



FOUNDATION ENERGY MANAGEMENT, LLC

Foundation Energy Management, LLC
16000 North Dallas Parkway, Suite 875
Dallas, Texas 75248

September 4, 2015

Colorado Oil and Gas Corporation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203
ATTN: Rob Young

RE: SPILL ID# 441818

Dear Rob Young,

Foundation Energy Management, LLC (Foundation) is submitting the sampling results for the Spill ID# 441818, RMR Ranch #14-36.

Below is a table that outlines what samples we took and their thresholds. Attached to this letter is the complete sampling report and a map of where the samples were taken.

Location of Sample	Depth of Sample	Tested for	Sample Taken Date	Sample Result	Table 910-1 Standard
Background	3'	pH	8/19/2015	7.1	6-9
NW	3'	pH	8/19/2015	6.6	6-9
SW	3'	pH	8/19/2015	7.3	6-9
East	3'	pH	8/19/2015	6.7	6-9
Background	3'	SAR	8/19/2015	0.51	< 12 [^] 5
NW	3'	SAR	8/19/2015	2.48	< 12 [^] 5
SW	3'	SAR	8/19/2015	1.98	< 12 [^] 5
East	3'	SAR	8/19/2015	0.31	< 12 [^] 5
Background	3'	EC	8/19/2015	0.86	< 4 mmhos/cm or 2x Background
NW	3'	EC	8/19/2015	1.04	< 4 mmhos/cm or 2x Background
SW	3'	EC	8/19/2015	0.9	< 4 mmhos/cm or 2x Background
East	3'	EC	8/19/2015	0.74	< 4 mmhos/cm or 2x Background
Background - C15080794-001	3'	TPH	8/21/2015	14.9	500 mg/kg
NW - C15080794-002	3'	TPH	8/21/2015	4.1	500 mg/kg
SW - C15080794-003	3'	TPH	8/21/2015	ND	500 mg/kg
East - C15080794-004	3'	TPH	8/21/2015	11	500 mg/kg
Background - C15080794-001	3'	BTEX	8/21/2015	ND	360.17 mg/kg [^] 2
NW - C15080794-002	3'	BTEX	8/21/2015	ND	360.17 mg/kg [^] 2
SW - C15080794-003	3'	BTEX	8/21/2015	ND	360.17 mg/kg [^] 2
East - C15080794-004	3'	BTEX	8/21/2015	ND	360.17 mg/kg [^] 2

Tulsa Office

15 East 5th Street, Suite 1200
Tulsa, Oklahoma 74103
P: 918-526-5510 F: 918-585-1660

Corporate Office

16000 Dallas Parkway, Suite 875
Dallas, Texas 75248
P: 972-707-2500 F: 972-934-8610

Denver Office

1801 Broadway, Suite 1500
Denver, Colorado 80202
P: 303-244-8100 F: 303-861-0604



FOUNDATION
ENERGY MANAGEMENT, LLC

Foundation Energy Management, LLC
16000 North Dallas Parkway, Suite 875
Dallas, Texas 75248

Please contact me at (918) 526-5591 or cohair@foundationenergy.com if you have any questions.

Regards,

Caitlin O'Hair
HSE/Regulatory Tech

Tulsa Office

15 East 5th Street, Suite 1200
Tulsa, Oklahoma 74103
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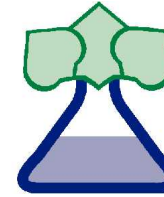
Denver Office

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Denver, Colorado 80202
P: 303-244-8100 F: 303-861-0604

American Agricultural Laboratory, Inc.

20053
GREG MEKELBURG
ENVIRO AG ENGINEERING INC
6654 COUNTY ROAD 44
YUMA CO 80759

210 East 1st / PO Box 370 / McCook, Nebraska 69001
Office: 308-345-3670 / FAX: 308-345-7880
www.AmAgLab.com



NAME : FOUNDATION

DATE RECEIVED: 08/19/2015

DATE REPORTED: 08/21/2015

SOIL TEST RESULTS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH		LIME REC T/A 60% ECCE		EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA)		PHOSPHORUS				
				1 : 1 Soil	Buffer Woodruff	Legume	Non Legume				ppm	lbs/A	P1 ppm	Bicarb ppm	P2 ppm	M2 ppm	M3 ppm
1297687	RMR 14 36	BACKGROUND	0-36	7.1				N	0.86								6
1297688	RMR 14 36	NW	0-36	6.6				N	1.04								16
1297689	RMR 14 36	SW	0-36	7.3				N	0.90								7
1297690	RMR 14 36	EAST	0-36	6.7				N	0.74								15

LAB NUMBER	SULFATE-S Ca-P ppm	NH4OAc (Exchangeable)				DTPA				BORON Sorbitol ppm	EST. CATION EXCHANGE CAPACITY (CEC) me/100g	% SATURATION					
		K ppm	Ca ppm	Mg ppm	Na ppm	Zn ppm	Fe ppm	Mn ppm	Cu ppm			BASE	H	Ca	Mg	K	Na
1297687										0.3							
1297688										0.1							
1297689										0.3							
1297690										0.2							

