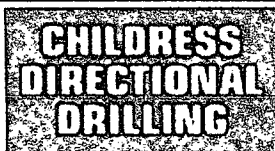


3001541510

Customer: Lime Rock Recourses	Rig: UDI#33	SHL X:
Lease, Well No.: Hondo 4K Federal #50	Job No.: CD-13088	SHL Y:
County or Parrish: Eddy	Location or Area: Artisa NM	Mag.Decl.: 7.68



Calculated f/ Targets

KBTVD (@ 0' VS)

Dip Angle (+Dn/-Up)

Sensor

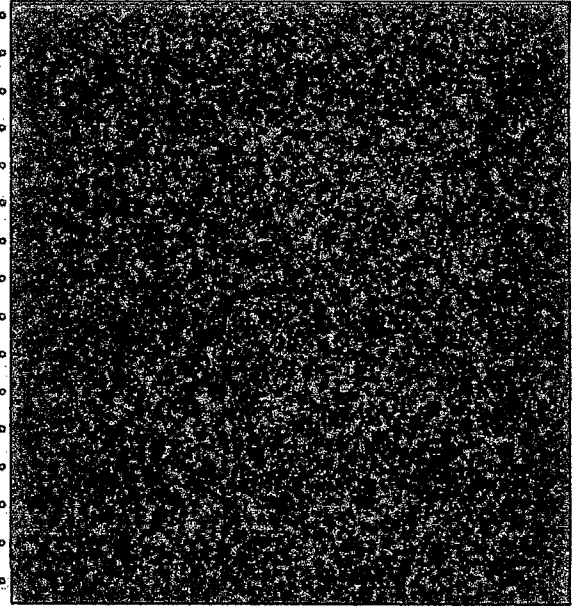
TVD

N-S

E-W

Tie-In Survey Co.:						Minimum Curvature Calculations				Rates / 100' M.D.		Dist f/ Target Line		
Surveying Company: Childress Directional						Proposed Azimuth: 162.34°				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.	378.00	0.40	219.80	378.00'	-1.01'	-0.84'	0.71'	0.11°						
2.	466.00	0.40	208.10	465.99'	-1.52'	-1.19'	1.09'	0.09°						
3.	529.00	2.50	190.00	528.97'	-3.07'	-1.53'	2.46'	3.37°						
4.	559.00	3.30	194.50	558.93'	-4.55'	-1.86'	3.77'	2.77°						
5.	590.00	3.30	191.70	589.88'	-6.29'	-2.26'	5.30'	0.52°						
6.	621.00	3.60	176.80	620.83'	-8.13'	-2.39'	7.02'	3.04°						
7.	653.00	4.30	171.20	652.75'	-10.32'	-2.15'	9.18'	2.50°						
8.	685.00	4.90	172.40	684.65'	-12.86'	-1.78'	11.71'	1.90°						
9.	717.00	5.50	167.80	716.51'	-15.71'	-1.28'	14.58'	2.28°						
10.	749.00	6.20	165.90	748.35'	-18.89'	-0.54'	17.84'	2.27°						
11.	781.00	7.10	166.60	780.13'	-22.49'	0.34'	21.53'	2.82°						
12.	878.00	8.40	161.30	876.25'	-35.03'	4.01'	34.60'	1.53°						
13.	973.00	8.30	158.70	970.24'	-47.99'	8.72'	48.38'	0.41°						
14.	1070.00	7.00	171.50	1,066.38'	-60.36'	12.14'	61.20'	2.20°						
15.	1166.00	8.10	164.80	1,161.55'	-72.68'	14.78'	73.73'	1.47°						
16.	1263.00	7.70	167.60	1,257.63'	-85.62'	17.96'	87.03'	0.57°						
17.	1358.00	8.40	161.50	1,351.69'	-98.41'	21.53'	100.31'	1.16°						
18.	1454.00	7.50	155.00	1,446.77'	-110.74'	26.40'	113.53'	1.32°						
19.	1551.00	6.90	149.00	1,543.01'	-121.47'	32.08'	125.48'	0.99°						
20.	1646.00	4.30	123.90	1,637.56'	-128.35'	37.98'	133.83'	3.70°						
21.	1743.00	1.70	31.40	1,734.46'	-129.15'	41.75'	135.73'	4.84°						
22.	1839.00	2.70	273.30	1,830.42'	-127.81'	40.23'	133.99'	3.97°						
23.	1934.00	1.30	264.00	1,925.36'	-127.79'	36.93'	132.97'	1.51°						
