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By OCD Dr Oberding at 3:35 pm, Apr 03, 2017

**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*

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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 INTRODUCTION**

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 closest 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.

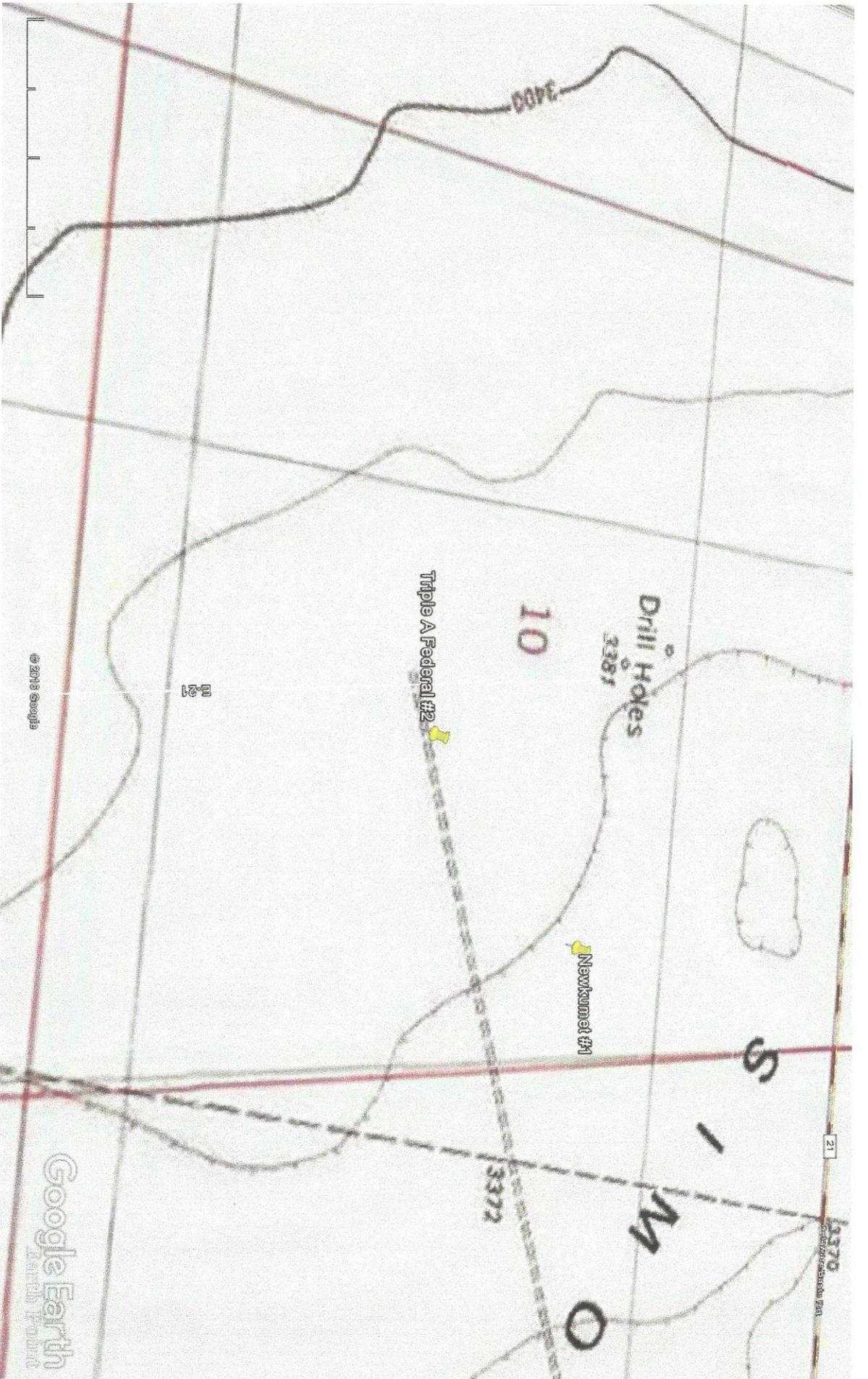
## TABLES

Table 1  
Soil Samples Analytical Summary  
Siana Oil and Gas, Triple A Federal #2  
Lea County, New Mexico

Boring	Depth Feet BGS	Date	Chloride mg/Kg	Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Xylene mg/kg	GRO mg/Kg	DRO mg/Kg	Oil mg/Kg	Total TPH mg/Kg
RRAL:											
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	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	0
	75 - 76	10/11/2016	10,100	--	--	--	--	--	--	--	0
	80 - 81	10/11/2016	12,200	--	--	--	--	--	--	--	0
	85 - 86	10/11/2016	9,720	--	--	--	--	--	--	--	0
	90 - 91	10/11/2016	8,230	--	--	--	--	--	--	--	0
	95 - 96	10/11/2016	9,770	--	--	--	--	--	--	--	0
	100 - 101	10/11/2016	10,600	--	--	--	--	--	--	--	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	--	--	--	--	<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	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	0
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	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	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	--	--	--	--	--	--	--	0
SB-5'	10 - 11	3/22/2017	--	<0.00114	<0.00227	<0.00114	<0.00227	<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	<26.3
	5 - 6	10/19/2016	17	--	--	--	--	--	--	--	0
SB-6'	5 - 6	3/22/2017	--	<0.00115	<0.00230	<0.00115	<0.00230	<28.7	<28.7	<28.7	<28.7
	10 - 11	10/19/2016	19	--	--	--	--	--	--	--	0
SB-6'	10 - 11	3/22/2017	--	<0.00118	<0.00235	<0.00118	<0.00235	<29.4	<29.4	<29.4	<29.4

