FOUNDATION
ENERGY MANAGEMENT, LLC

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

March 29, 2016

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

RE: SPILL ID# 444406

Dear Mr. Rob Young,

Foundation Energy Management, LLC (Foundation) is submitting the sampling results for the Spill ID# 444406, Republican #4 WTS.

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	Below Standards?
Background 1 (1366767)	0-6"	pH	3/21/2016	8.2	6-9	YES
Background 2 (1366768)	6-36"	pH	3/21/2016	8.4	6-9	YES
In fence 1 (1366769)	0-6"	pH	3/21/2016	8.3	6-9	YES
In fence 2 (1366770)	6-36"	pH	3/21/2016	8.7	6-9	YES
Out fence 1 (1366771)	0-6"	pH	3/21/2016	8.1	6-9	YES
Out fence 2 (1366772)	6-36"	pH	3/21/2016	8.1	6-9	YES
Background 1 (1366767)	0-6"	SAR	3/21/2016	0.16	< 12	YES
Background 2 (1366768)	6-36"	SAR	3/21/2016	0.18	< 12	YES
In fence 1 (1366769)	0-6"	SAR	3/21/2016	0.55	< 12	YES
In fence 2 (1366770)	6-36"	SAR	3/21/2016	5.99	< 12	YES
Out fence 1 (1366771)	0-6"	SAR	3/21/2016	0.14	< 12	YES
Out fence 2 (1366772)	6-36"	SAR	3/21/2016	0.2	< 12	YES
Background 1 (1366767)	0-6"	EC	3/21/2016	0.22	< 4 mmhos/cm or 2x Background	YES
Background 2 (1366768)	6-36"	EC	3/21/2016	0.58	< 4 mmhos/cm or 2x Background	YES
In fence 1 (1366769)	0-6"	EC	3/21/2016	0.52	< 4 mmhos/cm or 2x Background	YES
In fence 2 (1366770)	6-36"	EC	3/21/2016	0.74	< 4 mmhos/cm or 2x Background	YES
Out fence 1 (1366771)	0-6"	EC	3/21/2016	0.26	< 4 mmhos/cm or 2x Background	YES
Out fence 2 (1366772)	6-36"	EC	3/21/2016	0.58	< 4 mmhos/cm or 2x Background	YES

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

Regards,

Caitlin O'Hair

Caitlin O'Hair
HSE/Regulatory Tech

American Agricultural Laboratory, Inc.

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40469
FOUNDATION ENERGY COMPANY
16000 NORTH DALLAS PARKWAY
SUITE 875
DALLAS TX 75248

