:

Telephone No:

Sampler Signature:

Cotywoolf@chargerservices.com

Report Format:

×

Standard

NPDES

\naiyze

PO #:

ORDER #: (lab use only)

LAB # (lab use only)

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Total #. of Containers

ield Filtered

HNO_{3 250,ml Poly}

H₂SO₄

Na₂S₂O₃ None 1L Poly NaOH/ZnAc

Chloride

BTEX by 8021B

Standard

DW=Drinking Water SL=Sludge

P=Non-Potable Specify Other

TPH by TX 1005 8015B 8015M

Rush 24 48 72 (Please call)

Relinquished by:

Date

Time

1×5

Received by:

Laboratory Comments:
Sample Containers Intact?
VOCs Free of Headspace?
Labels on container(s)
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| Project Loc: | | (| Company Address: |
|--------------------------------------|--|-------------------------------|------------------|
| Project #: | 17168 | Company Name Charges Services | Company Name |
| Project Name: Stano Triple A Fed # 2 | Midland, Texas 79701 | Project Manager: Coty Woolf | Project Manager: |
| Phone: 432-686-7235 | CHAIN OF COSTODT RECORD AND ANALTSIS REQUEST Permian Basin Environmental Lab, LP 1400 Rankin Hwy | | |

Page 30 of 30

PERMIAN BASIN ENVIRONMENTAL LAB, LP 1400 Rankin Hwy Midland, TX 79701



Analytical Report

Prepared for:

Coty Woolf Charger Services P.O. Box 53070 Midland, TX 79710

Project: Siana Curry State #5
Project Number: [none]
Location:

Lab Order Number: 7C31007



NELAP/TCEQ # T104704156-16-6

Report Date: 04/03/17

Charger Services Project: Siana Curry State #5

P.O. Box 53070 Midland TX, 79710 Project Number: [none]
Project Manager: Coty Woolf

ANALYTICAL REPORT FOR SAMPLES

| Sample ID | Laboratory ID | Matrix | Date Sampled | Date Received |
|--------------|---------------|--------|----------------|------------------|
| SB-4 (15-16) | 7C31007-01 | Soil | 03/21/17 13:40 | 03-31-2017 12:00 |
| SB-4 (20-21) | 7C31007-02 | Soil | 03/21/17 13:50 | 03-31-2017 12:00 |

Fax: (432) 695-6247

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-4 (15-16) 7C31007-01 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|----------------|--------------------|------------|-------------|--------------|----------|----------|---------------|-------|
| | Perr | nian Basin E | Environmen | ıtal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Toluene | ND | 0.00208 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Ethylbenzene | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00208 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Xylene (o) | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 78.4 % | 75-1 | 25 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 91.6 % | 75-1 | 25 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| General Chemistry Parameters by EPA / S | tandard Method | ls | | | | | | | |
| % Moisture | 4.0 | 0.1 | % | 1 | P7D0301 | 04/03/17 | 04/03/17 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by | EPA Method 80 | 15M | | | | | | | |
| C6-C12 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| >C12-C28 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| >C28-C35 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 79.7 % | 70-1 | 30 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 99.6 % | 70-1 | 30 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.0 | mg/kg dry | 1 | [CALC] | 03/31/17 | 03/31/17 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

SB-4 (20-21) 7C31007-02 (Soil)