Notes: Analysis performed by Permian 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**



Google Earth

feet  
km

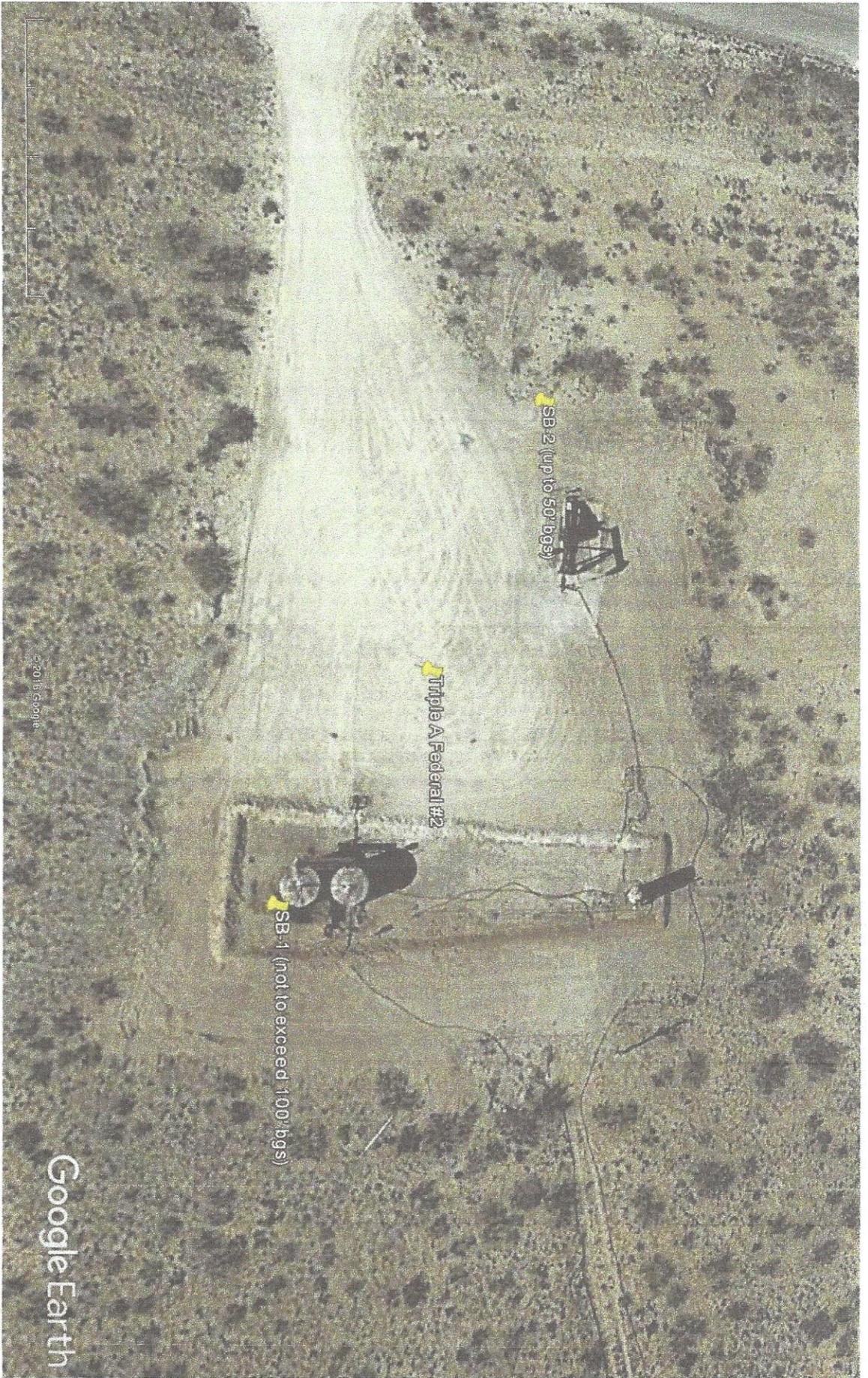


4000



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Google Earth  
Satellite Imagery



Google Earth

feet  
meters

200

80



Google Earth

## Appendix A

**Site Name:** Siana Triple A Fed #2  
**Job Number:** 16-0401  
**Driller:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-1  
**Date:** 10/11/2016  
**Geologist:** A. Pachthofer  
**Longitude:** 103°27'20.54"W

Depth	Time	PID (ppm)	USCS	Munsell Color	Description
Surface					
2	9:50	0.0	CH	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  
**Job Number:** 16-0401  
**Driller:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-2  
**Date:** 10/11/2016  
**Geologist:** A. Pachlhofer  
**Longitude:** 103°27'20.54"W

Depth	Time	PID (ppm)	USCS	Munsell Color	Description
Surface					
2	12:00	0.0	CH	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:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-3  
**Date:** 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	CH	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  
**Job Number:** 16-0401  
**Driller:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-4  
**Date:** 10/19/2016  
**Geologist:** A. Pachlhofer  
**Longitude:** 103°27'20.54"W