LAB NUMBER	SOLUBLE (SAT. EXT.)			SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS				CHLORIDE		EXCH. NH4-N		ALUMINUM ppm	TOTAL N %
	Ca me/L	Mg me/L	Na me/L				SAND %	SILT %	CLAY %	SOIL TEXTURE	ppm	lbs/A	ppm	lbs/A		
1297687	7.87	2.90	1.18	0.51	1	0.0										
1297688	6.36	2.63	5.26	2.48	2	0.0										
1297689	3.25	1.17	2.95	1.98	2	0.0										
1297690	3.56	1.33	0.48	0.31	1	0.0										

SUGGESTED FERTILIZER RECOMMENDATIONS

LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	CROP TO BE GROWN	YIELD GOAL	N lbs/A	P2O5 lbs/A	K2O lbs/A	S lbs/A	Zn lbs/A	MgO lbs/A	Fe lbs/A	Mn lbs/A	Cu lbs/A	B lbs/A	Cl lbs/A
1297687	RMR 14 36	BACKGROUND													
1297688	RMR 14 36	NW													
1297689	RMR 14 36	SW													
1297690	RMR 14 36	EAST													

Analysis By: American Agricultural Lab

Recommendations By: American Agricultural Lab



ANALYTICAL SUMMARY REPORT

September 01, 2015

American Agricultural Laboratory

210 E 1st St

McCook, NE 69001

Work Order: C15080794

Project Name: Not Indicated

Energy Laboratories, Inc. Casper WY received the following 4 samples for American Agricultural Laboratory on 8/21/2015 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C15080794-001	20053 RMR 14-36 Background		08/21/15	Soil	Ultrasonic Extraction Methanol Extraction for Volatiles Diesel Range Organics Gasoline Range Organics Volatile Organics, Methanol Extraction SW8260B VOCs, BTEX
C15080794-002	20053 RMR 14-36 NW		08/21/15	Soil	Same As Above
C15080794-003	20053 RMR 14-36 SW		08/21/15	Soil	Same As Above
C15080794-004	20053 RMR 14-36 East		08/21/15	Soil	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

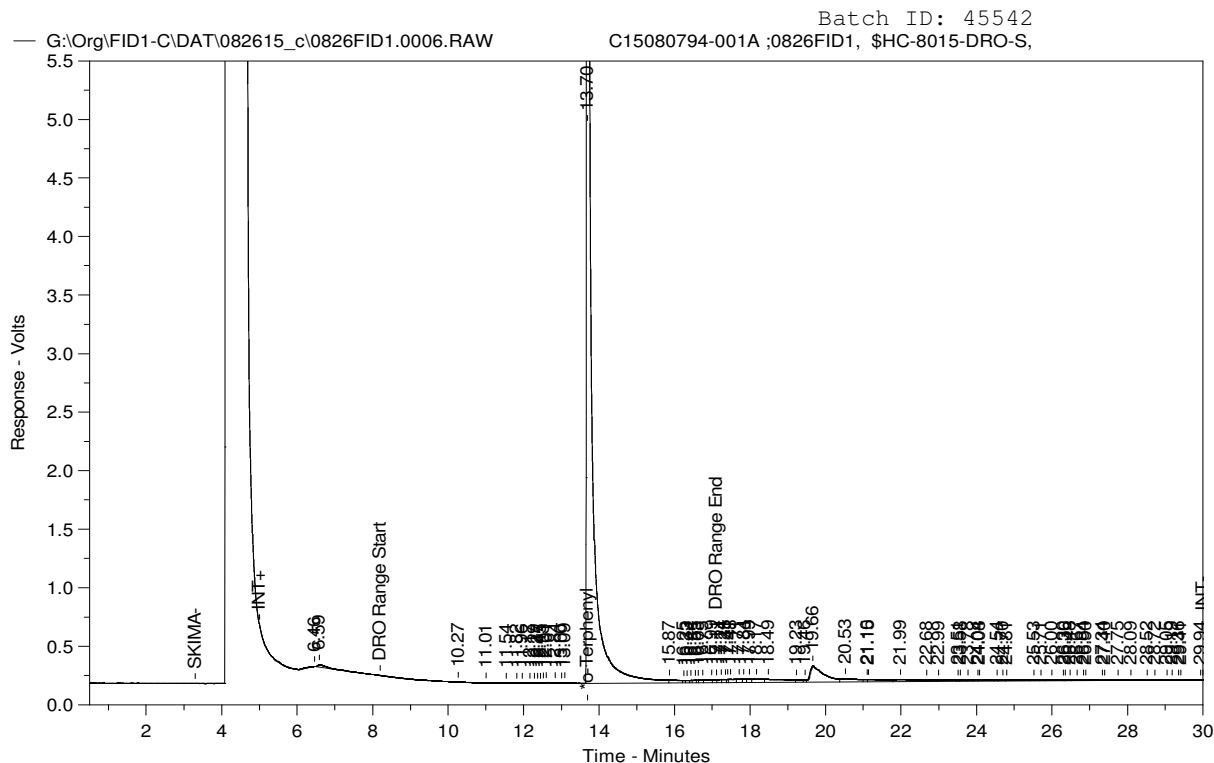
Client: American Agricultural Laboratory
Project: Not Indicated
Lab ID: C15080794-001
Client Sample ID: 20053 RMR 14-36 Background