| Analyte | Result | Reporting Limit | Units | Dilution | Batch | Prepared | Analyzed | Method | Notes |
|---|-------------|--------------------|-----------|-------------|--------------|----------|----------|---------------|-------|
| | Per | mian Basin F | Environme | ıtal Lab, l | L .P. | | | | |
| Organics by GC | | | | | | | | | |
| Benzene | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Toluene | ND | 0.00208 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Ethylbenzene | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Xylene (p/m) | ND | 0.00208 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Xylene (o) | ND | 0.00104 | mg/kg dry | 1 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Surrogate: 4-Bromofluorobenzene | | 85.2 % | 75-1 | 25 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| Surrogate: 1,4-Difluorobenzene | | 95.8 % | 75-1 | 25 | P7D0208 | 03/31/17 | 04/02/17 | EPA 8021B | |
| General Chemistry Parameters by EPA / Sta | ndard Metho | ds | | | | | | | |
| % Moisture | 4.0 | 0.1 | % | 1 | P7D0301 | 04/03/17 | 04/03/17 | % calculation | |
| Total Petroleum Hydrocarbons C6-C35 by E | PA Method 8 | 015M | | | | | | | |
| C6-C12 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| >C12-C28 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| >C28-C35 | ND | 26.0 | mg/kg dry | 1 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Surrogate: 1-Chlorooctane | | 76.1 % | 70-1 | 30 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Surrogate: o-Terphenyl | | 94.7 % | 70-1 | 30 | P7D0206 | 03/31/17 | 03/31/17 | TPH 8015M | |
| Total Petroleum Hydrocarbon C6-C35 | ND | 26.0 | mg/kg dry | 1 | [CALC] | 03/31/17 | 03/31/17 | calc | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

0.0587

0.0549

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

Spike

Source

Reporting

| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
|------------------------------------|--------|---------|-----------|-------------|-------------|-------------|--------|-------|-------|-------|
| Batch P7D0208 - General Preparatio | n (GC) | | | | | | | | | |
| Blank (P7D0208-BLK1) | | | | Prepared: 0 | 03/31/17 A | nalyzed: 04 | /02/17 | | | |
| Benzene | ND | 0.00100 | mg/kg wet | | | | | | | |
| Toluene | ND | 0.00200 | " | | | | | | | |
| Ethylbenzene | ND | 0.00100 | " | | | | | | | |
| Xylene (p/m) | ND | 0.00200 | " | | | | | | | |
| Xylene (o) | ND | 0.00100 | " | | | | | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0560 | | " | 0.0600 | | 93.2 | 75-125 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0441 | | " | 0.0600 | | 73.5 | 75-125 | | | S-GC |
| LCS (P7D0208-BS1) | | | | Prepared: 0 |)3/31/17 Aı | nalyzed: 04 | /02/17 | | | |
| Benzene | 0.105 | 0.00100 | mg/kg wet | 0.100 | | 105 | 70-130 | | | |
| Toluene | 0.0862 | 0.00200 | " | 0.100 | | 86.2 | 70-130 | | | |
| Ethylbenzene | 0.0807 | 0.00100 | " | 0.100 | | 80.7 | 70-130 | | | |
| Xylene (p/m) | 0.163 | 0.00200 | " | 0.200 | | 81.4 | 70-130 | | | |
| Xylene (o) | 0.0811 | 0.00100 | " | 0.100 | | 81.1 | 70-130 | | | |
| Surrogate: 4-Bromofluorobenzene | 0.0604 | | " | 0.0600 | | 101 | 75-125 | | | |
| Surrogate: 1,4-Difluorobenzene | 0.0698 | | " | 0.0600 | | 116 | 75-125 | | | |
| LCS Dup (P7D0208-BSD1) | | | | Prepared: 0 | 03/31/17 At | nalyzed: 04 | /02/17 | | | |
| Benzene | 0.0988 | 0.00100 | mg/kg wet | 0.100 | | 98.8 | 70-130 | 5.78 | 20 | |
| Toluene | 0.0846 | 0.00200 | " | 0.100 | | 84.6 | 70-130 | 1.91 | 20 | |
| Ethylbenzene | 0.0845 | 0.00100 | " | 0.100 | | 84.5 | 70-130 | 4.58 | 20 | |
| Xylene (p/m) | 0.162 | 0.00200 | " | 0.200 | | 81.1 | 70-130 | 0.363 | 20 | |
| Xylene (o) | 0.0803 | 0.00100 | " | 0.100 | | 80.3 | 70-130 | 1.02 | 20 | |