Depth	Time	PID (ppm)	USCS	Munsell Color	Description
Surface					
2	17:20	0.0	CH	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  
**Job Number:** 16-0401  
**Driller:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-5  
**Date:** 10/19/2016  
**Geologist:** A. Pachhofer  
**Longitude:** 103°27'20.54"W

Depth	Time	PID (ppm)	USCS	Munsell Color	Description
Surface					
2	17:10	0.0	CH	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  
**Job Number:** 16-0401  
**Driller:** Scarborough Drilling  
**Drill Method:** Air Rotary  
**Latitude:** 32°19'1.81"N

**Location:** Lea County, NM  
**Boring ID:** SB-6  
**Date:** 10/19/2016  
**Geologist:** A. Pachhofer  
**Longitude:** 103°27'20.54"W

Depth	Time	PID (ppm)	USCS	Munsell Color	Description
Surface					
2	16:40	0.0	CH	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

Fax: (432) 695-6247

**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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		89.5 %			P6J1907	10/19/16	10/19/16	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		74.5 %			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	
<i>Surrogate: 1-Chlorooctane</i>		90.1 %			P6J1808	10/15/16	10/18/16	TX 1005	
<i>Surrogate: o-Terphenyl</i>		94.8 %			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 EPA / Standard Methods**

<b>Chloride</b>	<b>26.5</b>	1.11	mg/kg dry	1	P6J1702	10/17/16	10/18/16	EPA 300.0	
<b>% Moisture</b>	<b>10.0</b>	0.1	%	1	P6J1804	10/18/16	10/18/16	% calculation	

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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 %	70-130		P6J1808	10/15/16	10/18/16	TX 1005	
Surrogate: o-Terphenyl		94.6 %	70-130		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 EPA / 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	

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		83.6 %			<i>P6J1907</i>	<i>10/19/16</i>	<i>10/19/16</i>	<i>EPA 8021B</i>	
<i>Surrogate: 1,4-Difluorobenzene</i>		75.2 %			<i>P6J1907</i>	<i>10/19/16</i>	<i>10/19/16</i>	<i>EPA 8021B</i>	
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	
<i>Surrogate: 1-Chlorooctane</i>		92.0 %			<i>P6J1808</i>	<i>10/15/16</i>	<i>10/18/16</i>	<i>TX 1005</i>	
<i>Surrogate: o-Terphenyl</i>		97.6 %			<i>P6J1808</i>	<i>10/15/16</i>	<i>10/18/16</i>	<i>TX 1005</i>	
Total Hydrocarbon nC6-nC35	ND	27.778	mg/kg dry	1	[CALC]	10/15/16	10/18/16	[CALC]	

**General Chemistry Parameters by EPA / Standard Methods**

<b>Chloride</b>	<b>204</b>	1.11	mg/kg dry	1	P6J1702	10/17/16	10/18/16	EPA 300.0	
<b>% Moisture</b>	<b>10.0</b>	0.1	%	1	P6J1804	10/18/16	10/18/16	% calculation	

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 1-Chlorooctane</i>		96.0 %		70-130	P6J1808	10/15/16	10/18/16	TX 1005	
<i>Surrogate: o-Terphenyl</i>		99.6 %		70-130	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 EPA / Standard Methods**

<b>Chloride</b>	<b>250</b>	1.28	mg/kg dry	1	P6J1702	10/17/16	10/18/16	EPA 300.0	
<b>% Moisture</b>	<b>22.0</b>	0.1	%	1	P6J1804	10/18/16	10/18/16	% calculation	

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**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
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**Batch P6J1808 - General Preparation (GC)**

<b>Blank (P6J1808-BLK1)</b>										
Prepared: 10/15/16 Analyzed: 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			

<b>LCS (P6J1808-BS1)</b>										
Prepared: 10/15/16 Analyzed: 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			

<b>LCS Dup (P6J1808-BS1)</b>										
Prepared: 10/15/16 Analyzed: 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 (GC)**

<b>Blank (P6J1907-BLK1)</b>										
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			

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

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**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
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**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			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0693</i>		"	<i>0.0800</i>		<i>86.6</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0726</i>		"	<i>0.0800</i>		<i>90.7</i>	<i>75-125</i>			

**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	
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0688</i>		"	<i>0.0800</i>		<i>86.0</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0777</i>		"	<i>0.0800</i>		<i>97.1</i>	<i>75-125</i>			

**Matrix Spike (P6J1907-MS1)**

Source: 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			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0879</i>		"	<i>0.0889</i>		<i>98.8</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0707</i>		"	<i>0.0889</i>		<i>79.5</i>	<i>75-125</i>			

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Midland TX, 79710

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6J1702 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J1702-BLK1)</b>										
					Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P6J1702-BS1)</b>										
					Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	400	1.00	mg/kg wet	400		99.9	80-120			
<b>LCS Dup (P6J1702-BSD1)</b>										
					Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	398	1.00	mg/kg wet	400		99.6	80-120	0.313	20	
<b>Duplicate (P6J1702-DUP1)</b>										
					Source: 6J17002-01 Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	935	11.1	mg/kg dry		940			0.569	20	
<b>Duplicate (P6J1702-DUP2)</b>										
					Source: 6J17004-25 Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	141	1.15	mg/kg dry		141			0.0163	20	
<b>Matrix Spike (P6J1702-MS1)</b>										
					Source: 6J17002-01 Prepared: 10/17/16 Analyzed: 10/18/16					
Chloride	1540	11.1	mg/kg dry	556	940	108	80-120			

