



Company: Mewbourne Oil Company

Lease/Well: Bradley 28 Fed/3H

Location: S28 T18s R30e

Rig Name: Patterson 47

State/County: New Mexico/Eddy

Latitude: 32.72

GRID North is 0.19 Degrees East of True North

VS-Azi: 88.44 Degrees



Depth Reference : RKB = 19 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ...y 28 fed #3h_gyro survey_1.ut

Minimum Curvature Method

Report Date/Time: 6/21/2012 / 13:22

Vaughn Energy Services

(432) 563-5444

Gardendale, TX

Surveyor: Colby Ware

Bradley 28 Fed 3H / API 30-015-40246

30-015-40246

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.65	55.59	100.00	0.32	0.47	0.48	0.57	55.59	0.65
200.00	0.44	320.74	199.99	0.94	0.70	0.72	1.17	36.59	0.82
300.00	0.77	260.59	299.99	1.13	-0.21	-0.18	1.14	349.48	0.67
400.00	0.74	256.97	399.98	0.87	-1.50	-1.48	1.74	300.09	0.06
500.00	0.77	276.56	499.97	0.80	-2.79	-2.77	2.91	286.00	0.26
600.00	0.78	277.01	599.96	0.96	-4.13	-4.10	4.24	283.09	0.01
700.00	0.73	278.80	699.96	1.14	-5.43	-5.40	5.55	281.86	0.05
800.00	0.45	279.98	799.95	1.31	-6.45	-6.42	6.58	281.45	0.28
900.00	0.52	281.05	899.95	1.46	-7.28	-7.24	7.43	281.35	0.07
1000.00	0.34	302.89	999.94	1.71	-7.97	-7.92	8.15	282.09	0.24
1100.00	0.38	311.44	1099.94	2.09	-8.47	-8.41	8.72	283.85	0.07
1200.00	0.52	336.35	1199.94	2.73	-8.90	-8.83	9.31	287.03	0.24
1300.00	0.68	13.96	1299.93	3.72	-8.94	-8.84	9.69	292.59	0.41
1400.00	1.01	17.81	1399.92	5.14	-8.53	-8.39	9.96	301.05	0.34
1500.00	1.03	17.92	1499.91	6.83	-7.99	-7.80	10.51	310.54	0.02
1600.00	1.06	356.64	1599.89	8.61	-7.76	-7.53	11.59	317.94	0.39
1700.00	1.25	357.54	1699.87	10.62	-7.86	-7.57	13.21	323.47	0.19
1800.00	1.30	353.39	1799.85	12.83	-8.04	-7.69	15.15	327.93	0.11

