



Railroad Commission of Texas
Oil and Gas Division
PO Box 12967
Capitol Station
Austin, TX 78711

11/17/17

Attention: Cathy Garrison

Re: Lime Rock Resources
UL 13 Jaffrey #4414H
Andrews County, Texas
API No. 42-003-47570

Enclosed, please find the original and one copy of the survey performed on the referenced well by Terra Directional Services LLC. (Operator No.843151). Other information required by your office is as follows:

<u>Name of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Robert Bergeron	OH	MD from 147 to 8692	10/03/2017 to 10/08/2017	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Sincerely,

A blue ink signature of Donald Mason, written in a cursive style.

Donald Mason
President



Lime Rock Resources

Andrews County, TX (NAD-27 2015)

Sec 14, Block 13, University Lands Survey

UL 13 Jaffrey #4414H

42-003-47570

Lateral #1

Design: Lateral #1

Standard Survey Report

11 October, 2017



Company:	Lime Rock Resources	Local Co-ordinate Reference:	Well UL 13 Jaffrey #4414H
Project:	Andrews County, TX (NAD-27 2015)	TVD Reference:	KB @ 3296.90usft (Sendero #9)
Site:	Sec 14, Block 13, University Lands Survey	MD Reference:	KB @ 3296.90usft (Sendero #9)
Well:	UL 13 Jaffrey #4414H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Project	Andrews County, TX (NAD-27 2015)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Texas North Central 4202		

Site		Sec 14, Block 13, University Lands Survey			
Site Position:		Northing:	304,348.400 usft	Latitude:	32° 23' 33.090 N
From:	Map	Easting:	384,262.500 usft	Longitude:	102° 44' 11.700 W
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-2.86 °

Well	UL 13 Jaffrey #4414H					
Well Position	+N/-S	0.00 usft	Northing:	304,552.700 usft	Latitude:	32° 23' 35.543 N
	+E/-W	0.00 usft	Easting:	385,143.200 usft	Longitude:	102° 44' 1.560 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,273.90 usft

Wellbore	Lateral #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/29/2017	6.54	60.35	48,096.22767375

Design	Lateral #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	169.43	

Survey Program	Date	10/11/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
147.00	8,692.00	TDS MWD #1 (Lateral #1)	MWD	MWD - Standard	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.00	0.90	177.30	146.99	-1.15	0.05	1.14	0.61	0.61	0.00
First TDS MWD Survey									
331.00	0.90	166.20	330.97	-4.00	0.47	4.02	0.09	0.00	-6.03
515.00	1.10	170.90	514.94	-7.15	1.09	7.23	0.12	0.11	2.55
700.00	1.20	167.40	699.91	-10.79	1.79	10.94	0.07	0.05	-1.89
883.00	1.20	167.60	882.87	-14.53	2.62	14.77	0.00	0.00	0.11
1,069.00	0.60	141.20	1,068.84	-17.19	3.65	17.57	0.38	-0.32	-14.19
1,258.00	0.40	113.30	1,257.84	-18.23	4.88	18.81	0.16	-0.11	-14.76
1,448.00	0.30	139.10	1,447.83	-18.86	5.81	19.61	0.10	-0.05	13.58
1,637.00	0.40	136.30	1,636.83	-19.72	6.59	20.59	0.05	0.05	-1.48