**Batch P6J1804 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J1804-BLK1)</b>										
					Prepared & Analyzed: 10/18/16					
% Moisture	ND	0.1	%							
<b>Duplicate (P6J1804-DUP1)</b>										
					Source: 6J17004-25 Prepared & Analyzed: 10/18/16					
% Moisture	13.0	0.1	%		13.0			0.00	20	
<b>Duplicate (P6J1804-DUP2)</b>										
					Source: 6J17009-05 Prepared & Analyzed: 10/18/16					
% Moisture	ND	0.1	%		ND				20	

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Midland TX, 79710

Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6J1804 - \*\*\* DEFAULT PREP \*\*\***

<b>Duplicate (P6J1804-DUP3)</b>		<b>Source: 6J17013-04</b>			Prepared & Analyzed: 10/18/16					
% Moisture	ND	0.1	%		8.0			200	20	

**Batch P6K0104 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6K0104-BLK1)</b>		Prepared & Analyzed: 11/01/16								
% Moisture	ND	0.1	%							

<b>Duplicate (P6K0104-DUP1)</b>		<b>Source: 6J31008-02</b>			Prepared & Analyzed: 11/01/16					
% Moisture	2.0	0.1	%		3.0			40.0	20	

<b>Duplicate (P6K0104-DUP2)</b>		<b>Source: 6J20003-13</b>			Prepared & Analyzed: 11/01/16					
% Moisture	2.0	0.1	%		1.0			66.7	20	

**Batch P6K0105 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6K0105-BLK1)</b>		Prepared: 11/01/16 Analyzed: 11/02/16								
Chloride	ND	1.00	mg/kg wet							

<b>LCS (P6K0105-BS1)</b>		Prepared: 11/01/16 Analyzed: 11/02/16								
Chloride	404	1.00	mg/kg wet	400		101	80-120			

<b>Duplicate (P6K0105-DUP1)</b>		<b>Source: 6K01001-01</b>			Prepared: 11/01/16 Analyzed: 11/02/16					
Chloride	5.61	1.01	mg/kg dry		5.39			3.86	20	

<b>Duplicate (P6K0105-DUP2)</b>		<b>Source: 6J17004-14</b>			Prepared: 11/01/16 Analyzed: 11/02/16					
Chloride	17100	54.9	mg/kg dry		17100			0.0483	20	

Charger Services  
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Project: Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6K0105 - \*\*\* DEFAULT PREP \*\*\***

**Matrix Spike (P6K0105-MS1)**

Source: **6K01001-01**

Prepared: 11/01/16 Analyzed: 11/02/16

Chloride	843	1.01	mg/kg dry	1010	5.39	82.9	80-120			
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### 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

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.





CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP  
1400 Rankin Hwy  
Midland, Texas 79701

Phone: 432-686-7235  
Sarna

Project Name: Triple A Fed #2

Project Manager: Coty Wolf  
Company Name: Charger Services

Company Address:

City/State/Zip:

Telephone No: 325-669-5735

Sampler Signature: [Signature]

Fax No:

e-mail: Coty.Wolf@chargerservices.com

Report Format:  Standard  TRRP  NPDES

ORDER # (lab use only) 6511004

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Ice	HNO <sub>3</sub> 250ml Poly	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None 1L Poly	NaOH/ZnAc	DW=Drinking Water SL=Sludge	GW = Groundwater S=Soil/Solid	NP=Non-Potable Specify Other	TPH by TX 1005 (8015B) 8015M	Chloride	BTEX by 8021B	Analyze For:	
11	SB-1	50	55	10/11/16	10:40		1	X											S	X	X	X	
12		60	65		10:45																		
13		70	75		10:50																		
14		80	85		11:00																		
15		90	95		11:05																		
16		100	105		11:10																		
17		110	115		11:15																		
18		120	125		11:20																		
19		130	135		11:25																		
20		140	145		11:30																		

Special Instructions:

Relinquished by: [Signature] Date: 10/11/16 Time: 4:20

Relinquished by: [Signature] Date: 10/14/16 Time: 16:20

Relinquished by: [Signature] Date: 10/14/16 Time: 16:20

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Laboratory Comments:  
 Sample Containers Intact?  
 VOCs Free of Headspace?  
 Labels on containers?  
 Custody seals on containers?  
 Custody seals on cooler(s)?  
 Sample Hand Delivered by Sampler/Client Rep?   
 by Courier?  UPS  DHL   
 FedEx  Lone Star   
 temperature Upon Receipt: \_\_\_\_\_ °C  
 Adjusted: 2.0 °C Factor

Rush 24 48 72 (Please call) Standard







**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

Fax: (432) 695-6247

**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

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.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	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.0 %	75-125		P6J2603	10/25/16	10/25/16	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		82.0 %	75-125		P6J2603	10/25/16	10/25/16	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.03	mg/kg dry	1	P6J2506	10/25/16	10/27/16	EPA 300.0	
<b>% Moisture</b>	<b>3.0</b>	0.1	%	1	P6J2502	10/25/16	10/25/16	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		84.3 %	70-130		P6J2602	10/24/16	10/24/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		100 %	70-130		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	