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1900.00	1.54	355.90	1899.81	15.30	-8.27	-7.85	17.39	331.61	0.24
2000.00	1.93	0.92	1999.77	18.32	-8.34	-7.84	20.13	335.53	0.42
2100.00	2.36	7.74	2099.70	22.04	-8.03	-7.43	23.46	339.97	0.50
2200.00	2.27	18.06	2199.62	25.97	-7.14	-6.43	26.93	344.62	0.43
2300.00	2.34	17.79	2299.54	29.79	-5.90	-5.09	30.37	348.79	0.07
2400.00	2.17	16.02	2399.46	33.56	-4.76	-3.84	33.89	351.93	0.19
2500.00	1.87	11.57	2499.40	36.97	-3.91	-2.90	37.18	353.97	0.34
2600.00	2.02	9.97	2599.34	40.31	-3.28	-2.18	40.44	355.35	0.16
2700.00	1.77	6.83	2699.28	43.58	-2.79	-1.60	43.67	356.34	0.28
2800.00	1.34	10.95	2799.25	46.26	-2.38	-1.12	46.32	357.05	0.44
2900.00	1.25	9.97	2899.22	48.47	-1.97	-0.65	48.51	357.67	0.09
3000.00	1.33	358.79	2999.20	50.71	-1.81	-0.43	50.74	357.96	0.27
3100.00	1.42	358.85	3099.17	53.12	-1.86	-0.41	53.15	358.00	0.09
3200.00	1.24	359.10	3199.14	55.44	-1.90	-0.39	55.48	358.04	0.18
3300.00	1.10	355.87	3299.12	57.49	-1.99	-0.42	57.52	358.02	0.16
3400.00	1.16	358.72	3399.10	59.46	-2.08	-0.46	59.49	358.00	0.08
3500.00	1.15	345.58	3499.08	61.44	-2.35	-0.68	61.49	357.81	0.26
3600.00	1.12	342.13	3599.06	63.34	-2.90	-1.18	63.41	357.38	0.08
3700.00	1.17	345.32	3699.04	65.26	-3.46	-1.68	65.36	356.97	0.08
3800.00	1.20	343.64	3799.02	67.26	-4.02	-2.18	67.38	356.58	0.05
3900.00	1.51	1.34	3898.99	69.58	-4.28	-2.38	69.72	356.48	0.51
4000.00	1.20	0.84	3998.96	71.94	-4.23	-2.27	72.07	356.63	0.31
4100.00	1.01	5.28	4098.94	73.86	-4.14	-2.13	73.98	356.79	0.21
4200.00	1.11	1.80	4198.93	75.71	-4.03	-1.96	75.81	356.96	0.12
4300.00	1.19	20.81	4298.91	77.65	-3.63	-1.51	77.73	357.33	0.39
4400.00	1.42	29.81	4398.88	79.69	-2.64	-0.47	79.74	358.10	0.31
4500.00	1.85	32.02	4498.84	82.14	-1.17	1.07	82.15	359.18	0.44
4600.00	1.99	30.55	4598.78	85.00	0.57	2.88	85.01	0.38	0.14
4700.00	2.11	35.98	4698.72	87.98	2.53	4.93	88.02	1.65	0.23
4800.00	2.24	44.17	4798.65	90.87	4.97	7.45	91.01	3.13	0.34
4900.00	2.19	51.36	4898.57	93.47	7.82	10.37	93.79	4.79	0.28
5000.00	2.19	47.53	4998.50	95.95	10.72	13.33	96.54	6.38	0.15
5100.00	1.94	40.53	5098.44	98.52	13.23	15.91	99.41	7.65	0.35
5200.00	1.85	42.48	5198.38	101.00	15.42	18.16	102.17	8.68	0.11
5300.00	1.62	40.53	5298.34	103.26	17.43	20.23	104.72	9.58	0.24
5400.00	0.78	23.35	5398.31	104.96	18.61	21.46	106.59	10.06	0.90
5500.00	0.44	17.24	5498.31	105.94	18.99	21.87	107.63	10.16	0.34
5600.00	0.74	294.78	5598.30	106.58	18.52	21.41	108.18	9.86	0.81
5700.00	1.31	266.81	5698.29	106.79	16.79	19.69	108.10	8.94	0.74

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5800.00	1.31	268.53	5798.26	106.70	14.51	17.41	107.68	7.75	0.94
5900.00	1.16	270.13	5898.24	106.67	12.36	15.26	107.38	6.61	0.15
6000.00	1.48	277.35	5998.21	106.84	10.07	12.97	107.31	5.38	0.36
6100.00	1.44	290.25	6098.18	107.44	7.61	10.53	107.71	4.05	0.33
6200.00	1.43	300.27	6198.15	108.50	5.35	8.30	108.63	2.82	0.25
6300.00	1.94	329.79	6298.11	110.59	3.42	6.43	110.65	1.77	0.99
6400.00	2.38	348.49	6398.04	114.09	2.16	5.26	114.11	1.08	0.82
6500.00	2.51	355.86	6497.95	118.30	1.58	4.80	118.31	0.77	0.34
6600.00	2.95	10.17	6597.83	123.01	1.88	5.23	123.03	0.88	0.81
6700.00	3.05	5.03	6697.70	128.19	2.57	6.06	128.22	1.15	0.28
6800.00	2.88	1.08	6797.56	133.35	2.85	6.48	133.38	1.22	0.26
6900.00	2.76	7.63	6897.44	138.24	3.22	6.98	138.28	1.33	0.34
7000.00	2.62	8.84	6997.33	142.89	3.89	7.78	142.94	1.56	0.15
7100.00	1.92	7.89	7097.25	146.81	4.47	8.46	146.87	1.74	0.71
7200.00	1.37	2.29	7197.21	149.66	4.75	8.82	149.73	1.82	0.56
7300.00	1.50	353.15	7297.18	152.15	4.64	8.78	152.22	1.75	0.26
7400.00	1.52	349.56	7397.15	154.75	4.24	8.45	154.81	1.57	0.10
7500.00	1.44	351.45	7497.11	157.30	3.82	8.10	157.34	1.39	0.09
7600.00	1.04	350.48	7597.09	159.43	3.48	7.82	159.47	1.25	0.40
7652.00	0.97	328.52	7649.08	160.27	3.17	7.53	160.30	1.13	0.75



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
 Lease Name: Bradley 28 Federal Com #003H
 API /Job Number: 30-015-40246 S12-080
 Comments: Tie-in to Vaughn Energy Gyro Survey
 Survey Company: Stryker Energy Directional Services, LLC

