

**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: Blue Dunn
Project Number: [none]
Location: New Mexico

Lab Order Number: 6F17002



NELAP/TCEQ # T104704156-13-3

Report Date: 06/30/16

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

Project: Blue Dunn
Project Number: [none]
Project Manager: Coty Woolf

Fax: (432) 695-6247

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1 0-1	6F17002-01	Soil	06/08/16 10:00	06-17-2016 08:15
SS-1 1-2	6F17002-02	Soil	06/08/16 10:15	06-17-2016 08:15
SS-1 2-3	6F17002-03	Soil	06/08/16 10:30	06-17-2016 08:15
SS-2 0-1	6F17002-04	Soil	06/08/16 10:45	06-17-2016 08:15
SS-2 1-2	6F17002-05	Soil	06/08/16 11:00	06-17-2016 08:15
SS-2 2-3	6F17002-06	Soil	06/08/16 11:15	06-17-2016 08:15
SS-3 0-1	6F17002-07	Soil	06/08/16 11:30	06-17-2016 08:15
SS-3 1-2	6F17002-08	Soil	06/08/16 11:45	06-17-2016 08:15
SS-3 2-3	6F17002-09	Soil	06/08/16 12:00	06-17-2016 08:15
SS-4 0-1	6F17002-10	Soil	06/08/16 12:15	06-17-2016 08:15
SS-4 1-2	6F17002-11	Soil	06/08/16 12:30	06-17-2016 08:15
SS-4 2-3	6F17002-12	Soil	06/08/16 12:45	06-17-2016 08:15
SS-5 0-1	6F17002-13	Soil	06/08/16 13:00	06-17-2016 08:15
SS-5 1-2	6F17002-14	Soil	06/08/16 13:15	06-17-2016 08:15
SS-5 2-3	6F17002-15	Soil	06/08/16 13:30	06-17-2016 08:15
SS-6 0-1	6F17002-16	Soil	06/08/16 13:45	06-17-2016 08:15
SS-6 1-2	6F17002-17	Soil	06/08/16 14:00	06-17-2016 08:15
SS-6 2-3	6F17002-18	Soil	06/08/16 14:15	06-17-2016 08:15

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SS-1 0-1
6F17002-01 (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	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B
Toluene	ND	0.213	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B
Ethylbenzene	ND	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B
Xylene (p/m)	ND	0.213	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B
Xylene (o)	ND	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B
Surrogate: 4-Bromofluorobenzene		75.9 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B
Surrogate: 1,4-Difluorobenzene		107 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B

General Chemistry Parameters by EPA / Standard Methods

Chloride	1410	26.6	mg/kg dry	25	P6F2018	06/20/16	06/21/16	EPA 300.0
% Moisture	6.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	1010	266	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M
>C12-C28	30600	266	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M
>C28-C35	4920	266	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M
Surrogate: 1-Chlorooctane		112 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M
Surrogate: o-Terphenyl		93.0 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M
Total Petroleum Hydrocarbon C6-C35	36500	266	mg/kg dry	10	[CALC]	06/17/16	06/19/16	calc

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SS-1 1-2
6F17002-02 (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	0.109	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Toluene	ND	0.217	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.109	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (p/m)	ND	0.217	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.109	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		112 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		116 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	1210	10.9	mg/kg dry	10	P6F2018	06/20/16	06/21/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	281	272	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	15700	272	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	3050	272	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		121 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		135 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	19000	272	mg/kg dry	10	[CALC]	06/17/16	06/19/16	calc	

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SS-1 2-3
6F17002-03 (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	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Toluene	ND	0.213	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.402	0.213	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.106	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		132 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		111 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	1090	10.6	mg/kg dry	10	P6F2018	06/20/16	06/21/16	EPA 300.0	
% Moisture	6.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	303	133	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	10700	133	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1940	133	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		113 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		130 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	12900	133	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-2 0-1
6F17002-04 (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	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Toluene	ND	0.220	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (p/m)	ND	0.220	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		117 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		111 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	194	1.10	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	4840	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1020	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		111 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		116 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	5860	137	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-2 1-2
6F17002-05 (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	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Toluene	ND	0.220	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Ethylbenzene	0.300	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.612	0.220	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.110	mg/kg dry	100	P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		107 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		83.3 %	75-125		P6F2102	06/19/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	748	5.49	mg/kg dry	5	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	566	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	11000	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1600	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		116 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		132 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	13100	137	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-2 2-3
6F17002-06 (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	0.0220	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0440	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.623	0.0220	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.774	0.0440	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	0.317	0.0220	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		119 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		113 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	676	5.49	mg/kg dry	5	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	9.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	671	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	13300	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	2760	137	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		122 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		135 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	16800	137	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-3 0-1
6F17002-07 (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	0.136	0.0215	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	1.22	0.0430	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	2.64	0.0215	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	8.84	0.0430	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	1.38	0.0215	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		104 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		103 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	1530	5.38	mg/kg dry	5	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	7.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	4260	269	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	41100	269	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	8210	269	mg/kg dry	10	P6F2010	06/17/16	06/19/16	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		108 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		114 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	53600	269	mg/kg dry	10	[CALC]	06/17/16	06/19/16	calc	