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Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental 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	
<i>Surrogate: 1,4-Difluorobenzene</i>		81.8 %	75-125		P6J2603	10/25/16	10/25/16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		67.9 %	75-125		P6J2603	10/25/16	10/25/16	EPA 8021B	S-GC

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.09	mg/kg dry	1	P6J2506	10/25/16	10/27/16	EPA 300.0	
<b>% Moisture</b>	<b>8.0</b>	0.1	%	1	P6J2502	10/25/16	10/25/16	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		88.7 %	70-130		P6J2602	10/24/16	10/24/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		105 %	70-130		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	

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Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		33.9 %	75-125		P6J2807	10/28/16	10/28/16	EPA 8021B	S-GC
<i>Surrogate: 1,4-Difluorobenzene</i>		76.7 %	75-125		P6J2807	10/28/16	10/28/16	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.05	mg/kg dry	1	P6J2506	10/25/16	10/27/16	EPA 300.0	
<b>% Moisture</b>	<b>5.0</b>	0.1	%	1	P6J2502	10/25/16	10/25/16	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		89.5 %	70-130		P6K0106	10/28/16	10/29/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		99.1 %	70-130		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	

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 1,4-Difluorobenzene</i>		76.9 %	75-125		P6J2807	10/28/16	10/29/16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		35.6 %	75-125		P6J2807	10/28/16	10/29/16	EPA 8021B	S-GC

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.06	mg/kg dry	1	P6J3104	10/31/16	11/01/16	EPA 300.0	
<b>% Moisture</b>	<b>6.0</b>	0.1	%	1	P6J3101	10/31/16	10/31/16	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		76.1 %	70-130		P6K0204	10/31/16	10/31/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		92.6 %	70-130		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	

Charger Services  
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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

Charger Services  
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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		35.0 %	75-125		P6J2807	10/28/16	10/29/16	EPA 8021B	S-GC
<i>Surrogate: 1,4-Difluorobenzene</i>		76.4 %	75-125		P6J2807	10/28/16	10/29/16	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

Chloride	ND	1.05	mg/kg dry	1	P6J3104	10/31/16	11/01/16	EPA 300.0	
<b>% Moisture</b>	<b>5.0</b>	0.1	%	1	P6J3101	10/31/16	10/31/16	% calculation	

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		74.0 %	70-130		P6K0204	10/31/16	10/31/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		91.3 %	70-130		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	

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, L.P.**

**General Chemistry Parameters by EPA / Standard Methods**

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

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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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**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
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**Batch P6J2603 - General Preparation (GC)**

<b>Blank (P6J2603-BLK1)</b>										
										Prepared & Analyzed: 10/25/16
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	"							
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0670</i>		<i>"</i>	<i>0.0600</i>		<i>112</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0543</i>		<i>"</i>	<i>0.0600</i>		<i>90.4</i>	<i>75-125</i>			

<b>LCS (P6J2603-BS1)</b>										
										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			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0721</i>		<i>"</i>	<i>0.0600</i>		<i>120</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0466</i>		<i>"</i>	<i>0.0600</i>		<i>77.8</i>	<i>75-125</i>			

<b>LCS Dup (P6J2603-BSD1)</b>										
										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	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0553</i>		<i>"</i>	<i>0.0600</i>		<i>92.2</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0768</i>		<i>"</i>	<i>0.0600</i>		<i>128</i>	<i>75-125</i>			<i>S-GC</i>

<b>Matrix Spike (P6J2603-MS1)</b>										
			Source: 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
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0741</i>		<i>"</i>	<i>0.0632</i>		<i>117</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0508</i>		<i>"</i>	<i>0.0632</i>		<i>80.5</i>	<i>75-125</i>			

Charger Services  
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Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**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
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**Batch P6J2603 - General Preparation (GC)**

<b>Matrix Spike Dup (P6J2603-MSD1)</b>	<b>Source: 6J21002-03</b>			<b>Prepared &amp; Analyzed: 10/25/16</b>						
Benzene	0.159	0.00105	mg/kg dry	0.211	ND	75.5	80-120	9.90	20	QM-07
Toluene	0.155	0.00211	"	0.211	0.00151	73.0	80-120	13.4	20	QM-07
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-07
Xylene (o)	0.131	0.00105	"	0.211	0.0377	44.2	80-120	22.0	20	QM-07
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0783</i>		<i>"</i>	<i>0.0632</i>		<i>124</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0469</i>		<i>"</i>	<i>0.0632</i>		<i>74.2</i>	<i>75-125</i>			<i>S-GC</i>

**Batch P6J2807 - General Preparation (GC)**

<b>Blank (P6J2807-BLK1)</b>	<b>Prepared &amp; Analyzed: 10/28/16</b>									
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	"							
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0286</i>		<i>"</i>	<i>0.0800</i>		<i>35.8</i>	<i>75-125</i>			<i>S-GC</i>
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0615</i>		<i>"</i>	<i>0.0800</i>		<i>76.9</i>	<i>75-125</i>			

<b>LCS (P6J2807-BS1)</b>	<b>Prepared &amp; Analyzed: 10/28/16</b>									
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			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0748</i>		<i>"</i>	<i>0.0800</i>		<i>93.5</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0263</i>		<i>"</i>	<i>0.0800</i>		<i>32.8</i>	<i>75-125</i>			<i>S-GC</i>

Charger Services  
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Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

