

API #30-015-41446

Customer: Limerock Resources					Rig: United Drilling Rig #33				Latitude: 32.789545		
Lease, Well No.: Eagle 34 J Federal #63					Job No.: CDD-14004				Longitude: -104.265452		
County or Parish: Eddy County, NM					Location or Area: Artesia, NM				Mag.Decl.: 7.12°		
									Horizontal Targets		
					Calculated #/ Targets				TVD	3436.76	4750.00
					Elevation 3,576.00				N/S	0.79	0.79
					KB 11.8				E/W	164.03	164.03
Tie-In Survey Co.: Childress Directional Drilling					Minimum Curvature Calculations				Rates / 100' M.D.		Dist #/ Target Line
Surveying Company: Childress Directional Drilling					Proposed Azimuth: 84.81°				Build or	R or -L	Above or
Survey No.	M.D.	INCL.	AZM.	TVD.	N / -S	E / -W	V. SECT.	DLS / 100'	-Drop	Turn	-Below
Tie-In	0.00	0.00	0.00	0.00'	0.00'	0.00'	0.00'	0.00°			
1.	381.00	0.20	26.40	381.00'	0.60'	0.30'	0.35'	0.05°			
2.	472.00	0.20	32.90	472.00'	0.87'	0.45'	0.53'	0.02°			
3.	564.00	0.20	82.90	564.00'	1.03'	0.70'	0.79'	0.18°			
4.	660.00	0.40	115.70	660.00'	0.90'	1.17'	1.24'	0.27°			
5.	756.00	0.40	122.00	755.99'	0.58'	1.75'	1.80'	0.05°			
6.	853.00	0.40	107.10	852.99'	0.30'	2.36'	2.38'	0.11°			
7.	949.00	0.60	113.90	948.99'	0.00'	3.14'	3.13'	0.22°			
8.	1045.00	0.60	125.50	1,044.98'	-0.50'	4.01'	3.95'	0.13°			
9.	1141.00	0.70	127.20	1,140.98'	-1.14'	4.89'	4.77'	0.11°			
10.	1238.00	0.30	352.60	1,237.97'	-1.25'	5.33'	5.19'	0.96°			
11.	1334.00	0.50	6.50	1,333.97'	-0.59'	5.34'	5.27'	0.23°			
12.	1430.00	0.70	20.10	1,429.97'	0.38'	5.59'	5.60'	0.25°			
13.	1526.00	0.70	18.10	1,525.96'	1.49'	5.98'	6.09'	0.03°			
14.	1622.00	0.50	354.00	1,621.96'	2.46'	6.11'	6.31'	0.33°			
15.	1718.00	0.70	352.10	1,717.95'	3.46'	5.99'	6.28'	0.21°			
16.	1814.00	0.50	4.80	1,813.94'	4.46'	5.94'	6.32'	0.25°			
17.	1911.00	0.50	244.20	1,910.94'	4.70'	5.60'	6.00'	0.90°			
18.	2007.00	0.60	356.60	2,006.94'	5.02'	5.19'	5.62'	0.95°			
19.	2103.00	0.70	354.10	2,102.93'	6.10'	5.10'	5.63'	0.11°			
20.	2199.00	0.80	35.00	2,198.93'	7.23'	5.43'	6.06'	0.55°			
21.	2295.00	4.70	91.60	2,294.81'	7.67'	9.74'	10.40'	4.49°			
22.	2392.00	8.20	94.00	2,391.18'	7.08'	20.62'	21.18'	3.62°			
23.	2488.00	11.60	90.60	2,485.73'	6.50'	37.11'	37.54'	3.59°			
24.	2584.00	15.00	89.50	2,579.15'	6.51'	59.19'	59.53'	3.55°			
25.	2680.00	19.40	84.60	2,670.83'	8.12'	87.50'	87.87'	4.82°			
26.	2776.00	15.60	81.80	2,762.38'	11.46'	116.16'	116.72'	4.05°			
27.	2873.00	11.00	85.50	2,856.75'	14.05'	138.31'	139.01'	4.82°			
28.	2969.00	6.20	79.70	2,951.65'	15.69'	152.55'	153.34'	5.07°			
29.	3066.00	2.00	92.40	3,048.38'	16.56'	159.39'	160.24'	4.40°			
30.	3161.00	0.90	51.20	3,143.35'	16.96'	161.63'	162.50'	1.53°			
31.	3264.00	0.40	106.20	3,246.34'	17.37'	162.61'	163.51'	0.72°			
32.	3360.00	0.40	62.80	3,342.34'	17.42'	163.23'	164.13'	0.31°			
33.	3456.00	0.40	92.60	3,438.34'	17.56'	163.86'	164.78'	0.21°			
34.	3553.00	0.40	98.80	3,535.33'	17.50'	164.53'	165.44'	0.04°			
35.	3649.00	0.50	120.70	3,631.33'	17.23'	165.22'	166.10'	0.21°			
36.	3745.00	0.40	138.40	3,727.33'	16.77'	165.81'	166.64'	0.18°			
37.	3841.00	0.50	141.80	3,823.33'	16.19'	166.29'	167.07'	0.11°			
38.	3937.00	0.20	220.80	3,919.32'	15.73'	166.44'	167.18'	0.52°			
39.	4033.00	0.10	266.80	4,015.32'	15.60'	166.24'	166.97'	0.16°			

40.	4129.00	0.40	325.00	4,111.32'	15.87'	165.97'	166.72'	0.37°
41.	4225.00	0.50	323.80	4,207.32'	16.48'	165.53'	166.34'	0.10°
42.	4321.00	0.60	318.40	4,303.32'	17.19'	164.95'	165.83'	0.12°
43.	4417.00	0.60	312.90	4,399.31'	17.91'	164.25'	165.19'	0.06°
44.	4513.00	0.40	312.40	4,495.31'	18.48'	163.63'	164.63'	0.21°
45.	4609.00	0.50	316.00	4,591.30'	19.01'	163.09'	164.14'	0.11°
46.	4705.00	0.70	302.00	4,687.30'	19.62'	162.30'	163.41'	0.26°
47.	4724.00	0.80	315.70	4,706.30'	19.78'	162.11'	163.24'	1.08°
PTB	4768.00	0.80	315.70	4,750.29'	20.22'	161.68'	162.85'	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 Poffenroth
MWD Manager
Childress Directional Drilling, LLC