| Matrix Spike (P7D0208-MS1) | Sour | ce: 7C29023 | 3-11 | Prepared: | 03/31/17 An | alyzed: 04 | 1/02/17 | |
|---------------------------------|--------|-------------|-----------|-----------|-------------|------------|---------|-------|
| Benzene | 0.0248 | 0.00118 | mg/kg dry | 0.235 | ND | 10.6 | 80-120 | QM-07 |
| Toluene | 0.0253 | 0.00235 | " | 0.235 | ND | 10.8 | 80-120 | QM-07 |
| Ethylbenzene | 0.0278 | 0.00118 | " | 0.235 | ND | 11.8 | 80-120 | QM-07 |
| Xylene (p/m) | 0.0426 | 0.00235 | " | 0.471 | 0.00220 | 8.58 | 80-120 | QM-07 |
| Xylene (o) | 0.0450 | 0.00118 | " | 0.235 | ND | 19.1 | 80-120 | QM-07 |
| Surrogate: 4-Bromofluorobenzene | 0.0613 | | " | 0.0706 | | 86.8 | 75-125 | |
| Surrogate: 1,4-Difluorobenzene | 0.0710 | | " | 0.0706 | | 101 | 75-125 | |

0.0600

0.0600

97.8

91.5

75-125

75-125

Surrogate: 4-Bromofluorobenzene

Surrogate: 1,4-Difluorobenzene

RPD

%REC

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Organics by GC - Quality Control Permian Basin Environmental Lab, L.P.

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|---------|--------|-----------|-------|-------|--------|------|--------|-----|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |

| | Batch P7D0208 - | General Pre | paration (GC) | |
|--|-----------------|-------------|---------------|--|
|--|-----------------|-------------|---------------|--|

| Matrix Spike Dup (P7D0208-MSD1) | Sour | rce: 7C29023 | -11 | Prepared: (| 03/31/17 An | alyzed: 04 | 1/02/17 | | | |
|---------------------------------|--------|--------------|-----------|-------------|-------------|------------|---------|------|----|-------|
| Benzene | 0.0224 | 0.00118 | mg/kg dry | 0.235 | ND | 9.52 | 80-120 | 10.4 | 20 | QM-07 |
| Toluene | 0.0256 | 0.00235 | " | 0.235 | ND | 10.9 | 80-120 | 1.16 | 20 | QM-07 |
| Ethylbenzene | 0.0366 | 0.00118 | " | 0.235 | ND | 15.6 | 80-120 | 27.4 | 20 | QM-07 |
| Xylene (p/m) | 0.0791 | 0.00235 | " | 0.471 | 0.00220 | 16.3 | 80-120 | 62.3 | 20 | QM-07 |
| Xylene (o) | 0.0821 | 0.00118 | " | 0.235 | ND | 34.9 | 80-120 | 58.3 | 20 | QM-07 |
| Surrogate: 4-Bromofluorobenzene | 0.0706 | | " | 0.0706 | | 100 | 75-125 | | | |
| Surrogate: 1.4-Difluorobenzene | 0.0841 | | " | 0.0706 | | 119 | 75-125 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|--------------------------------------|--------|--------------|-------|------------|-----------|----------|--------|------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P7D0301 - *** DEFAULT PREP *** | | | | | | | | | | |
| Blank (P7D0301-BLK1) | | | | Prepared & | Analyzed: | 04/03/17 | | | | |
| % Moisture | ND | 0.1 | % | | | | | | | |
| Duplicate (P7D0301-DUP1) | Sour | ce: 7C31003- | 11 | Prepared & | Analyzed: | 04/03/17 | | | | |
| % Moisture | 7.0 | 0.1 | % | | 7.0 | | | 0.00 | 20 | |
| Duplicate (P7D0301-DUP2) | Sour | ce: 7C31008- | 06 | Prepared & | Analyzed: | 04/03/17 | | | | |
| % Moisture | 5.0 | 0.1 | % | | 5.0 | | | 0.00 | 20 | |
| Duplicate (P7D0301-DUP3) | Sour | ce: 7C31012- | 03 | Prepared & | Analyzed: | 04/03/17 | | | | |
| % Moisture | 4.0 | 0.1 | % | | 4.0 | | | 0.00 | 20 | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