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**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
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**Batch P6J2807 - General Preparation (GC)**

<b>LCS Dup (P6J2807-BSD1)</b>		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-GC
Surrogate: 1,4-Difluorobenzene	0.0754		"	0.0800		94.2	75-125			

<b>Matrix Spike (P6J2807-MS1)</b>		Source: 6J21004-04	Prepared: 10/28/16 Analyzed: 10/29/16							
Benzene	0.164	0.00143	mg/kg dry	0.286	ND	57.3	80-120			QM-07
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-GC
Surrogate: 1,4-Difluorobenzene	0.113		"	0.114		99.2	75-125			

<b>Matrix Spike Dup (P6J2807-MSD1)</b>		Source: 6J21004-04	Prepared: 10/28/16 Analyzed: 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-GC

Charger Services  
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Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6J2502 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J2502-BLK1)</b>				Prepared & Analyzed: 10/25/16						
% Moisture	ND	0.1	%							
<b>Duplicate (P6J2502-DUP1)</b>				Source: 6J21001-03 Prepared & Analyzed: 10/25/16						
% Moisture	12.0	0.1	%		12.0			0.00	20	
<b>Duplicate (P6J2502-DUP2)</b>				Source: 6J21008-04 Prepared & Analyzed: 10/25/16						
% Moisture	2.0	0.1	%		1.0			66.7	20	
<b>Duplicate (P6J2502-DUP3)</b>				Source: 6J21013-03 Prepared & Analyzed: 10/25/16						
% Moisture	13.0	0.1	%		13.0			0.00	20	
<b>Duplicate (P6J2502-DUP4)</b>				Source: 6J24001-08 Prepared & Analyzed: 10/25/16						
% Moisture	9.0	0.1	%		8.0			11.8	20	

**Batch P6J2506 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J2506-BLK1)</b>				Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P6J2506-BS1)</b>				Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	413	1.00	mg/kg wet	400		103	80-120			
<b>LCS Dup (P6J2506-BSD1)</b>				Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	414	1.00	mg/kg wet	400		103	80-120	0.181	20	
<b>Duplicate (P6J2506-DUP1)</b>				Source: 6J21004-01 Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	2.47	1.35	mg/kg dry		ND				20	

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6J2506 - \*\*\* DEFAULT PREP \*\*\***

<b>Duplicate (P6J2506-DUP2)</b>		<b>Source: 6J21006-03</b>		Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	3.21	1.05	mg/kg dry		3.57			10.6	20	
<b>Matrix Spike (P6J2506-MS1)</b>		<b>Source: 6J21004-01</b>		Prepared: 10/25/16 Analyzed: 10/26/16						
Chloride	1070	1.35	mg/kg dry	1350	ND	79.0	80-120			QM-07

**Batch P6J3101 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J3101-BLK1)</b>				Prepared & Analyzed: 10/31/16						
% Moisture	ND	0.1	%							
<b>Duplicate (P6J3101-DUP1)</b>		<b>Source: 6J28004-04</b>		Prepared & Analyzed: 10/31/16						
% Moisture	3.0	0.1	%		3.0			0.00	20	
<b>Duplicate (P6J3101-DUP2)</b>		<b>Source: 6J28009-04</b>		Prepared & Analyzed: 10/31/16						
% Moisture	8.0	0.1	%		8.0			0.00	20	

**Batch P6J3104 - \*\*\* DEFAULT PREP \*\*\***

<b>Blank (P6J3104-BLK1)</b>				Prepared: 10/31/16 Analyzed: 11/01/16						
Chloride	ND	1.00	mg/kg wet							
<b>LCS (P6J3104-BS1)</b>				Prepared: 10/31/16 Analyzed: 11/01/16						
Chloride	381	1.00	mg/kg wet	400		95.2	80-120			
<b>LCS Dup (P6J3104-BSD1)</b>				Prepared: 10/31/16 Analyzed: 11/01/16						
Chloride	381	1.00	mg/kg wet	400		95.2	80-120	0.0315	20	

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Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6J3104 - \*\*\* DEFAULT PREP \*\*\***

**Duplicate (P6J3104-DUP1)** Source: 6J28002-01 Prepared: 10/31/16 Analyzed: 11/01/16

Chloride	901	10.6	mg/kg dry		893			0.973	20	
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**Duplicate (P6J3104-DUP2)** Source: 6J26009-03 Prepared: 10/31/16 Analyzed: 11/01/16

Chloride	5000	29.1	mg/kg dry		4990			0.116	20	
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**Matrix Spike (P6J3104-MS1)** Source: 6J28002-01 Prepared: 10/31/16 Analyzed: 11/01/16

Chloride	1860	10.6	mg/kg dry	1060	893	90.8	80-120			
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**Batch P6K0104 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P6K0104-BLK1)** Prepared & Analyzed: 11/01/16

% Moisture	ND	0.1	%							
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**Duplicate (P6K0104-DUP1)** Source: 6J31008-02 Prepared & Analyzed: 11/01/16

% Moisture	2.0	0.1	%		3.0			40.0	20	
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**Duplicate (P6K0104-DUP2)** Source: 6J20003-13 Prepared & Analyzed: 11/01/16

% Moisture	2.0	0.1	%		1.0			66.7	20	
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**Batch P6K0207 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P6K0207-BLK1)** Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	ND	1.00	mg/kg wet							
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**LCS (P6K0207-BS1)** Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	431	1.00	mg/kg wet	400		108	80-120			
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Charger Services  
P.O. Box 53070  
Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6K0207 - \*\*\* DEFAULT PREP \*\*\***

