

API # 30-015-41466

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 28 2014

Customer: LIME ROCK RESOURCES	Rig: UDI #33	SHL X:
Lease, Well No.: FALCON 3G FEDERAL #32	Job No.: 14124	SHL Y: RECEIVED
County or Parish: EDDY	Location or Area: ARTESIA, NM	Mag. Decl.: 7.54

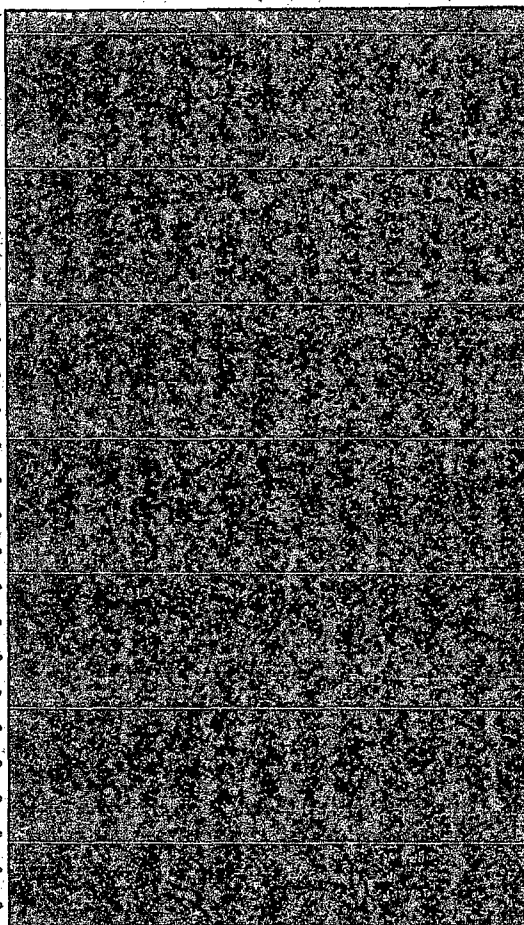
**CHILDRESS
DIRECTIONAL
DRILLING**

Calculated # Targets		Sensor			
KBTVD (@ 0' VS)		TVD			
Dip Angle (+Dn/-Up)		N-S	384.09		
		E-W	-81.1		

Tie-In Survey Co.: n/a						Minimum Curvature Calculations			Rates / 100' M.D.		Dist # Target Line		
Surveying Company: Childress Directional						Proposed Azimuth: 348.09°			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.	330.00	0.30	75.80	330.00'	0.21'	0.84'	0.03'	0.09°					
2.	421.00	0.40	268.60	421.00'	0.26'	0.75'	0.10'	0.76°					
3.	508.00	1.00	320.60	507.99'	0.84'	-0.03'	0.83'	0.94°					
4.	540.00	1.50	321.90	539.98'	1.39'	-0.47'	1.45'	1.56°					
5.	570.00	2.60	333.30	569.96'	2.30'	-1.02'	2.46'	3.89°					
6.	603.00	3.30	332.80	602.92'	3.82'	-1.79'	4.10'	2.12°					
7.	635.00	4.40	338.00	634.85'	5.77'	-2.67'	6.20'	3.60°					
8.	667.00	5.50	337.70	666.73'	8.33'	-3.71'	8.92'	3.44°					
9.	699.00	6.00	341.10	698.57'	11.33'	-4.84'	12.09'	1.89°					
10.	730.00	6.60	347.10	729.38'	14.60'	-5.76'	15.48'	2.87°					
11.	763.00	7.40	349.70	762.13'	18.54'	-6.56'	19.50'	2.61°					
12.	795.00	8.00	349.50	793.85'	22.76'	-7.34'	23.78'	1.88°					
13.	827.00	9.10	348.90	825.49'	27.43'	-8.23'	28.54'	3.45°					
14.	859.00	9.80	348.40	857.05'	32.58'	-9.26'	33.79'	2.20°					
15.	891.00	10.30	348.50	888.56'	38.05'	-10.38'	39.38'	1.56°					
16.	922.00	11.00	349.30	919.03'	43.68'	-11.48'	45.11'	2.31°					
17.	1019.00	10.10	348.10	1,014.39'	61.09'	-14.95'	62.86'	0.96°					
18.	1115.00	10.60	347.20	1,108.83'	77.94'	-18.65'	80.11'	0.55°					
19.	1211.00	11.60	349.90	1,203.03'	96.05'	-22.30'	98.59'	1.17°					
20.	1307.00	11.20	351.20	1,297.14'	114.77'	-25.41'	117.54'	0.50°					
21.	1403.00	10.60	349.30	1,391.40'	132.66'	-28.48'	135.68'	0.73°					
22.	1499.00	12.10	350.00	1,486.52'	151.24'	-31.87'	154.56'	1.57°					
23.	1594.00	11.60	349.10	1,578.50'	170.43'	-35.40'	174.07'	0.56°					
24.	1690.00	11.60	349.00	1,672.54'	189.38'	-39.07'	193.37'	0.02°					
25.	1786.00	11.60	349.60	1,766.58'	208.35'	-42.65'	212.67'	0.13°					
26.	1882.00	11.60	348.80	1,860.62'	227.31'	-46.27'	231.97'	0.17°					
27.	1978.00	11.60	350.20	1,954.66'	246.29'	-49.79'	251.26'	0.29°					
28.	2074.00	11.60	350.60	2,048.70'	265.32'	-53.01'	270.55'	0.08°					
29.	2170.00	11.70	351.80	2,142.72'	284.48'	-55.97'	289.90'	0.27°					
30.	2266.00	11.10	348.30	2,236.82'	303.16'	-59.23'	308.86'	0.95°					
31.	2362.00	10.20	346.80	2,331.17'	320.49'	-63.05'	326.60'	0.98°					
32.	2458.00	10.20	348.10	2,425.65'	337.08'	-66.74'	343.60'	0.24°					
33.	2554.00	9.80	347.90	2,520.19'	353.39'	-70.21'	360.27'	0.42°					
34.	2587.00	9.10	347.50	2,552.75'	358.68'	-71.36'	365.69'	2.13°					
35.	2619.00	9.30	348.60	2,584.33'	363.68'	-72.42'	370.80'	0.83°					
36.	2651.00	8.90	348.90	2,615.93'	368.65'	-73.41'	375.86'	1.26°					
37.	2683.00	8.30	349.60	2,647.57'	373.35'	-74.30'	380.65'	1.90°					
38.	2715.00	7.30	345.30	2,679.28'	377.59'	-75.23'	384.99'	3.62°					
39.	2747.00	6.00	345.00	2,711.06'	381.17'	-76.18'	388.69'	4.06°					
40.	2779.00	5.00	342.20	2,742.91'	384.11'	-77.04'	391.74'	3.23°					