| | | Reporting | | Spike | Source | | %REC | | RPD | |
|---------------------------------|--------|-------------|-----------|-------------|-------------|-------------|---------|--------|-------|-------|
| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes |
| Batch P7D0206 - TX 1005 | | | | | | | | | | |
| Blank (P7D0206-BLK1) | | | | Prepared & | k Analyzed: | 03/31/17 | | | | |
| C6-C12 | ND | 25.0 | mg/kg wet | | | | | | | |
| >C12-C28 | ND | 25.0 | " | | | | | | | |
| >C28-C35 | ND | 25.0 | " | | | | | | | |
| Surrogate: 1-Chlorooctane | 80.0 | | " | 100 | | 80.0 | 70-130 | | | |
| Surrogate: o-Terphenyl | 48.9 | | " | 50.0 | | 97.7 | 70-130 | | | |
| LCS (P7D0206-BS1) | | | | Prepared & | ն Analyzed: | 03/31/17 | | | | |
| C6-C12 | 950 | 25.0 | mg/kg wet | 1000 | | 95.0 | 75-125 | | | |
| >C12-C28 | 1180 | 25.0 | " | 1000 | | 118 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 115 | | " | 100 | | 115 | 70-130 | | | |
| Surrogate: o-Terphenyl | 46.6 | | " | 50.0 | | 93.2 | 70-130 | | | |
| LCS Dup (P7D0206-BSD1) | | | | Prepared & | k Analyzed: | 03/31/17 | | | | |
| C6-C12 | 903 | 25.0 | mg/kg wet | 1000 | | 90.3 | 75-125 | 5.11 | 20 | |
| >C12-C28 | 1110 | 25.0 | " | 1000 | | 111 | 75-125 | 6.37 | 20 | |
| Surrogate: 1-Chlorooctane | 107 | | " | 100 | | 107 | 70-130 | | | |
| Surrogate: o-Terphenyl | 47.3 | | " | 50.0 | | 94.7 | 70-130 | | | |
| Matrix Spike (P7D0206-MS1) | Sour | ce: 7C31008 | 3-10 | Prepared: (| 03/31/17 A | nalyzed: 04 | -/01/17 | | | |
| C6-C12 | 993 | 27.8 | mg/kg dry | 1110 | 16.0 | 87.9 | 75-125 | | | |
| >C12-C28 | 1320 | 27.8 | " | 1110 | 99.9 | 109 | 75-125 | | | |
| Surrogate: 1-Chlorooctane | 119 | | " | 111 | | 107 | 70-130 | | | |
| Surrogate: o-Terphenyl | 57.1 | | " | 55.6 | | 103 | 70-130 | | | |
| Matrix Spike Dup (P7D0206-MSD1) | Sour | ce: 7C31008 | 3-10 | Prepared: (| 03/31/17 A | nalyzed: 04 | -/01/17 | | | |
| C6-C12 | 1010 | 27.8 | mg/kg dry | 1110 | 16.0 | 89.6 | 75-125 | 1.92 | 20 | |
| >C12-C28 | 1320 | 27.8 | " | 1110 | 99.9 | 109 | 75-125 | 0.0357 | 20 | |
| Surrogate: 1-Chlorooctane | 127 | | " | 111 | | 114 | 70-130 | | | |
| Surrogate: o-Terphenyl | 61.9 | | " | 55.6 | | 111 | 70-130 | | | |

P.O. Box 53070 Project Number: [none]
Midland TX, 79710 Project Manager: Coty Woolf

Notes and Definitions

S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

LCS Laboratory Control Spike

MS Matrix Spike

Dup Duplicate

| | Drew | Darron | | | |
|---------------------|------|--------|-------|----------|--|
| Report Approved By: | | | Date: | 4/3/2017 | |

Brent Barron, Laboratory Director/Technical Director

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-686-7235.

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