6/27/12

Target KBTVD: 8,274 Feet
 Target Angle: 89.38 Degrees
 Section Plane: 88.44 Degrees
 Declination Corrected to Grid: 7.51 Degrees
 Bit to Survey Offset: 57 Feet

Lead Driller: Gary Burow

Survey Number	Measured Depth	Drift (Degrees)	Azimuth (Degrees)	Course Length	TVD (Feet)	Vertical Section	+N/-S (Feet)	+E/-W (Feet)	+Above -Below			
									BUR	DLS	KBTVD	Target
T/I	7,652	0.97	328.52	N/A	7,649.08	7.5	160.27	3.17	N/A	0.8	7649.0	624.9
1	7756	1.20	39.50	104	7,753.07	7.8	161.9	3.4	0.2	1.2	7753.0	520.9
2	7788	4.90	82.70	32	7,785.02	9.4	162.3	5.0	11.6	12.8	7784.9	489.0
3	7820	9.90	90.80	32	7,816.74	13.5	162.4	9.1	15.6	15.9	7816.6	457.3
4	7851	15.10	92.10	31	7,847.00	20.2	162.2	15.8	16.8	16.8	7846.8	427.1
5	7883	19.30	92.40	32	7,877.56	29.6	161.9	25.2	13.1	13.1	7877.2	396.6
6	7914	22.70	92.40	31	7,906.49	40.7	161.4	36.3	11.0	11.0	7906.1	367.8
7	7946	25.70	93.60	32	7,935.68	53.8	160.7	49.4	9.4	9.5	7935.1	338.8
8	7978	29.00	97.70	32	7,964.10	68.4	159.2	64.1	10.3	11.9	7963.4	310.5
9	8010	31.30	99.40	32	7,991.77	84.2	156.8	79.9	7.2	7.7	7990.9	283.0
10	8042	33.90	100.00	32	8,018.73	101.1	153.9	96.9	8.1	8.2	8017.6	256.2
11	8073	38.10	99.40	31	8,043.80	119.0	150.9	114.9	13.5	13.6	8042.5	231.4
12	8105	40.40	99.80	32	8,068.58	138.8	147.5	134.9	7.2	7.2	8067.1	206.8
13	8137	42.20	101.60	32	8,092.62	159.5	143.6	155.6	5.6	6.7	8090.9	183.0
14	8169	45.40	102.80	32	8,115.71	181.0	138.9	177.2	10.0	10.3	8113.8	160.1
15	8200	49.00	103.70	31	8,136.77	202.9	133.7	199.4	11.6	11.8	8134.6	139.3
16	8232	51.60	103.80	32	8,157.21	226.7	127.8	223.3	8.1	8.1	8154.8	119.1
17	8264	54.50	104.40	32	8,176.45	251.3	121.6	248.1	9.1	9.2	8173.7	100.2
18	8295	58.40	104.90	31	8,193.58	276.1	115.0	273.1	12.6	12.7	8190.6	83.3
19	8327	62.60	104.90	32	8,209.33	302.8	107.9	300.0	13.1	13.1	8206.1	67.8
20	8359	65.10	105.10	32	8,223.43	330.3	100.4	327.7	7.8	7.8	8219.9	54.0
21	8390	66.70	105.10	31	8,236.09	357.5	93.1	355.1	5.2	5.2	8232.2	41.7
22	8422	70.00	105.10	32	8,247.89	385.9	85.3	383.8	10.3	10.3	8243.7	30.2
23	8454	73.80	103.70	32	8,257.83	415.2	77.8	413.2	11.9	12.6	8253.3	20.5
24	8486	76.80	103.30	32	8,265.95	445.1	70.5	443.3	9.4	9.5	8261.1	12.7
25	8517	79.50	102.30	31	8,272.32	474.5	63.8	472.9	8.7	9.3	8267.2	6.7
26	8548	83.40	101.40	31	8,276.93	504.3	57.5	502.9	12.6	12.9	8271.5	2.4
27	8634	89.90	100.80	86	8,281.95	588.0	41.0	587.1	7.6	7.6	8275.6	-1.7
28	8666	89.80	100.00	32	8,282.03	619.3	35.2	618.6	-0.3	2.5	8275.3	-1.5
29	8698	89.30	98.00	32	8,282.28	650.8	30.2	650.2	-1.6	6.4	8275.2	-1.4
30	8730	89.30	95.00	32	8,282.68	682.4	26.6	681.9	0.0	9.4	8275.3	-1.4
31	8761	89.40	92.80	31	8,283.03	713.3	24.5	712.9	0.3	7.1	8275.3	-1.4
32	8792	90.00	90.30	31	8,283.19	744.2	23.7	743.9	1.9	8.3	8275.1	-1.3
33	8824	90.30	88.20	32	8,283.11	776.2	24.1	775.9	0.9	6.6	8274.7	-0.8
34	8856	90.50	87.80	32	8,282.88	808.2	25.2	807.8	0.6	1.4	8274.1	-0.3
35	8888	90.50	88.00	32	8,282.60	840.2	26.4	839.8	0.0	0.6	8273.5	0.4
36	8919	88.90	88.40	31	8,282.77	871.2	27.3	870.8	-5.2	5.3	8273.3	0.5



