

API #30-015-41285

Customer: Lime Rock Recourses	Rig: UDI#33	SHL X:
Lease, Well No.: Eagle 34 I Federal #62	Job No.: CD-13119	SHL Y:
County or Parrish: Eddy County	Location or Area: New Mexico	Mag.Decl.: 7.65



Calculated // Targets
KBTVD (@ 0' VS)
Dip Angle (+Dn/-Up)

Sensor			
TVD			
N-S			
E-W			

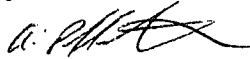
Tie-In Survey Co.: NA						Minimum Curvature Calculations			Rates / 100' M.D.		Dist // Target Line		
Surveying Company: Childress Directional						Proposed Azimuth: 72.98°			Build or	R or -L	Course	Above or	Right or
Survey No.	M.D.	INCL.	AZM.	TVD	N / -S	E / -W	V. SECT.	DLS / 100'	-Drop	-Turn	Length	-Below	-Left
Tie-In	0.00	0.00	0.00	0.00'	0.00'	0.00'	0.00'	0.00°					
1.	414.00	0.40	26.50	414.00'	1.29'	0.64'	1.00'	0.10°					
2.	504.00	1.40	74.30	503.99'	1.87'	1.84'	2.31'	1.30°					
3.	598.00	4.00	80.10	597.87'	2.75'	6.18'	6.71'	2.78°					
4.	694.00	6.30	80.10	693.48'	4.23'	14.67'	15.26'	2.40°					
5.	790.00	8.60	67.20	788.67'	7.92'	26.48'	27.63'	2.95°					
6.	886.00	11.00	73.40	883.26'	13.31'	41.87'	43.94'	2.73°					
7.	983.00	12.90	72.50	978.16'	19.22'	61.07'	64.02'	1.97°					
8.	1079.00	13.30	67.80	1,071.66'	26.61'	81.51'	85.73'	1.18°					
9.	1176.00	13.60	69.00	1,166.00'	34.91'	102.49'	108.22'	0.42°					
10.	1272.00	9.70	70.90	1,260.01'	41.61'	120.68'	127.57'	4.08°					
11.	1368.00	7.10	70.40	1,354.97'	46.24'	133.91'	141.58'	2.71°					
12.	1464.00	3.70	69.70	1,450.53'	49.31'	142.41'	150.60'	3.54°					
13.	1561.00	3.20	70.20	1,547.35'	51.31'	147.89'	156.43'	0.62°					
14.	1656.00	1.80	106.30	1,642.26'	51.79'	151.82'	160.33'	2.15°					
15.	1753.00	1.00	121.40	1,739.23'	50.92'	154.00'	162.16'	0.90°					
16.	1849.00	1.10	124.00	1,835.22'	49.97'	155.48'	163.30'	0.12°					
17.	1945.00	0.40	48.30	1,931.21'	49.68'	156.50'	164.18'	1.12°					
18.	2041.00	0.80	291.70	2,027.21'	50.15'	156.12'	163.96'	1.09°					
19.	2137.00	0.90	290.80	2,123.20'	50.67'	154.80'	162.85'	0.11°					
20.	2233.00	0.90	291.20	2,219.19'	51.21'	153.39'	161.66'	0.01°					
21.	2329.00	0.80	287.00	2,315.18'	51.67'	152.04'	160.51'	0.12°					
22.	2426.00	0.70	297.20	2,412.17'	52.14'	150.87'	159.52'	0.17°					
23.	2522.00	0.80	301.00	2,508.16'	52.76'	149.77'	158.66'	0.12°					
24.	2618.00	0.80	302.80	2,604.15'	53.46'	148.64'	157.78'	0.03°					
25.	2714.00	0.20	279.90	2,700.15'	53.86'	147.91'	157.19'	0.65°					
26.	2810.00	0.10	204.20	2,796.14'	53.81'	147.71'	156.99'	0.21°					
27.	2906.00	0.20	229.70	2,892.14'	53.62'	147.55'	156.78'	0.12°					
28.	3002.00	0.30	267.10	2,988.14'	53.50'	147.17'	156.38'	0.19°					
29.	3099.00	0.10	308.80	3,085.14'	53.54'	146.85'	156.09'	0.24°					
30.	3195.00	0.10	237.40	3,181.14'	53.55'	146.71'	155.96'	0.12°					
31.	3291.00	0.30	323.40	3,277.14'	53.71'	146.49'	155.80'	0.32°					
32.	3388.00	0.40	345.10	3,374.14'	54.24'	146.25'	155.72'	0.17°					
33.	3484.00	0.50	340.00	3,470.14'	54.96'	146.02'	155.71'	0.11°					
34.	3586.00	0.70	332.30	3,572.13'	55.93'	145.58'	155.58'	0.21°					
35.	3682.00	0.30	140.40	3,668.13'	56.25'	145.47'	155.56'	1.04°					
36.	3778.00	0.40	116.60	3,764.13'	55.91'	145.93'	155.90'	0.18°					
37.	3874.00	0.40	130.00	3,860.13'	55.54'	146.49'	156.33'	0.10°					
38.	3971.00	0.70	104.50	3,957.12'	55.18'	147.32'	157.02'	0.39°					

RECEIVED
DEC 05 2013
NMOCD ARTESIA

39.	4066.00	0.50	91.30	4,052.12'	55.02'	148.29'	157.90'	0.25°					
40.	4163.00	0.60	92.20	4,149.11'	54.99'	149.23'	158.79'	0.10°					
41.	4259.00	0.50	176.60	4,245.11'	54.55'	149.75'	159.16'	0.77°					
42.	4355.00	0.70	216.10	4,341.10'	53.66'	149.43'	158.59'	0.47°					
43.	4451.00	0.80	207.90	4,437.10'	52.60'	148.77'	157.65'	0.15°					
44.	4547.00	0.80	209.60	4,533.09'	51.42'	148.13'	156.69'	0.02°					
45.	4643.00	0.40	218.60	4,629.08'	50.58'	147.59'	155.93'	0.43°					
46.	4739.00	0.40	205.90	4,725.08'	50.01'	147.23'	155.42'	0.09°					
47.	4771.00	0.40	195.40	4,757.08'	49.81'	147.15'	155.29'	0.23°					
PTB	4816.00	0.40	195.40	4,802.08'	49.50'	147.07'	155.12'	0.00°					

The above survey data is true and correct, complete and within the limitations of the tool as set forth by Childress Directional Drilling, LLC; that I am authorized and qualified to make this report; that this survey was conducted at the request of Lime Rock Resources; that I reviewed these MWD Surveys and find they conform to the principles and procedures as set forth by Childress Directional Drilling.

Regards,



Art Polfenroth
MWD Manager
Childress Directional Drilling, LLC