Report Date: 09/01/15
Collection Date: Not Provided
Date Received: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
Ethylbenzene	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
m+p-Xylenes	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
o-Xylene	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
Toluene	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
Xylenes, Total	ND	mg/kg		0.2		SW8260B	08/29/15 00:42 / dm
Surr: 1,2-Dichlorobenzene-d4	102	%REC		70-130		SW8260B	08/29/15 00:42 / dm
Surr: Dibromofluoromethane	103	%REC		70-130		SW8260B	08/29/15 00:42 / dm
Surr: p-Bromofluorobenzene	109	%REC		70-130		SW8260B	08/29/15 00:42 / dm
Surr: Toluene-d8	89.0	%REC		70-130		SW8260B	08/29/15 00:42 / dm
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	ND	mg/kg		10		SW8015B	08/26/15 17:44 / bah
Total Extractable Hydrocarbons	10	mg/kg		10		SW8015B	08/26/15 17:44 / bah
Surr: o-Terphenyl	59.0	%REC		32-106		SW8015B	08/26/15 17:44 / bah
Gasoline Range Organics (GRO)	ND	mg/kg		4.0		SW8015B	08/27/15 13:45 / jlr
Total Purgeable Hydrocarbons	4.9	mg/kg		4.0		SW8015B	08/27/15 13:45 / jlr
Surr: Trifluorotoluene	89.0	%REC		53.8-137		SW8015B	08/27/15 13:45 / jlr

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C15080794-001A ;0826FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\082615_c\0826FID1.0006.RAW
Date & Time Acquired: 8/26/2015 17:44:04
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_082115_R.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_082115_R.CAL
Sample Weight: 30.2 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 50145
Rt range for Diesel Range Organics (C10 to C28): 8.047 to 17.09
Rt range for Oil Range Organics (C28 to C40+): 16.95 to End Time

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	13.697	66.225	39.363	59.44

DRO Area:1868906 DRO AMOUNT: 1.234107
TEH Area:1.564948E+07 TEH AMOUNT: 10.33393
Oil Area:1.369116E+07 OIL AMOUNT: 9.040774



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

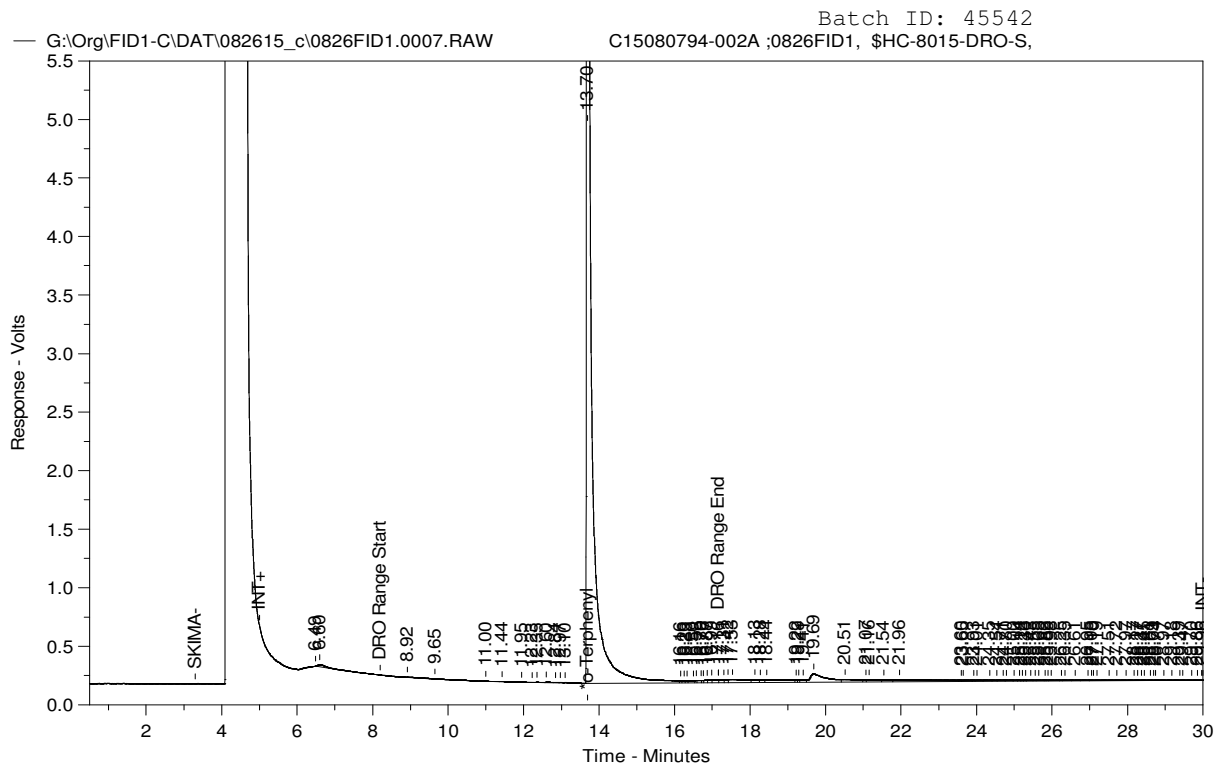
Client: American Agricultural Laboratory
Project: Not Indicated
Lab ID: C15080794-002
Client Sample ID: 20053 RMR 14-36 NW