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Well:	UL 13 Jaffrey #4414H	North Reference:	Grid
Wellbore:	Lateral #1	Survey Calculation Method:	Minimum Curvature
Design:	Lateral #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,825.00	0.20	228.80	1,824.83	-20.41	6.80	21.31	0.24	-0.11	49.20
1,939.00	0.40	312.70	1,938.83	-20.27	6.36	21.09	0.38	0.18	73.60
2,129.00	0.70	66.00	2,128.82	-19.35	6.93	20.29	0.49	0.16	59.63
2,319.00	1.50	3.60	2,318.79	-16.39	8.15	17.61	0.70	0.42	-32.84
2,508.00	1.40	10.00	2,507.73	-11.65	8.70	13.05	0.10	-0.05	3.39
2,697.00	1.60	1.40	2,696.66	-6.74	9.17	8.30	0.16	0.11	-4.55
2,886.00	0.70	291.80	2,885.63	-3.67	8.16	5.11	0.80	-0.48	-36.83
3,075.00	0.30	275.60	3,074.62	-3.19	6.60	4.35	0.22	-0.21	-8.57
3,264.00	0.20	246.90	3,263.62	-3.27	5.80	4.28	0.08	-0.05	-15.19
3,454.00	0.10	74.90	3,453.62	-3.36	5.66	4.34	0.16	-0.05	-90.53
3,644.00	0.40	106.60	3,643.62	-3.51	6.45	4.63	0.17	0.16	16.68
3,834.00	1.00	147.40	3,833.61	-5.09	7.98	6.47	0.39	0.32	21.47
3,928.00	0.60	128.60	3,927.60	-6.09	8.81	7.60	0.50	-0.43	-20.00
3,960.00	1.10	162.80	3,959.59	-6.49	9.03	8.04	2.16	1.56	106.88
3,990.00	2.80	186.70	3,989.58	-7.49	9.03	9.02	6.16	5.67	79.67
4,022.00	4.90	187.00	4,021.50	-9.63	8.77	11.07	6.56	6.56	0.94
4,054.00	6.90	184.90	4,053.33	-12.90	8.44	14.23	6.29	6.25	-6.56
4,086.00	9.10	182.50	4,085.02	-17.34	8.17	18.55	6.95	6.88	-7.50
4,117.00	11.60	179.50	4,115.51	-22.91	8.09	24.00	8.25	8.06	-9.68
4,149.00	14.50	176.60	4,146.68	-30.13	8.35	31.15	9.29	9.06	-9.06
4,180.00	17.20	175.70	4,176.50	-38.57	8.93	39.56	8.75	8.71	-2.90
4,212.00	19.80	175.20	4,206.84	-48.69	9.73	49.65	8.14	8.13	-1.56
4,243.00	22.50	175.90	4,235.75	-59.84	10.60	60.77	8.75	8.71	2.26
4,275.00	25.50	176.60	4,264.98	-72.83	11.44	73.69	9.42	9.38	2.19
4,307.00	28.70	176.70	4,293.47	-87.38	12.29	88.15	10.00	10.00	0.31
4,338.00	31.50	177.50	4,320.28	-102.91	13.08	103.56	9.12	9.03	2.58
4,370.00	34.20	178.40	4,347.16	-120.25	13.69	120.72	8.57	8.44	2.81
4,401.00	36.80	180.00	4,372.40	-138.25	13.94	138.46	8.91	8.39	5.16
4,433.00	40.10	179.50	4,397.46	-158.14	14.03	158.03	10.36	10.31	-1.56
4,464.00	43.20	178.90	4,420.62	-178.74	14.32	178.33	10.08	10.00	-1.94
4,496.00	46.50	177.70	4,443.30	-201.29	14.99	200.63	10.65	10.31	-3.75
4,528.00	50.10	176.50	4,464.59	-225.15	16.21	224.30	11.59	11.25	-3.75
4,559.00	53.90	176.40	4,483.67	-249.53	17.72	248.55	12.26	12.26	-0.32
4,591.00	57.60	176.50	4,501.67	-275.92	19.36	274.79	11.57	11.56	0.31
4,623.00	58.80	176.80	4,518.54	-303.07	20.95	301.77	3.83	3.75	0.94
4,654.00	58.50	176.80	4,534.67	-329.51	22.42	328.03	0.97	-0.97	0.00
4,686.00	58.10	176.80	4,551.48	-356.69	23.94	355.03	1.25	-1.25	0.00
4,718.00	57.90	176.80	4,568.44	-383.79	25.46	381.94	0.63	-0.63	0.00
4,742.43	57.58	177.27	4,581.48	-404.42	26.53	402.42	2.08	-1.29	1.93
As-Drilled FTP									
4,749.00	57.50	177.40	4,585.00	-409.95	26.79	407.91	2.08	-1.29	1.94
4,781.00	60.00	177.80	4,601.60	-437.29	27.93	434.99	7.89	7.81	1.25
4,813.00	64.10	177.70	4,616.60	-465.53	29.04	462.95	12.82	12.81	-0.31