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SS-3 1-2
6F17002-08 (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	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0417	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	ND	0.0417	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	4.44	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
<i>Surrogate: 1,4-Difluorobenzene</i>		100 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
<i>Surrogate: 4-Bromofluorobenzene</i>		106 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	31.1	1.04	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	4.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	2720	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	670	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
<i>Surrogate: 1-Chlorooctane</i>		116 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
<i>Surrogate: o-Terphenyl</i>		135 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	3390	130	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-3 2-3
6F17002-09 (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	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0417	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.312	0.0417	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	0.120	0.0208	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		109 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		118 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	187	1.04	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	4.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	221	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	3550	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	756	130	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		130 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		135 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	4530	130	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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Project: Blue Dunn
Project Number: [none]
Project Manager: Coty Woolf

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SS-4 0-1
6F17002-10 (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	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0412	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.543	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.842	0.0412	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		68.0 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		111 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	40.2	1.03	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	3.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	636	129	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C12-C28	15400	129	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
>C28-C35	3000	129	mg/kg dry	5	P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		123 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		138 %	70-130		P6F2010	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	19100	129	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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Project Number: [none]
Project Manager: Coty Woolf

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SS-4 1-2
6F17002-11 (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	0.0211	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	0.0455	0.0421	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.500	0.0211	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.759	0.0421	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	1.22	0.0211	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		64.6 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		101 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	109	1.05	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	5.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	489	132	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	13500	132	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	3110	132	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		107 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		122 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	17100	132	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-4 2-3
6F17002-12 (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	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0412	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.106	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	0.187	0.0412	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	0.285	0.0206	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		64.4 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		110 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	89.6	1.03	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	3.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	269	129	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	8290	129	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1630	129	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		117 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		127 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	10200	129	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-5 0-1
6F17002-13 (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	0.0227	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.0455	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.0227	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	ND	0.0455	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.0227	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		103 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		114 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	386	1.14	mg/kg dry	1	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	12.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	142	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	8150	142	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1850	142	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		124 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		138 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	10000	142	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-5 1-2
6F17002-14 (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	0.00112	mg/kg dry	1	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	ND	0.00225	mg/kg dry	1	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	ND	0.00112	mg/kg dry	1	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	ND	0.00225	mg/kg dry	1	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	ND	0.00112	mg/kg dry	1	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		108 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		108 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	875	5.62	mg/kg dry	5	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	ND	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	4220	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1030	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		120 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		141 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	5250	140	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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Project Manager: Coty Woolf

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SS-5 2-3
6F17002-15 (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	0.0225	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	0.253	0.0449	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.855	0.0225	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	3.61	0.0449	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	1.18	0.0225	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		68.4 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	S-GC
Surrogate: 1,4-Difluorobenzene		106 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	907	5.62	mg/kg dry	5	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	11.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	1850	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	26400	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	3700	140	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		119 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		119 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	32000	140	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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Project Manager: Coty Woolf

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SS-6 0-1
6F17002-16 (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	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	0.237	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	0.778	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	9.87	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	2.83	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		108 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		85.4 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	2360	27.2	mg/kg dry	25	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	2300	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	13400	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1840	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		110 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		96.9 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	17500	136	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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Project: Blue Dunn
Project Number: [none]
Project Manager: Coty Woolf

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SS-6 1-2
6F17002-17 (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	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Toluene	0.141	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Ethylbenzene	1.04	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (p/m)	11.6	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Xylene (o)	4.00	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		106 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		89.4 %	75-125		P6F2702	06/21/16	06/21/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	1600	10.9	mg/kg dry	10	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	3180	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	14500	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	2060	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		124 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		132 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	S-GC
Total Petroleum Hydrocarbon C6-C35	19700	136	mg/kg dry	5	[CALC]	06/17/16	06/19/16	calc	