Report Date: 09/01/15
Collection Date: Not Provided
Date Received: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
Ethylbenzene	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
m+p-Xylenes	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
o-Xylene	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
Toluene	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
Xylenes, Total	ND	mg/kg		0.2		SW8260B	08/29/15 01:17 / dm
Surr: 1,2-Dichlorobenzene-d4	90.0	%REC		70-130		SW8260B	08/29/15 01:17 / dm
Surr: Dibromofluoromethane	94.0	%REC		70-130		SW8260B	08/29/15 01:17 / dm
Surr: p-Bromofluorobenzene	97.0	%REC		70-130		SW8260B	08/29/15 01:17 / dm
Surr: Toluene-d8	80.0	%REC		70-130		SW8260B	08/29/15 01:17 / dm
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	ND	mg/kg		10		SW8015B	08/26/15 18:30 / bah
Total Extractable Hydrocarbons	ND	mg/kg		10		SW8015B	08/26/15 18:30 / bah
Surr: o-Terphenyl	58.0	%REC		32-106		SW8015B	08/26/15 18:30 / bah
Gasoline Range Organics (GRO)	ND	mg/kg		4.0		SW8015B	08/27/15 14:22 / jlr
Total Purgeable Hydrocarbons	4.1	mg/kg		4.0		SW8015B	08/27/15 14:22 / jlr
Surr: Trifluorotoluene	84.0	%REC		53.8-137		SW8015B	08/27/15 14:22 / jlr

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C15080794-002A ;0826FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\082615_c\0826FID1.0007.RAW
Date & Time Acquired: 8/26/2015 18:30:11
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_082115_R.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_082115_R.CAL
Sample Weight: 31.8 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 50145
Rt range for Diesel Range Organics (C10 to C28): 8.047 to 17.09
Rt range for Oil Range Organics (C28 to C40+): 16.95 to End Time

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	13.698	62.893	36.806	58.52

DRO Area:1318935 DRO AMOUNT: 0.8271199
TEH Area:1.224473E+07 TEH AMOUNT: 7.678816
Oil Area:1.072801E+07 OIL AMOUNT: 6.727666



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

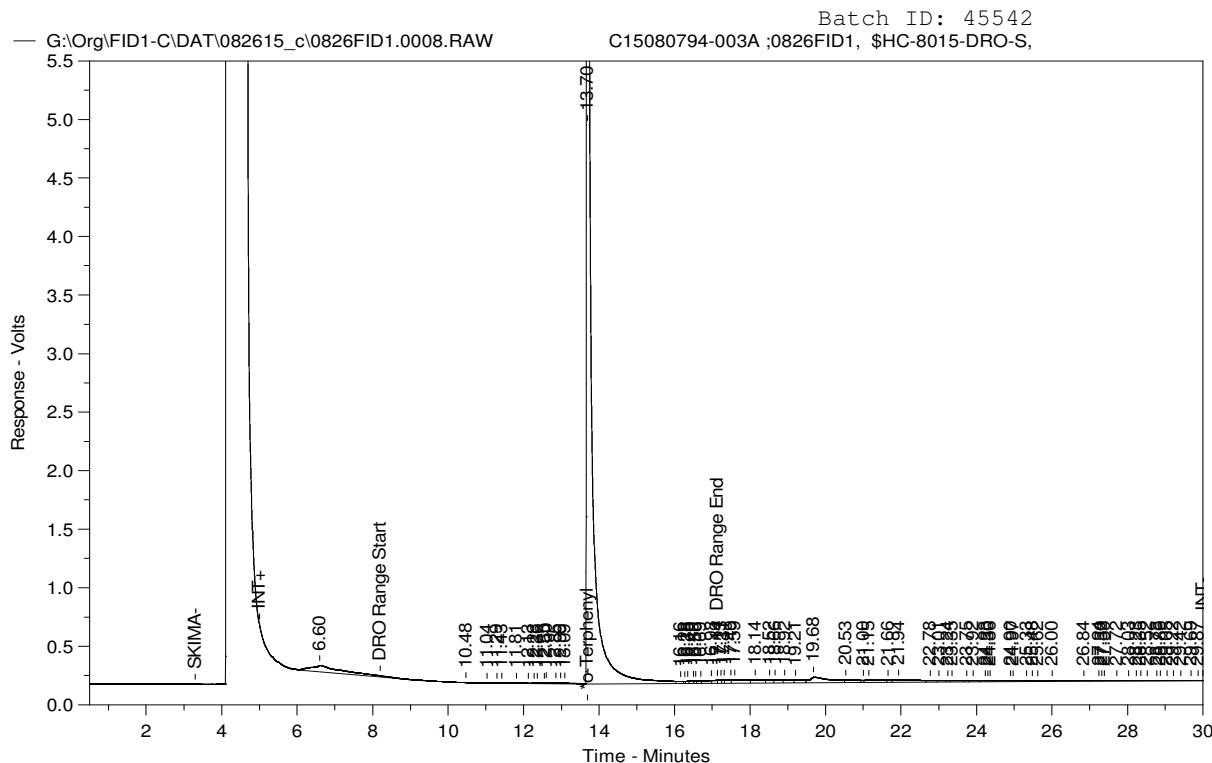
Client: American Agricultural Laboratory
Project: Not Indicated
Lab ID: C15080794-003
Client Sample ID: 20053 RMR 14-36 SW