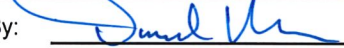
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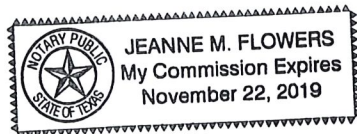
Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,844.00	68.30	177.20	4,629.10	-493.85	30.30	491.03	13.63	13.55	-1.61
4,876.00	72.50	176.50	4,639.84	-523.95	31.96	520.92	13.29	13.13	-2.19
4,907.00	76.50	176.50	4,648.12	-553.76	33.79	550.56	12.90	12.90	0.00
4,938.00	79.70	175.90	4,654.51	-584.02	35.80	580.68	10.49	10.32	-1.94
4,969.00	83.80	175.40	4,658.96	-614.61	38.12	611.17	13.32	13.23	-1.61
5,064.00	91.80	173.90	4,662.60	-709.04	46.97	705.63	8.57	8.42	-1.58
5,160.00	92.30	177.90	4,659.17	-804.72	53.83	800.93	4.20	0.52	4.17
5,255.00	92.40	177.20	4,655.27	-899.55	57.89	894.90	0.74	0.11	-0.74
5,349.00	92.70	177.70	4,651.09	-993.36	62.06	987.89	0.62	0.32	0.53
5,445.00	92.40	175.90	4,646.82	-1,089.11	67.42	1,083.00	1.90	-0.31	-1.88
5,541.00	90.60	174.40	4,644.30	-1,184.73	75.53	1,178.48	2.44	-1.88	-1.56
5,636.00	90.70	170.80	4,643.23	-1,278.92	87.76	1,273.31	3.79	0.11	-3.79
5,730.00	89.70	170.00	4,642.90	-1,371.60	103.44	1,367.30	1.36	-1.06	-0.85
5,825.00	88.00	169.60	4,644.81	-1,465.07	120.26	1,462.27	1.84	-1.79	-0.42
5,920.00	88.10	170.30	4,648.04	-1,558.56	136.83	1,557.21	0.74	0.11	0.74
6,016.00	89.00	167.90	4,650.47	-1,652.79	154.97	1,653.17	2.67	0.94	-2.50
6,110.00	89.20	167.90	4,651.94	-1,744.69	174.68	1,747.13	0.21	0.21	0.00
6,205.00	89.60	168.60	4,652.94	-1,837.70	194.02	1,842.10	0.85	0.42	0.74
6,297.00	89.70	167.10	4,653.50	-1,927.63	213.38	1,934.06	1.63	0.11	-1.63
6,389.00	89.50	167.20	4,654.14	-2,017.32	233.84	2,025.99	0.24	-0.22	0.11
6,480.00	89.20	166.60	4,655.18	-2,105.95	254.47	2,116.89	0.74	-0.33	-0.66
6,572.00	89.50	166.60	4,656.22	-2,195.44	275.79	2,208.77	0.33	0.33	0.00
6,665.00	90.00	167.10	4,656.62	-2,286.00	296.94	2,301.68	0.76	0.54	0.54
6,758.00	89.80	167.60	4,656.79	-2,376.74	317.31	2,394.62	0.58	-0.22	0.54
6,849.00	90.20	168.10	4,656.79	-2,465.70	336.46	2,485.58	0.70	0.44	0.55
6,941.00	90.50	168.10	4,656.23	-2,555.72	355.43	2,577.56	0.33	0.33	0.00
7,031.00	91.10	168.60	4,654.97	-2,643.86	373.61	2,667.53	0.87	0.67	0.56
7,126.00	90.00	166.90	4,654.06	-2,736.69	393.76	2,762.48	2.13	-1.16	-1.79
7,221.00	90.90	167.40	4,653.31	-2,829.30	414.89	2,857.40	1.08	0.95	0.53
7,316.00	89.40	166.70	4,653.06	-2,921.88	436.18	2,952.32	1.74	-1.58	-0.74
7,411.00	89.70	167.20	4,653.81	-3,014.43	457.63	3,047.22	0.61	0.32	0.53
7,505.00	90.40	166.90	4,653.73	-3,106.04	478.69	3,141.14	0.81	0.74	-0.32
7,600.00	90.00	166.90	4,653.39	-3,198.56	500.22	3,236.05	0.42	-0.42	0.00
7,693.00	90.00	167.20	4,653.39	-3,289.20	521.06	3,328.97	0.32	0.00	0.32
7,788.00	89.80	166.60	4,653.56	-3,381.72	542.60	3,423.87	0.67	-0.21	-0.63
7,883.00	91.10	168.20	4,652.81	-3,474.43	563.32	3,518.81	2.17	1.37	1.68
7,978.00	88.30	166.40	4,653.31	-3,567.09	584.20	3,613.73	3.50	-2.95	-1.89
8,073.00	88.00	166.90	4,656.38	-3,659.47	606.12	3,708.56	0.61	-0.32	0.53
8,168.00	90.00	167.30	4,658.04	-3,752.06	627.33	3,803.47	2.15	2.11	0.42
8,263.00	89.90	167.30	4,658.12	-3,844.73	648.21	3,898.40	0.11	-0.11	0.00
8,358.00	90.90	168.00	4,657.46	-3,937.53	668.53	3,993.35	1.28	1.05	0.74
8,451.00	91.50	168.00	4,655.51	-4,028.48	687.86	4,086.30	0.65	0.65	0.00
8,545.00	89.50	167.50	4,654.69	-4,120.33	707.81	4,180.25	2.19	-2.13	-0.53