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SS-6 2-3
6F17002-18 (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	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/22/16	EPA 8021B	
Toluene	0.491	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/22/16	EPA 8021B	
Ethylbenzene	1.34	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/22/16	EPA 8021B	
Xylene (p/m)	12.3	0.0435	mg/kg dry	20	P6F2702	06/21/16	06/22/16	EPA 8021B	
Xylene (o)	4.06	0.0217	mg/kg dry	20	P6F2702	06/21/16	06/22/16	EPA 8021B	
Surrogate: 1,4-Difluorobenzene		102 %	75-125		P6F2702	06/21/16	06/22/16	EPA 8021B	
Surrogate: 4-Bromofluorobenzene		79.2 %	75-125		P6F2702	06/21/16	06/22/16	EPA 8021B	

General Chemistry Parameters by EPA / Standard Methods

Chloride	1320	10.9	mg/kg dry	10	P6F2910	06/21/16	06/21/16	EPA 300.0	
% Moisture	8.0	0.1	%	1	P6F2002	06/20/16	06/20/16	% calculation	

Total Petroleum Hydrocarbons C6-C35 by EPA Method 8015M

C6-C12	2510	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C12-C28	10200	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
>C28-C35	1400	136	mg/kg dry	5	P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: 1-Chlorooctane		113 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Surrogate: o-Terphenyl		122 %	70-130		P6F2304	06/17/16	06/19/16	TPH 8015M	
Total Petroleum Hydrocarbon C6-C35	14100	136	mg/kg dry	5	[CALC]	06/17/16	06/19/16	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 P6F2102 - General Preparation (GC)

Blank (P6F2102-BLK1)

Prepared: 06/19/16 Analyzed: 06/21/16

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	0.0613		"	0.0600		102	75-125			
Surrogate: 4-Bromofluorobenzene	0.0663		"	0.0600		111	75-125			

LCS (P6F2102-BS1)

Prepared: 06/19/16 Analyzed: 06/21/16

Benzene	0.0908	0.00100	mg/kg wet	0.100		90.8	70-130			
Toluene	0.0804	0.00200	"	0.100		80.4	70-130			
Ethylbenzene	0.119	0.00100	"	0.100		119	70-130			
Xylene (p/m)	0.201	0.00200	"	0.200		100	70-130			
Xylene (o)	0.0953	0.00100	"	0.100		95.3	70-130			
Surrogate: 1,4-Difluorobenzene	0.0658		"	0.0600		110	75-125			
Surrogate: 4-Bromofluorobenzene	0.0748		"	0.0600		125	75-125			

Matrix Spike (P6F2102-MS1)

Source: 6F17003-18

Prepared: 06/19/16 Analyzed: 06/21/16

Benzene	0.0666	0.00130	mg/kg dry	0.130	ND	51.3	80-120			QM-07
Toluene	0.0181	0.00260	"	0.130	ND	14.0	80-120			QM-07
Ethylbenzene	0.0491	0.00130	"	0.130	0.00700	32.4	80-120			QM-07
Xylene (p/m)	ND	0.00260	"	0.260	ND		80-120			QM-07
Xylene (o)	0.00539	0.00130	"	0.130	ND	4.15	80-120			QM-07
Surrogate: 1,4-Difluorobenzene	0.0819		"	0.0779		105	75-125			
Surrogate: 4-Bromofluorobenzene	0.0892		"	0.0779		114	75-125			

Batch P6F2702 - General Preparation (GC)

Blank (P6F2702-BLK1)

Prepared & Analyzed: 06/21/16

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	0.0636		"	0.0600		106	75-125			
Surrogate: 4-Bromofluorobenzene	0.0668		"	0.0600		111	75-125			

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

Project: Blue Dunn
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 P6F2702 - General Preparation (GC)

LCS (P6F2702-BS1)

Prepared & Analyzed: 06/21/16

Benzene	0.118	0.00100	mg/kg wet	0.100		118	70-130			
Toluene	0.108	0.00200	"	0.100		108	70-130			
Ethylbenzene	0.117	0.00100	"	0.100		117	70-130			
Xylene (p/m)	0.223	0.00200	"	0.200		112	70-130			
Xylene (o)	0.120	0.00100	"	0.100		120	70-130			
Surrogate: 4-Bromofluorobenzene	0.0685		"	0.0600		114	75-125			
Surrogate: 1,4-Difluorobenzene	0.0641		"	0.0600		107	75-125			

Duplicate (P6F2702-DUP1)