Report Date: 09/01/15
Collection Date: Not Provided
Date Received: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
Ethylbenzene	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
m+p-Xylenes	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
o-Xylene	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
Toluene	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
Xylenes, Total	ND	mg/kg		0.2		SW8260B	08/29/15 01:52 / dm
Surr: 1,2-Dichlorobenzene-d4	98.0	%REC		70-130		SW8260B	08/29/15 01:52 / dm
Surr: Dibromofluoromethane	102	%REC		70-130		SW8260B	08/29/15 01:52 / dm
Surr: p-Bromofluorobenzene	106	%REC		70-130		SW8260B	08/29/15 01:52 / dm
Surr: Toluene-d8	86.0	%REC		70-130		SW8260B	08/29/15 01:52 / dm
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	ND	mg/kg		10		SW8015B	08/26/15 19:16 / bah
Total Extractable Hydrocarbons	ND	mg/kg		10		SW8015B	08/26/15 19:16 / bah
Surr: o-Terphenyl	54.0	%REC		32-106		SW8015B	08/26/15 19:16 / bah
Gasoline Range Organics (GRO)	ND	mg/kg		4.0		SW8015B	08/27/15 14:59 / jlr
Total Purgeable Hydrocarbons	ND	mg/kg		4.0		SW8015B	08/27/15 14:59 / jlr
Surr: Trifluorotoluene	79.0	%REC		53.8-137		SW8015B	08/27/15 14:59 / jlr

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Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C15080794-003A ;0826FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\082615_c\0826FID1.0008.RAW
Date & Time Acquired: 8/26/2015 19:16:24
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_082115_R.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_082115_R.CAL
Sample Weight: 32.4 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 50145
Rt range for Diesel Range Organics (C10 to C28): 8.047 to 17.09
Rt range for Oil Range Organics (C28 to C40+): 16.95 to End Time

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	13.695	61.728	33.23	53.83

DRO Area:1452747 DRO AMOUNT: 0.8941643
TEH Area:1.50625E+07 TEH AMOUNT: 9.27095
Oil Area:1.055474E+07 OIL AMOUNT: 6.496433



LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

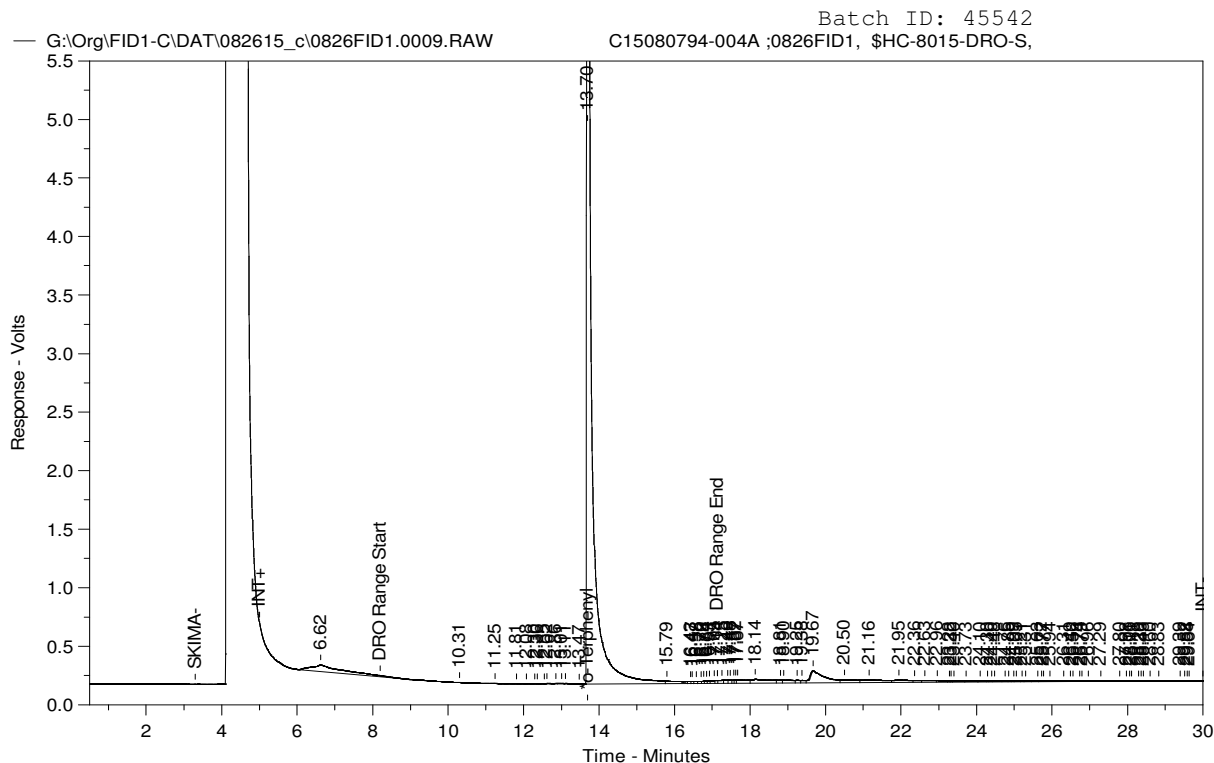
Client: American Agricultural Laboratory
Project: Not Indicated
Lab ID: C15080794-004
Client Sample ID: 20053 RMR 14-36 East