**LCS Dup (P6K0207-BSD1)** Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	444	1.00	mg/kg wet	400		111	80-120	2.86	20	
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**Duplicate (P6K0207-DUP1)** Source: 6J21005-07 Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	2080	27.5	mg/kg dry		2050			1.13	20	
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**Duplicate (P6K0207-DUP2)** Source: 6J28003-05 Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	55.2	1.10	mg/kg dry		51.3			7.30	20	
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**Matrix Spike (P6K0207-MS1)** Source: 6J21005-07 Prepared: 11/02/16 Analyzed: 11/03/16

Chloride	3330	27.5	mg/kg dry	1100	2050	116	80-120			
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**Batch P7C1603 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P7C1603-BLK1)** Prepared & Analyzed: 03/16/17

Chloride	ND	1.00	mg/kg wet							
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**LCS (P7C1603-BS1)** Prepared & Analyzed: 03/16/17

Chloride	403	1.00	mg/kg wet	400		101	80-120			
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**LCS Dup (P7C1603-BSD1)** Prepared & Analyzed: 03/16/17

Chloride	403	1.00	mg/kg wet	400		101	80-120	0.0993	20	
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**Duplicate (P7C1603-DUP1)** Source: 7C13014-01 Prepared & Analyzed: 03/16/17

Chloride	371	1.06	mg/kg dry		369			0.575	20	
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**Duplicate (P7C1603-DUP2)** Source: 7C13017-03 Prepared & Analyzed: 03/16/17

Chloride	26.4	1.04	mg/kg dry		28.2			6.72	20	
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Charger Services  
P.O. Box 53070  
Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

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

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**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)**

Source: 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)**

Source: 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			

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

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P6K0106 - TX 1005**

**Blank (P6K0106-BLK1)**

Prepared: 10/28/16 Analyzed: 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: 10/28/16 Analyzed: 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-BS1)**

Prepared: 10/28/16 Analyzed: 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)**

Source: 6J28002-08

Prepared: 10/28/16 Analyzed: 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)**

Source: 6J28002-08

Prepared: 10/28/16 Analyzed: 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			

Charger Services  
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Midland TX, 79710

Project: Siana Triple A Fed #2  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**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-BS1)**

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)**

Source: 6J28010-05

Prepared: 10/31/16 Analyzed: 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)**

Source: 6J28010-05

Prepared: 10/31/16 Analyzed: 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			

### 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

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.



CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Permian Basin Environmental Lab, LP  
1400 Rankin Hwy  
Midland, Texas 79701

Phone: 432-686-7235

Project Manager: Cathy Wolf  
Company Name: Charge Services

Project Name: Triple A Pad #2

Company Address: \_\_\_\_\_

Project Loc: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

PO #: \_\_\_\_\_

Telephone No: 325-669-5735

Report Format:  Standard  TRRP  NPDES

Sampler Signature: [Signature]

e-mail: Cathy.Wolf@charge-services.com

ORDER #: 652100X

Preservation & # of Containers

Analyze For:

LAB # (lab use only)	FIELD CODE	Beginning Depth	Ending Depth	Date Sampled	Time Sampled	Field Filtered	Total #. of Containers	Preservation & # of Containers								Matrix	TPH by TX 1005 (8015B, 8015M)	Chloride	BTEX by 8021B	Rush 24 48 72 (Please call) Standard
								Ice	HNO <sub>3</sub> 250,ml Poly	HCl	H <sub>2</sub> SO <sub>4</sub>	NaOH	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	None 1L Poly	NaOH/ZnAc					
	SB-3		2	10/19/16	5:30 PM		1	X												
	SB-3		5		5:35 PM															
	SB-3		10		5:45 PM															
	SB-4		2		5:20 PM															
	SB-4		4		5:25 PM															
	SB-4		2		5:10 PM															
	SB-5		2		5:15 PM															
	SB-5		5		4:40 PM															
	SB-6		3		4:45 PM															
	SB-6		7		4:50 PM															

Special Instructions:

Laboratory Comments:

Relinquished by: TOSH COATES Date: 10/21/16 Time: 5:15 PM Received by: [Signature] Date: 10/21/16 Time: 8:15

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Temperature Upon Receipt: \_\_\_\_\_ °C Factor: NCELI



**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  
P.O. Box 53070  
Midland TX, 79710

Project: Siana Curry State #5  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**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

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

Project: Siana Curry State #5  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		78.4 %	75-125		P7D0208	03/31/17	04/02/17	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		91.6 %	75-125		P7D0208	03/31/17	04/02/17	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

<b>% Moisture</b>	<b>4.0</b>	0.1	%	1	P7D0301	04/03/17	04/03/17	% calculation	
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**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		79.7 %	70-130		P7D0206	03/31/17	03/31/17	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		99.6 %	70-130		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	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**Permian Basin Environmental Lab, 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	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.2 %	75-125		P7D0208	03/31/17	04/02/17	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		95.8 %	75-125		P7D0208	03/31/17	04/02/17	EPA 8021B	

**General Chemistry Parameters by EPA / Standard Methods**

<b>% Moisture</b>	<b>4.0</b>	0.1	%	1	P7D0301	04/03/17	04/03/17	% calculation	
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**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M**