NAME: FOUNDATION ENERGY DATE RECEIVED: 03/21/2016 DATE REPORTED: 03/28/2016

SOIL TEST RESULTS

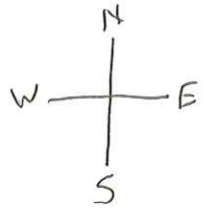
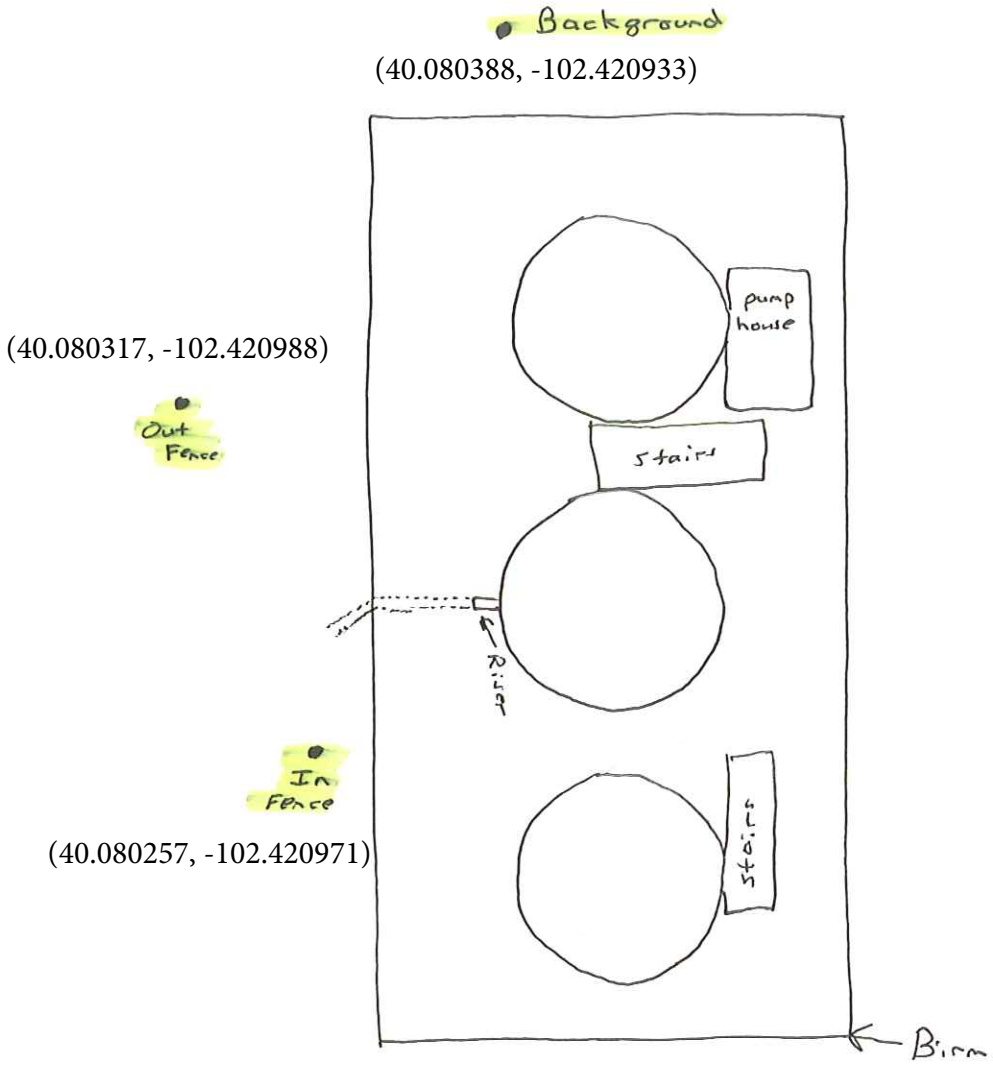
LAB NUMBER	FIELD IDENTIFICATION	SAMPLE IDENTIFICATION	Depth Inches	pH 1:1 Soil	pH Buffer Woodruff	LIME REC T/A 60% ECCE Legume	LIME REC T/A 60% ECCE Non Legume	EL	SOLUBLE SALTS mod. SP mmhos/cm	OM LOI %	NITRATE-N (FIA) ppm	NITRATE-N (FIA) lbs/A	PHOSPHORUS P1 ppm	PHOSPHORUS Bicarb ppm	PHOSPHORUS P2 ppm	PHOSPHORUS M2 ppm	PHOSPHORUS M3 ppm
1366767	REPULICAN 4 TRANSFER	BACKGROUND	0-6	8.2				L	0.22								
1366768	REPULICAN 4 TRANSFER	BACKGROUND	6-36	8.4				H	0.58								
1366769	REPULICAN 4 TRANSFER	INFENCE	0-6	8.3				H	0.52								
1366770	REPULICAN 4 TRANSFER	INFENCE	6-36	8.7				H	0.74								
1366771	REPULICAN 4 TRANSFER	OUTFENCE	0-6	8.1				L	0.26								
1366772	REPULICAN 4 TRANSFER	OUTFENCE	6-36	8.1				H	0.58								

LAB NUMBER	SULFATE-S Ca-P ppm	NH4OAc (Exchangeable) K ppm	NH4OAc (Exchangeable) Ca ppm	NH4OAc (Exchangeable) Mg ppm	NH4OAc (Exchangeable) Na ppm	DTPA Zn ppm	DTPA Fe ppm	DTPA Mn ppm	DTPA Cu ppm	BORON Sorbitol ppm	EST. CATION EXCHANGE CAPACITY (CEC) me/100g	% SATURATION BASE	% SATURATION H	% SATURATION Ca	% SATURATION Mg	% SATURATION K	% SATURATION Na
1366767										0.1							
1366768										0.2							
1366769										0.2							
1366770										0.5							
1366771										0.2							
1366772										0.1							

LAB NUMBER	SOLUBLE (SAT. EXT.) Ca me/L	SOLUBLE (SAT. EXT.) Mg me/L	SOLUBLE (SAT. EXT.) Na me/L	SODIUM ADSORPTION RATIO (SAR)	EXCH. SODIUM PERCENT (ESP)	GYPSUM REQ T/A	PARTICLE SIZE ANALYSIS SAND %	PARTICLE SIZE ANALYSIS SILT %	PARTICLE SIZE ANALYSIS CLAY %	PARTICLE SIZE ANALYSIS SOIL TEXTURE	CHLORIDE ppm	CHLORIDE lbs/A	EXCH. NH4-N ppm	EXCH. NH4-N lbs/A	ALUMINUM ppm	TOTAL N %
1366767	2.02	0.39	0.18	0.16	1	0.0										
1366768	3.16	0.56	0.24	0.18	1	0.0										
1366769	2.82	0.55	0.71	0.55	1	0.0										
1366770	1.13	0.24	4.96	5.99	8	1.5										
1366771	2.77	0.66	0.18	0.14	1	0.0										
1366772	1.85	0.35	0.21	0.20	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
1366767	REPULICAN 4 TRANSFER	BACKGROUND													
1366769	REPULICAN 4 TRANSFER	INFENCE													
1366771	REPULICAN 4 TRANSFER	OUTFENCE													

Analysis By: American Agricultural Lab Recommendations By:American Agricultural Lab Electronically Approved by: **Kevin Grooms**

Republican Transfer #4