Report Date: 09/01/15
Collection Date: Not Provided
Date Received: 08/21/15
Matrix: Soil

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
VOLATILE ORGANIC COMPOUNDS							
Benzene	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
Ethylbenzene	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
m+p-Xylenes	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
o-Xylene	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
Toluene	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
Xylenes, Total	ND	mg/kg		0.2		SW8260B	08/31/15 17:02 / jlr
Surr: 1,2-Dichlorobenzene-d4	109	%REC		70-130		SW8260B	08/31/15 17:02 / jlr
Surr: Dibromofluoromethane	104	%REC		70-130		SW8260B	08/31/15 17:02 / jlr
Surr: p-Bromofluorobenzene	117	%REC		70-130		SW8260B	08/31/15 17:02 / jlr
Surr: Toluene-d8	93.0	%REC		70-130		SW8260B	08/31/15 17:02 / jlr
ORGANIC CHARACTERISTICS							
Diesel Range Organics (DRO)	ND	mg/kg		10		SW8015B	08/26/15 20:02 / bah
Total Extractable Hydrocarbons	11	mg/kg		10		SW8015B	08/26/15 20:02 / bah
Surr: o-Terphenyl	54.0	%REC		32-106		SW8015B	08/26/15 20:02 / bah
Gasoline Range Organics (GRO)	ND	mg/kg		4.0		SW8015B	08/27/15 15:36 / jlr
Total Purgeable Hydrocarbons	ND	mg/kg		4.0		SW8015B	08/27/15 15:36 / jlr
Surr: Trifluorotoluene	79.0	%REC		53.8-137		SW8015B	08/27/15 15:36 / jlr

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

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ND - Not detected at the reporting limit.



DIESEL RANGE ORGANICS CHROMATOGRAM

Sample Name: C15080794-004A ;0826FID1, \$HC-8015-DRO-S,
Raw File: G:\Org\FID1-C\DAT\082615_c\0826FID1.0009.RAW
Date & Time Acquired: 8/26/2015 20:02:29
Method File: G:\Org\FID1-C\Methods\FID1_BASE_CAL_082115_R.met
Calibration File: \\cafle\organics\Org\FID1-C\Cals\FID1_082115_R.CAL
Sample Weight: 31.5 Dilution: 1 S.A.: 1

Mean RF for Hydrocarbon Range Calculations: 50145

Rt range for Diesel Range Organics (C10 to C28): 8.047 to 17.09

Rt range for Oil Range Organics (C28 to C40+): 16.95 to End Time

SURROGATE COMPOUND	RT	ACTUAL	MEASURED	%REC
*o-Terphenyl	13.697	63.492	34.524	54.37

DRO Area:1740607 DRO AMOUNT: 1.101952
TEH Area:1.699021E+07 TEH AMOUNT: 10.75624
Oil Area:1.186113E+07 OIL AMOUNT: 7.509101



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: American Agricultural Laboratory