please provide signature page for this survey

41.	2811.00	4.00	336.40	2,774.81'	386.46'	-77.92'	394.22'	3.43°
42.	2843.00	3.10	326.10	2,806.75'	388.20'	-78.84'	396.12'	3.44°
43.	2875.00	2.40	304.30	2,838.72'	389.30'	-79.88'	397.41'	3.89°
44.	2907.00	2.50	285.10	2,870.69'	389.86'	-81.11'	398.21'	2.57°
45.	2939.00	2.20	276.50	2,902.66'	390.11'	-82.39'	398.72'	1.44°
46.	2971.00	1.70	295.20	2,934.64'	390.38'	-83.43'	399.20'	2.51°
47.	3073.00	1.80	294.80	3,036.59'	391.70'	-86.26'	401.07'	0.10°
48.	3169.00	1.60	308.10	3,132.55'	393.16'	-88.68'	403.00'	0.46°
49.	3265.00	1.70	307.10	3,228.51'	394.84'	-90.87'	405.10'	0.11°
50.	3361.00	1.40	296.00	3,324.48'	396.22'	-93.06'	406.89'	0.44°
51.	3457.00	1.00	332.80	3,420.46'	397.48'	-94.50'	408.42'	0.88°
52.	3553.00	0.40	158.30	3,516.45'	397.91'	-94.75'	408.90'	1.46°
53.	3649.00	0.20	82.60	3,612.45'	397.62'	-94.46'	408.56'	0.42°
54.	3745.00	0.40	74.20	3,708.45'	397.73'	-93.98'	408.57'	0.21°
55.	3841.00	0.60	94.20	3,804.45'	397.79'	-93.15'	408.45'	0.27°
56.	3937.00	0.70	94.20	3,900.44'	397.71'	-92.07'	408.15'	0.10°
57.	4033.00	0.40	117.90	3,996.44'	397.51'	-91.19'	407.77'	0.39°
58.	4129.00	0.70	57.60	4,092.43'	397.67'	-90.39'	407.76'	0.64°
59.	4225.00	1.00	39.40	4,188.42'	398.63'	-89.37'	408.49'	0.42°
60.	4321.00	0.80	5.80	4,284.41'	399.94'	-88.77'	409.65'	0.58°
61.	4417.00	1.20	107.70	4,380.40'	400.30'	-87.74'	409.79'	1.64°
62.	4512.00	1.30	148.60	4,475.38'	399.08'	-86.23'	408.29'	0.92°
63.	4608.00	1.20	163.10	4,571.36'	397.19'	-85.37'	406.26'	0.34°
64.	4704.00	1.80	152.30	4,667.33'	394.89'	-84.38'	403.80'	0.69°
65.	4801.00	1.80	140.60	4,764.28'	392.37'	-82.71'	400.99'	0.38°
PTB	4838.00	1.80	140.60	4,801.26'	391.47'	-81.97'	399.96'	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