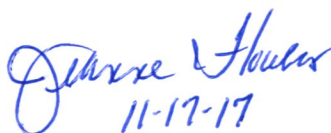
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Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,639.00	89.90	168.00	4,655.18	-4,212.19	727.75	4,274.21	0.68	0.43	0.53
Last TDS MWD Survey									
8,692.00	89.90	168.00	4,655.27	-4,264.03	738.77	4,327.19	0.00	0.00	0.00
Projection to Bit/TD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
147.00	146.99	-1.15	0.05	First TDS MWD Survey
4,742.43	4,581.48	-404.42	26.53	As-Drilled FTP
8,639.00	4,655.18	-4,212.19	727.75	Last TDS MWD Survey
8,692.00	4,655.27	-4,264.03	738.77	Projection to Bit/TD

Checked By:  Approved By:  Date: 11/17/2017




11-17-17



Daily Drilling Report

Well Name: UL 13 JAFFREY 4414H

API/UWI 42-003-47570	Surface Legal Location SURVEY- UL; BLOCK-13; SECTION-14	License #	State/Province Texas	Job Job C Drill
Spud Date 9/30/2017 17:00	Rig Release Date	KB-Ground Distance (ft) 21.00	KB-Casing Flange Distance (ft)	Tot
Daily Operations				AFE D17
Report Start Date 10/8/2017	Weather Clear	Temperature (°F)	Road Condition Muddy	Day 29,6
Operations 24 Hour Summary ROT DRLG/SLIDE F/ 7,841' T/ 8,700', SHORT TRIP, RUN FLUID CALIPER, LDDP				Mud
Operations Next Report Period CONT L/D DP, RUN PROD CSG & CMT				Start 7,84
Remarks CALLED TD 8,700' DUE TO WATER FLOW, LITHOLOGY @ TD 100% DOLOMITE				Deptl 859

PERMIT PLAT
SECTION 14, BLOCK 13, UNIVERSITY LANDS SURVEY,
ANDREWS COUNTY, TEXAS

SHL: UL 13 JAFFREY 4414H
GR. ELEV. = 3273.9'

POP:
256' FSL
1014' FEL

N76°23'31"E 5286.1'

TXSP-NC (NAD 83)
N(Y): = 6851065.4'
E(X): = 657787.2'
LAT.: = 32°23'21.41" N
LON.: = 102°44'50.42" W
TX-NC (NAD 27)
N(Y): = 303289.2'
E(X): = 381025.3'
LAT.: = 32.3891733° N
LON.: = 102.7468864° W