Report Date: 09/01/15

Project: Not Indicated

Work Order: C15080794

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B							Batch: 45542		
Lab ID: LCS-45542	Laboratory Control Sample				Run: FID1-C_150826A		08/26/15 15:25		
Total Extractable Hydrocarbons	587	mg/kg	10	88	60	109			
Surr: o-Terphenyl			0.67	73	56	147			
Lab ID: LCSD-45542	Laboratory Control Sample Duplicate				Run: FID1-C_150826A				08/26/15 16:11
Total Extractable Hydrocarbons	615	mg/kg	10	92	60	109	4.7	20	
Surr: o-Terphenyl			0.67	78	56	147			
Lab ID: MB-45542	Method Blank				Run: FID1-C_150826A				08/26/15 16:57
Total Extractable Hydrocarbons	ND	mg/kg	10						
Surr: o-Terphenyl			0.67	63	56	147			
Lab ID: C15080766-001BMS	Sample Matrix Spike				Run: FID1-C_150826A				08/27/15 02:57
Total Extractable Hydrocarbons	1590	mg/kg	66	76	60	140			
Surr: o-Terphenyl			6.6	82	32	106			
Lab ID: C15080766-001BMSD	Sample Matrix Spike Duplicate				Run: FID1-C_150826A				08/27/15 03:43
Total Extractable Hydrocarbons	1600	mg/kg	67	76	60	140	0.4	20	
Surr: o-Terphenyl			6.7	76	32	106	0.0	30	
Method: SW8015B							Batch: 45551		
Lab ID: LCS-45551	Laboratory Control Sample				Run: PIDELCD1-C_150826B		08/26/15 16:54		
Total Purgeable Hydrocarbons	15.6	mg/kg	2.0	78	54.2	133			
Surr: Trifluorotoluene			0.40	78	53.8	137			
Lab ID: LCSD-45551	Laboratory Control Sample Duplicate				Run: PIDELCD1-C_150826B				08/26/15 17:32
Total Purgeable Hydrocarbons	17.3	mg/kg	2.0	87	54.2	133	11	20	
Surr: Trifluorotoluene			0.40	85	53.8	137			
Lab ID: MB-45551	Method Blank				Run: PIDELCD1-C_150826B				08/26/15 18:09
Gasoline Range Organics (GRO)	ND	mg/kg	2.0						
Total Purgeable Hydrocarbons	ND	mg/kg	2.0						
Surr: Trifluorotoluene			0.40	90	53.8	137			
Lab ID: C15080733-001AMS	Sample Matrix Spike				Run: PIDELCD1-C_150826B				08/26/15 19:23
Total Purgeable Hydrocarbons	58.4	mg/kg	4.0	116	22.4	153			
Surr: Trifluorotoluene			0.80	89	53.8	137			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: American Agricultural Laboratory

Report Date: 09/01/15

Project: Not Indicated

Work Order: C15080794

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8015B							Analytical Run: R203328		
Lab ID: CCV_0826FID102r							Continuing Calibration Verification Standard		
Total Extractable Hydrocarbons							08/26/15 14:39		
Surr: o-Terphenyl									
Lab ID: CCV_0826FID112r							Continuing Calibration Verification Standard		
Total Extractable Hydrocarbons							08/26/15 22:20		
Surr: o-Terphenyl									
Method: SW8015B							Analytical Run: R203394		
Lab ID: CCV_0827HP102r							Continuing Calibration Verification Standard		
Total Purgeable Hydrocarbons							08/27/15 13:08		
Surr: Trifluorotoluene									
Lab ID: CCV_0827HP111r							Continuing Calibration Verification Standard		
Total Purgeable Hydrocarbons							08/27/15 18:42		
Surr: Trifluorotoluene									

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: American Agricultural Laboratory

Report Date: 09/01/15

Project: Not Indicated

Work Order: C15080794

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B									Batch: 45580
Lab ID: MB-45580	Method Blank				Run: 5975VOC1_150828C				08/29/15 00:07
Benzene	ND	mg/kg	0.20						
Ethylbenzene	ND	mg/kg	0.20						
m+p-Xylenes	ND	mg/kg	0.20						
o-Xylene	ND	mg/kg	0.20						
Toluene	ND	mg/kg	0.20						
Xylenes, Total	ND	mg/kg	0.20						
Surr: 1,2-Dichlorobenzene-d4			0.20	98	70	130			
Surr: Dibromofluoromethane			0.20	102	70	130			
Surr: p-Bromofluorobenzene			0.20	103	70	130			
Surr: Toluene-d8			0.20	85	70	130			
Lab ID: C15080794-004AMS	Sample Matrix Spike				Run: 5975VOC1_150831B				08/31/15 18:12
Benzene	2.43	mg/kg	0.20	122	70	130			
Ethylbenzene	2.50	mg/kg	0.20	125	70	130			
m+p-Xylenes	4.88	mg/kg	0.20	122	70	130			
o-Xylene	2.32	mg/kg	0.20	113	70	130			
Toluene	2.63	mg/kg	0.20	132	70	130			S
Xylenes, Total	7.21	mg/kg	0.20	119	70	130			
Surr: 1,2-Dichlorobenzene-d4			0.20	108	70	130			
Surr: Dibromofluoromethane			0.20	140	70	130			S
Surr: p-Bromofluorobenzene			0.20	118	70	130			
Surr: Toluene-d8			0.20	103	70	130			
Lab ID: LCS-45580	Laboratory Control Sample				Run: 5975VOC1_150831B				08/31/15 19:22
Benzene	2.38	mg/kg	0.20	119	70	130			
Ethylbenzene	2.46	mg/kg	0.20	123	70	130			
m+p-Xylenes	4.82	mg/kg	0.20	120	70	130			
o-Xylene	2.27	mg/kg	0.20	114	70	130			
Toluene	2.58	mg/kg	0.20	129	70	130			
Xylenes, Total	7.09	mg/kg	0.20	118	70	130			
Surr: 1,2-Dichlorobenzene-d4			0.20	108	70	130			
Surr: Dibromofluoromethane			0.20	128	70	130			
Surr: p-Bromofluorobenzene			0.20	115	70	130			
Surr: Toluene-d8			0.20	100	70	130			
Lab ID: LCSD-45580	Laboratory Control Sample Duplicate				Run: 5975VOC1_150831B				08/31/15 19:57
Benzene	2.39	mg/kg	0.20	120	70	130	0.3	20	
Ethylbenzene	2.46	mg/kg	0.20	123	70	130	0.0	20	
m+p-Xylenes	4.78	mg/kg	0.20	119	70	130	0.8	20	
o-Xylene	2.27	mg/kg	0.20	114	70	130	0.0	20	
Toluene	2.60	mg/kg	0.20	130	70	130	0.6	20	
Xylenes, Total	7.05	mg/kg	0.20	117	70	130	0.6	20	
Surr: 1,2-Dichlorobenzene-d4			0.20	108	70	130	0.0	10	
Surr: Dibromofluoromethane			0.20	126	70	130	0.0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: American Agricultural Laboratory