24.	2030.00	1.30	342.00	2,021.34'	-126.87'	35.51'	131.66'	1.70°						
25.	2126.00	1.00	332.00	2,117.32'	-125.10'	34.78'	129.75'	0.37°						
26.	2222.00	1.10	321.40	2,213.30'	-123.64'	33.81'	128.07'	0.23°						
27.	2318.00	1.00	325.10	2,309.29'	-122.23'	32.75'	126.40'	0.13°						
28.	2414.00	1.00	317.20	2,405.27'	-120.93'	31.71'	124.85'	0.14°						
29.	2511.00	1.10	299.50	2,502.26'	-119.85'	30.32'	123.40'	0.35°						
30.	2609.00	1.20	303.50	2,600.24'	-118.82'	28.65'	121.91'	0.13°						
31.	2708.00	1.00	311.60	2,699.22'	-117.67'	27.14'	120.36'	0.26°						
32.	2804.00	1.30	298.90	2,795.20'	-116.59'	25.56'	118.85'	0.41°						
33.	2900.00	1.30	305.60	2,891.17'	-115.43'	23.72'	117.18'	0.16°						
34.	2996.00	0.30	243.20	2,987.16'	-114.91'	22.61'	116.35'	1.24°						
35.	3092.00	0.30	188.60	3,083.16'	-115.27'	22.35'	116.62'	0.29°						
36.	3188.00	0.30	67.10	3,179.16'	-115.42'	22.54'	116.82'	0.55°						
37.	3284.00	0.40	344.50	3,275.16'	-115.00'	22.68'	116.46'	0.49°						

38.	3380.00	0.70	340.10	3,371.16'	-114.13'	22.39'	115.54'	0.32°
39.	3476.00	0.80	26.80	3,467.15'	-112.98'	22.49'	114.48'	0.63°
40.	3572.00	0.60	20.30	3,563.14'	-111.91'	22.97'	113.60'	0.22°
41.	3669.00	0.70	358.90	3,660.14'	-110.84'	23.14'	112.63'	0.27°
42.	3765.00	0.40	344.50	3,756.13'	-109.93'	23.04'	111.74'	0.34°
43.	3861.00	0.50	19.50	3,852.13'	-109.21'	23.09'	111.07'	0.30°
44.	3958.00	0.30	17.90	3,949.13'	-108.57'	23.30'	110.52'	0.21°
45.	4054.00	0.40	125.80	4,045.13'	-108.53'	23.65'	110.59'	0.59°
46.	4150.00	0.40	118.80	4,141.12'	-108.88'	24.22'	111.10'	0.05°
47.	4246.00	0.30	67.00	4,237.12'	-108.95'	24.74'	111.32'	0.33°
48.	4342.00	0.10	102.70	4,333.12'	-108.87'	25.06'	111.34'	0.24°
49.	4438.00	0.20	187.30	4,429.12'	-109.05'	25.12'	111.53'	0.22°
50.	4533.00	0.50	244.60	4,524.12'	-109.40'	24.72'	111.74'	0.45°
51.	4629.00	0.40	282.10	4,620.12'	-109.50'	24.02'	111.63'	0.32°
52.	4709.00	0.30	305.50	4,700.12'	-109.32'	23.57'	111.32'	0.22°
PTB.	4760.00	0.30	305.50	4,751.11'	-109.17'	23.36'	111.11'	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