TXSP-NC (NAD 83)
N(Y): = 6852309.1'
E(X): = 662924.9'
LAT.: = 32°23'35.76" N
LON.: = 102°43'51.13" W
TX-NC (NAD 27)
N(Y): = 304484.1'
E(X): = 386174.5'
LAT.: = 32.3931593° N
LON.: = 102.7304187° W

TXSP-NC (NAD 83)
N(Y): = 6845904.3'
E(X): = 659021.7'
LAT.: = 32°22'30.88" N
LON.: = 102°44'33.60" W
TX-NC (NAD 27)
N(Y): = 298116.9'
E(X): = 382210.4'
LAT.: = 32.3751358° N
LON.: = 102.7422163° W

TXSP-NC (NAD 83)
N(Y): = 6847146.6'
E(X): = 664160.0'
LAT.: = 32°22'45.21" N
LON.: = 102°43'34.31" W
TX-NC (NAD 27)
N(Y): = 299310.3'
E(X): = 387360.2'
LAT.: = 32.3791171° N
LON.: = 102.7257488° W

23
FORGE ENERGY, LLC.
"UL 13 JAFFREY 23"
603.4735 AC. (CALL)

FORGE ENERGY, LLC.
UL LSE #M-28969
V44/P448
120.6975 ac

FORGE ENERGY, LLC.
UL LSE #110122,
V943/P446
442.544 ac

FORGE ENERGY, LLC.
UL LSE #114535,
40.232 ac

TERRA DIRECTIONAL SERVICES, LLC
BHL is 4327.19' VS @ 169.43°
azimuth. TD is 8692.00' MD,
4655.27' TVD, and is 4264.03' S,
and 738.77' E of the SHL.

LTP/BHL:

UL 13 JAFFREY 1W

FND. CON. MON.

S76°24'31"W 5286.3'

ADJACENT WELLS/FEATURES

SURFACE HOLE LOCATION	NAD 83, TXSP-NC, N(Y): = 6852367.9', E(X): = 661892.9' - LAT.: = 32°23'35.93" N, LON.: = 102°44'03.18" W
POP	NAD 27, TX-NC, N(Y): = 304552.7', E(X): = 385143.2' - LAT.: = 32.3932065° N, LON.: = 102.7337668° W
FIRST TAKE	NAD 83, TXSP-NC, N(Y): = 6852319.8', E(X): = 661879.3' - LAT.: = 32°23'35.45" N, LON.: = 102°44'03.32" W
LAST TAKE/ BOTTOM HOLE LOCATION	NAD 27, TX-NC, N(Y): = 304504.7', E(X): = 385129.0' - LAT.: = 32.3930729° N, LON.: = 102.7338048° W
	NAD 83, TXSP-NC, N(Y): = 6851926.0', E(X): = 661767.3' - LAT.: = 32°23'31.51" N, LON.: = 102°44'04.44" W
	NAD 27, TX-NC, N(Y): = 304112.0', E(X): = 385013.3' - LAT.: = 32.3919788° N, LON.: = 102.7341159° W
	NAD 83, TXSP-NC, N(Y): = 6846958.3', E(X): = 662955.8' - LAT.: = 32°22'42.87" N, LON.: = 102°43'48.26" W
	NAD 27, TX-NC, N(Y): = 299133.5', E(X): = 386154.2' - LAT.: = 32.3784668° N, LON.: = 102.7296218° W

NAME:	SHL-SHL	POP-POP	FTP-FTP	LTP-LTP	BHL-BHL
JAFFREY 1123H	3827'	3830'	3622'	N/A	3541'
JAFFREY 2123H	2110'	2214'	1957'	N/A	1782'
JAFFREY 13-1W	6069'	N/A	N/A	N/A	N/A
UB 13-14 2H	4122'	3961'	3712'	N/A	10486'

DRIVING DIRECTIONS:

FROM THE INTERSECTION OF US HIGHWAY 385 AND TEXAS HIGHWAY 176, HEAD WEST ON TX-176 FOR APPROXIMATELY 13.6 MILES TO FM 181, TURN RIGHT ON FM 181, HEAD NORTHWESTERLY FOR APPROXIMATELY 1.8 MILES TO A FM 1967/FRANKEL CITY HWY. TURN RIGHT ON ON SAID FM 1967, HEAD NORTHEASTERLY FOR APPROXIMATELY 2.4 MILES TO A LEASE ROAD. TURN LEFT ON SAID LEASE ROAD, HEAD NORTH FOR APPROXIMATELY 85 FEET TO A LEASE ROAD. TURN RIGHT ON SAID LEASE ROAD, HEAD NORTHEASTERLY FOR APPROXIMATELY 0.5 MILES TO A POINT ON SAID LEASE ROAD. THE STAKED LOCATION FLAG IS TO THE NORTH APPROXIMATELY 95 FEET.