Report Date: 09/01/15

Project: Not Indicated

Work Order: C15080794

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8260B							Batch: 45580		
Lab ID: LCSD-45580	Laboratory Control Sample Duplicate				Run: 5975VOC1_150831B			08/31/15 19:57	
Surr: p-Bromofluorobenzene			0.20	115	70	130	0.0	10	
Surr: Toluene-d8			0.20	100	70	130	0.0	10	
Method: SW8260B							Analytical Run: R203474		
Lab ID: 28-AUG-15_CCV_21	Continuing Calibration Verification Standard							08/28/15 22:57	
Benzene	2.16	mg/kg	0.20	108	70	130			
Ethylbenzene	2.42	mg/kg	0.20	121	70	130			
m+p-Xylenes	4.74	mg/kg	0.20	118	70	130			
o-Xylene	2.35	mg/kg	0.20	118	70	130			
Toluene	2.51	mg/kg	0.20	126	70	130			
Xylenes, Total	7.09	mg/kg	0.20	118	70	130			
Surr: 1,2-Dichlorobenzene-d4			0.20	104	70	130			
Surr: Dibromofluoromethane			0.20	120	70	130			
Surr: p-Bromofluorobenzene			0.20	112	70	130			
Surr: Toluene-d8			0.20	92	70	130			
Method: SW8260B							Analytical Run: R203548		
Lab ID: ccv	Continuing Calibration Verification Standard							08/31/15 13:32	
Benzene	1.95	mg/kg	0.20	98	70	130			
Ethylbenzene	1.98	mg/kg	0.20	99	70	130			
m+p-Xylenes	3.83	mg/kg	0.20	96	70	130			
o-Xylene	1.86	mg/kg	0.20	93	70	130			
Toluene	2.02	mg/kg	0.20	101	70	130			
Xylenes, Total	5.70	mg/kg	0.20	95	70	130			
Surr: 1,2-Dichlorobenzene-d4			0.20	107	70	130			
Surr: Dibromofluoromethane			0.20	100	70	130			
Surr: p-Bromofluorobenzene			0.20	110	70	130			
Surr: Toluene-d8			0.20	94	70	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.



Work Order Receipt Checklist

American Agricultural Laboratory

C15080794

Login completed by: Corinne Wagner

Date Received: 8/21/2015

Reviewed by: BL2000\swaldrop

Received by: cjm

Reviewed Date: 8/24/2015

Carrier name: Ground

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	22.2°C		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Contact and Corrective Action Comments:

Samples received in paper bags. Should be in glass jars for requested analysis.



Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT- Provide as much information as possible.

Company Name: American Agricultural Laboratory		Project Name, PWS, Permit, Etc.		Sample Origin State:		EPA/State Compliance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Report Mail Address: 210 East 1st Street PO Box 370 McCook, NE 69001		Contact Name: Kevin/Christine Grooms		Phone/Fax: 308.345.3670		Email: officemanager@amaglab	
Invoice Address:		Invoice Contact & Phone:		Purchase Order:		Quote/Bottle Order:	
Special Report/Formats - ELI must be notified prior to sample submittal for the following: <input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> Format: <input type="checkbox"/> State: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> Other: _____		ANALYSIS REQUESTED		SEE ATTACHED		Normal Turnaround (TAT)	
Number of Containers Sample Type: A W S V B O Vegetation Bioassay Other		MATRIX		R U S H		Contact ELI prior to RUSH sample submittal for charges and scheduling - See Instruction Page	
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)		Collection Date		Collection Time		Shipped by: UPS ground	
1 20053 RMR 14-36 Background						Cooler ID(s): Box	
2 20053 RMR 14-36 NW						Receipt Temp 22.2 °C	
3 20053 RMR 14-36 SW						On Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
4 20053 RMR 14-36 East						Custody Seal Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Intact Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Signature Match Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
5						LABORATORY USE ONLY C15D80794	
6							
7							
8							
9							
10							
Custody Record MUST be Signed		Relinquished by (print): Sara Wagner		Signature: Sara Wagner		Date/Time: 8/19 10:50	
		Relinquished by (print):		Signature:		Date/Time:	
Sample Disposal:		Return to Client:		Received by Laboratory: Carol		Signature: Carol	
				Date/Time: 8/21/15		Signature: 9.45	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.

RMR 14-36

Crop
Circle

40.0914,
-102.58370

NW

water tank

E

40.0912916,
-102.58350

SW

40.0911805,
-102.58358

Lease Road

Back ground

40.0913916,
-102.58335