Source: 6F17004-07

Prepared: 06/21/16 Analyzed: 06/22/16

Benzene	ND	0.0562	mg/kg dry		ND				20	
Toluene	0.160	0.112	"		0.147			8.44	20	
Ethylbenzene	ND	0.0562	"		ND				20	
Xylene (p/m)	1.92	0.112	"		2.64			31.8	20	R3
Xylene (o)	1.86	0.0562	"		1.59			16.1	20	
Surrogate: 4-Bromofluorobenzene	0.0467		"	0.0674		69.3	75-125			S-GC
Surrogate: 1,4-Difluorobenzene	0.0639		"	0.0674		94.8	75-125			

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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 P6F2002 - * DEFAULT PREP *****

Blank (P6F2002-BLK1)		Prepared & Analyzed: 06/20/16								
% Moisture	ND	0.1	%							
Duplicate (P6F2002-DUP1)		Source: 6F17001-26		Prepared & Analyzed: 06/20/16						
% Moisture	5.0	0.1	%		5.0			0.00	20	
Duplicate (P6F2002-DUP2)		Source: 6F17003-07		Prepared & Analyzed: 06/20/16						
% Moisture	10.0	0.1	%		11.0			9.52	20	
Duplicate (P6F2002-DUP3)		Source: 6F17004-08		Prepared & Analyzed: 06/20/16						
% Moisture	9.0	0.1	%		11.0			20.0	20	
Duplicate (P6F2002-DUP4)		Source: 6F17005-13		Prepared & Analyzed: 06/20/16						
% Moisture	16.0	0.1	%		17.0			6.06	20	
Duplicate (P6F2002-DUP5)		Source: 6F17005-36		Prepared & Analyzed: 06/20/16						
% Moisture	11.0	0.1	%		10.0			9.52	20	

Batch P6F2018 - * DEFAULT PREP *****

Blank (P6F2018-BLK1)		Prepared: 06/20/16 Analyzed: 06/21/16								
Chloride	ND	1.00	mg/kg wet							
LCS (P6F2018-BS1)		Prepared: 06/20/16 Analyzed: 06/21/16								
Chloride	176	1.00	mg/kg wet	200		87.8	80-120			
LCS Dup (P6F2018-BSD1)		Prepared: 06/20/16 Analyzed: 06/21/16								
Chloride	177	1.00	mg/kg wet	200		88.7	80-120	0.941	20	

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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 P6F2018 - * DEFAULT PREP *****

Duplicate (P6F2018-DUP1)		Source: 6F20002-01		Prepared: 06/20/16 Analyzed: 06/21/16						
Chloride	1210	5.32	mg/kg dry		1150			4.68	20	
Duplicate (P6F2018-DUP2)		Source: 6F20002-11		Prepared: 06/20/16 Analyzed: 06/21/16						
Chloride	779	5.26	mg/kg dry		761			2.28	20	
Matrix Spike (P6F2018-MS1)		Source: 6F20002-01		Prepared: 06/20/16 Analyzed: 06/21/16						
Chloride	2300	5.32	mg/kg dry	1060	1150	108	80-120			

Batch P6F2910 - * DEFAULT PREP *****

Blank (P6F2910-BLK1)				Prepared: 06/21/16 Analyzed: 06/29/16						
Chloride	ND	1.00	mg/kg wet							
LCS (P6F2910-BS1)				Prepared: 06/21/16 Analyzed: 06/29/16						
Chloride	176	1.00	mg/kg wet	200		88.0	80-120			
LCS Dup (P6F2910-BSD1)				Prepared: 06/21/16 Analyzed: 06/29/16						
Chloride	177	1.00	mg/kg wet	200		88.4	80-120	0.561	20	
Duplicate (P6F2910-DUP1)		Source: 6F17002-04		Prepared & Analyzed: 06/21/16						
Chloride	193	1.10	mg/kg dry		194			0.284	20	
Duplicate (P6F2910-DUP2)		Source: 6F17002-14		Prepared & Analyzed: 06/21/16						
Chloride	862	5.62	mg/kg dry		875			1.47	20	
Matrix Spike (P6F2910-MS1)		Source: 6F17002-04		Prepared & Analyzed: 06/21/16						
Chloride	366	1.10	mg/kg dry	220	194	78.2	80-120			QM-07

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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 P6F2010 - TX 1005

Blank (P6F2010-BLK1)

Prepared: 06/17/16 Analyzed: 06/18/16

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	103		"	100		103	70-130			
Surrogate: o-Terphenyl	54.4		"	50.0		109	70-130			