SURVEYOR'S NOTES:

- ALL DOWNHOLE, POINT OF PENETRATION AND BOTTOM HOLE INFORMATION AND THEIR LOCATIONS WERE PROVIDED BY FORGE ENERGY, AND ARE NOT GUARANTEED BY THIS SURVEYOR.
- SEE DOCUMENTS FILED IN THIS OFFICE WHICH DESCRIBE IN DETAIL THE RECONSTRUCTION OF THESE SECTIONS AND/OR BLOCKS, USING FOUND MONUMENTATION, GLO AND COURTHOUSE DOCUMENTATION.
- NO SURFACE OWNERSHIP WAS PROVIDED OR REQUESTED BY FORGE ENERGY AND NONE WAS RESEARCHED OR PROVIDED BY WTC, INC.
- BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS NORTH CENTRAL (4202), WITH A CONVERGENCE ANGLE OF -02°17'50.56" AND COMBINED SCALE FACTOR OF 0.999785963, BASED ON AN OPUS SOLUTION ON CONTROL POINT RAIN AT N=6853794.505' - E=668713.105'
- THIS LOCATION IS APPROXIMATELY N63°W 12.1 MILES FROM ANDREWS, TEXAS.



LEGEND

- DENOTES PROPOSED/ PERMITTED SHL WELL LOCATION
- DENOTES EXISTING WELL
- DENOTES POINT OF PENETRATION
- DENOTES BOTTOM HOLE/ TERMINUS LOCATION
- DENOTES FIRST/ LAST TAKE
- DENOTES FOUND SECTION CORNER
- DENOTES CALCULATED CORNER
- DENOTES LEASE AREA

1000 0 1000 2000 FEET

SCALE: 1" = 1000'



I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PERMIT PLAT WAS DERIVED FROM FIELD NOTES OR ELECTRONIC DATA OF AN ACTUAL ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THE INFORMATION PRESENTED HEREON IS FOR TEXAS RAILROAD COMMISSION PERMITTING ONLY, AND DOES NOT CONSTITUTE OR REPRESENT A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE T.B.P.L.S., "PROFESSIONAL LAND SURVEYING PRACTICES ACT." IF THERE ARE ANY ALTERATIONS MADE, (HAND DRAWN OR HANDWRITTEN ADDITIONS) THIS SURVEYOR IS NO LONGER RESPONSIBLE FOR THE VALIDITY OF THIS PLAT.

May 9, 2017

Gregory W. Shoults, RPLS, No. 5356

DATE

SURVEY DATE: 05/03/2017
W.O. NUMBER: 51843

DRAFT: FHI
SHEET: 1 OF 1



UL 13 JAFFREY 4414H
SHL LOCATED 300' FSL, AND 990' FEL
SECTION 14, BLOCK 13, U.L.,
ANDREWS COUNTY, TEXAS.



WTC, INC.
405 S.W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181
TEXAS REGISTERED ENGINEERING FIRM F-2746
TEXAS REGISTERED SURVEYOR FIRM #100792-00



11/17/17

State of Texas
County of Andrews

I, Donald Mason, certify that: I am employed by Terra Directional Services LLC; that I did on the day(s) of 10/03/2017 through 10/08/2017 conduct or supervise the taking of a MWD survey from a depth of 147 feet to a depth 8692 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Terra Directional Services LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of Lime Rock Resources for the UL 13 Jaffrey #4414H Well API 42-003-47570 in Andrews County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Terra Directional Services LLC.

A handwritten signature in blue ink, appearing to read "Donald Mason", is written over a horizontal line.

Donald Mason
President