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	
<i>Surrogate: 1-Chlorooctane</i>		76.1 %	70-130		P7D0206	03/31/17	03/31/17	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		94.7 %	70-130		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	

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**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
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**Batch P7D0208 - General Preparation (GC)**

<b>Blank (P7D0208-BLK1)</b>										
Prepared: 03/31/17 Analyzed: 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	"							
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0560</i>		<i>"</i>	<i>0.0600</i>		<i>93.2</i>	<i>75-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0441</i>		<i>"</i>	<i>0.0600</i>		<i>73.5</i>	<i>75-125</i>			<i>S-GC</i>

<b>LCS (P7D0208-BS1)</b>										
Prepared: 03/31/17 Analyzed: 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			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0604</i>		<i>"</i>	<i>0.0600</i>		<i>101</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0698</i>		<i>"</i>	<i>0.0600</i>		<i>116</i>	<i>75-125</i>			

<b>LCS Dup (P7D0208-BSD1)</b>										
Prepared: 03/31/17 Analyzed: 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	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0587</i>		<i>"</i>	<i>0.0600</i>		<i>97.8</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0549</i>		<i>"</i>	<i>0.0600</i>		<i>91.5</i>	<i>75-125</i>			

<b>Matrix Spike (P7D0208-MS1)</b>										
Source: 7C29023-11 Prepared: 03/31/17 Analyzed: 04/02/17										
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
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0613</i>		<i>"</i>	<i>0.0706</i>		<i>86.8</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0710</i>		<i>"</i>	<i>0.0706</i>		<i>101</i>	<i>75-125</i>			

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Project Manager: Coty Woolf

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**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
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**Batch P7D0208 - General Preparation (GC)**

<b>Matrix Spike Dup (P7D0208-MSD1)</b>	<b>Source: 7C29023-11</b>			<b>Prepared: 03/31/17 Analyzed: 04/02/17</b>						
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
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0706</i>		<i>"</i>	<i>0.0706</i>		<i>100</i>	<i>75-125</i>			
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>0.0841</i>		<i>"</i>	<i>0.0706</i>		<i>119</i>	<i>75-125</i>			

Charger Services  
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Project: Siana Curry State #5  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

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

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P7D0301 - \*\*\* DEFAULT PREP \*\*\***

**Blank (P7D0301-BLK1)**

Prepared & Analyzed: 04/03/17

% Moisture	ND	0.1	%							
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**Duplicate (P7D0301-DUP1)**

Source: 7C31003-11

Prepared & Analyzed: 04/03/17

% Moisture	7.0	0.1	%		7.0			0.00	20	
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**Duplicate (P7D0301-DUP2)**

Source: 7C31008-06

Prepared & Analyzed: 04/03/17

% Moisture	5.0	0.1	%		5.0			0.00	20	
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**Duplicate (P7D0301-DUP3)**

Source: 7C31012-03

Prepared & Analyzed: 04/03/17

% Moisture	4.0	0.1	%		4.0			0.00	20	
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Charger Services  
P.O. Box 53070  
Midland TX, 79710

Project: Siana Curry State #5  
Project Number: [none]  
Project Manager: Coty Woolf

Fax: (432) 695-6247

**Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M - Quality Control**  
**Permian Basin Environmental Lab, L.P.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch P7D0206 - TX 1005**

**Blank (P7D0206-BLK1)**

Prepared & Analyzed: 03/31/17

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
<i>Surrogate: 1-Chlorooctane</i>	<i>80.0</i>		<i>"</i>	<i>100</i>		<i>80.0</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>48.9</i>		<i>"</i>	<i>50.0</i>		<i>97.7</i>	<i>70-130</i>			

**LCS (P7D0206-BS1)**

Prepared & 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			
<i>Surrogate: 1-Chlorooctane</i>	<i>115</i>		<i>"</i>	<i>100</i>		<i>115</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>46.6</i>		<i>"</i>	<i>50.0</i>		<i>93.2</i>	<i>70-130</i>			

**LCS Dup (P7D0206-BS1)**

Prepared & 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	
<i>Surrogate: 1-Chlorooctane</i>	<i>107</i>		<i>"</i>	<i>100</i>		<i>107</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>47.3</i>		<i>"</i>	<i>50.0</i>		<i>94.7</i>	<i>70-130</i>			

**Matrix Spike (P7D0206-MS1)**

Source: 7C31008-10

Prepared: 03/31/17 Analyzed: 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			
<i>Surrogate: 1-Chlorooctane</i>	<i>119</i>		<i>"</i>	<i>111</i>		<i>107</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>57.1</i>		<i>"</i>	<i>55.6</i>		<i>103</i>	<i>70-130</i>			

**Matrix Spike Dup (P7D0206-MSD1)**

Source: 7C31008-10

Prepared: 03/31/17 Analyzed: 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	
<i>Surrogate: 1-Chlorooctane</i>	<i>127</i>		<i>"</i>	<i>111</i>		<i>114</i>	<i>70-130</i>			
<i>Surrogate: o-Terphenyl</i>	<i>61.9</i>		<i>"</i>	<i>55.6</i>		<i>111</i>	<i>70-130</i>			

### 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

Report Approved By: \_\_\_\_\_



Date: 4/3/2017

Brent Barron, Laboratory Director/Technical Director

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