LCS (P6F2010-BS1)

Prepared: 06/17/16 Analyzed: 06/18/16

C6-C12	952	25.0	mg/kg wet	1000		95.2	75-125			
>C12-C28	1140	25.0	"	1000		114	75-125			
Surrogate: 1-Chlorooctane	127		"	100		127	70-130			
Surrogate: o-Terphenyl	56.0		"	50.0		112	70-130			

LCS Dup (P6F2010-BS1)

Prepared: 06/17/16 Analyzed: 06/18/16

C6-C12	999	25.0	mg/kg wet	1000		99.9	75-125	4.82	20	
>C12-C28	1190	25.0	"	1000		119	75-125	4.28	20	
Surrogate: 1-Chlorooctane	134		"	100		134	70-130			S-GC
Surrogate: o-Terphenyl	58.0		"	50.0		116	70-130			

Duplicate (P6F2010-DUP1)

Source: 6F17002-10

Prepared: 06/17/16 Analyzed: 06/19/16

C6-C12	639	129	mg/kg dry		636			0.453	20	
>C12-C28	15700	129	"		15400			1.95	20	
Surrogate: 1-Chlorooctane	129		"	103		125	70-130			
Surrogate: o-Terphenyl	71.1		"	51.5		138	70-130			S-GC

Batch P6F2304 - TX 1005

Blank (P6F2304-BLK1)

Prepared: 06/17/16 Analyzed: 06/19/16

C6-C12	ND	25.0	mg/kg wet							
>C12-C28	ND	25.0	"							
>C28-C35	ND	25.0	"							
Surrogate: 1-Chlorooctane	109		"	100		109	70-130			
Surrogate: o-Terphenyl	57.5		"	50.0		115	70-130			

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

Project: Blue Dunn
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 P6F2304 - TX 1005

LCS (P6F2304-BS1)

Prepared: 06/17/16 Analyzed: 06/19/16

C6-C12	1010	25.0	mg/kg wet	1000		101	75-125			
>C12-C28	1130	25.0	"	1000		113	75-125			
Surrogate: 1-Chlorooctane	137		"	100		137	70-130			S-GC
Surrogate: o-Terphenyl	58.0		"	50.0		116	70-130			

LCS Dup (P6F2304-BSD1)

Prepared: 06/17/16 Analyzed: 06/19/16

C6-C12	1020	25.0	mg/kg wet	1000		102	75-125	0.547	20	
>C12-C28	1160	25.0	"	1000		116	75-125	2.29	20	
Surrogate: 1-Chlorooctane	134		"	100		134	70-130			S-GC
Surrogate: o-Terphenyl	60.1		"	50.0		120	70-130			

Duplicate (P6F2304-DUP1)

Source: 6F17004-12

Prepared: 06/17/16 Analyzed: 06/19/16

C6-C12	1940	287	mg/kg dry		1830			6.12	20	
>C12-C28	22800	287	"		22300			2.30	20	
Surrogate: 1-Chlorooctane	151		"	115		131	70-130			S-GC
Surrogate: o-Terphenyl	72.2		"	57.5		126	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.
R3	The RPD exceeded the acceptance limit due to sample matrix effects.
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:

6/30/2016

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

Project Manager:

Cathy Lee (f)

Project Name:

Blue Dancer

Company Name

Charger Services

Project #:

Company Address:

Project Loc:

City/State/Zip:

PO #:

Telephone No:

Fax No:

Report Format:

☒ Standard

☐ TRRP

☐ NPDES

Sampler Signature:

[Signature]

e-mail:

(lab use only)

ORDER #:

6F17002

LAB # (lab use only)

FIELD CODE

Beginning Depth

Ending Depth

Date Sampled

Time Sampled

Field Filtered

Total #. of Containers

Ice

HNO₃ 250,ml Poly

HCl

H₂SO₄

NaOH

Na₂S₂O₃

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:

Rush 24 48 72 (Please call)

Standard

Special Instructions:

Relinquished by:

Date

Time

Date

Time

Relinquished by:

Date

Time

Date

Time

Relinquished by:

Date

Time

Date

Time

Laboratory Comments:

Sample Containers Initialed?
VOCS Free of Headspace?
Labels on container(s)
Custody seals on container(s)
Custody seals on cooler(s)
Sample Hand Delivered
by Sampler/Client Rep?
by Courier? UPS DHL FedEx Lone Star
Temperature Upon Receipt:
Adjusted: 2.0 °C Factor 100561

[Signatures]