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
 Lease Name: Bradley 28 Federal Com #003H
 API /Job Number: 30-015-40246 S12-080
 Comments: Tie-in to Vaughn Energy Gyro Survey
 Survey Company: Stryker Energy Directional Services, LLC

6/27/12

Target KBTVD: 8,274 Feet
 Target Angle: 89.38 Degrees
 Section Plane: 88.44 Degrees
 Declination Corrected to Grid: 7.51 Degrees
 Bit to Survey Offset: 57 Feet

Lead Driller: Gary Burow

Survey Number	Measured Depth	Drift	Azimuth	Course	TVD	Vertical	+N/-S	+E/-W	BUR	DLS	KBTVD	+Above -Below Target
		(Degrees)	(Degrees)	Length	(Feet)	Section	(Feet)	(Feet)				
37	8951	88.50	88.50	32	8,283.49	903.2	28.2	902.8	-1.3	1.3	8273.7	0.2
38	8983	88.20	88.70	32	8,284.41	935.2	29.0	934.7	-0.9	1.1	8274.3	-0.4
39	9015	87.80	88.70	32	8,285.53	967.2	29.7	966.7	-1.3	1.3	8275.1	-1.2
40	9079	88.90	89.20	64	8,287.37	1,031.1	30.9	1,030.7	1.7	1.9	8276.2	-2.3
41	9143	89.10	90.10	64	8,288.49	1,095.1	31.3	1,094.7	0.3	1.4	8276.6	-2.8
42	9206	89.70	89.20	63	8,289.15	1,158.1	31.7	1,157.7	1.0	1.7	8276.6	-2.7
43	9270	89.90	88.00	64	8,289.37	1,222.1	33.2	1,221.6	0.3	1.9	8276.1	-2.3
44	9334	89.10	88.00	64	8,289.93	1,286.1	35.5	1,285.6	-1.3	1.2	8276.0	-2.1
45	9397	89.70	87.70	63	8,290.59	1,349.1	37.8	1,348.6	1.0	1.1	8276.0	-2.1
46	9461	89.30	87.10	64	8,291.15	1,413.1	40.7	1,412.5	-0.6	1.1	8275.9	-2.0
47	9524	90.00	87.70	63	8,291.53	1,476.1	43.6	1,475.4	1.1	1.5	8275.6	-1.7
48	9588	91.70	88.00	64	8,290.58	1,540.0	46.0	1,539.4	2.7	2.7	8273.9	0.0
49	9651	91.80	88.40	63	8,288.66	1,603.0	48.0	1,602.3	0.2	0.7	8271.3	2.6
50	9715	90.30	87.80	64	8,287.49	1,667.0	50.1	1,666.3	-2.3	2.5	8269.4	4.4
51	9779	87.80	87.70	64	8,288.55	1,731.0	52.6	1,730.2	-3.9	3.9	8269.8	4.1
52	9842	89.00	88.20	63	8,290.31	1,793.9	54.8	1,793.1	1.9	2.1	8270.9	3.0
53	9906	89.20	89.10	64	8,291.31	1,857.9	56.4	1,857.1	0.3	1.4	8271.2	2.7
54	9969	88.60	88.50	63	8,292.52	1,920.9	57.7	1,920.1	-1.0	1.3	8271.7	2.1
55	10033	87.80	87.50	64	8,294.53	1,984.9	59.9	1,984.0	-1.3	2.0	8273.1	0.8
56	10096	90.40	88.70	63	8,295.52	2,047.9	62.0	2,046.9	4.1	4.5	8273.4	0.5
57	10160	90.70	88.90	64	8,294.91	2,111.9	63.3	2,110.9	0.5	0.6	8272.1	1.8
58	10224	89.30	88.40	64	8,294.91	2,175.9	64.8	2,174.9	-2.2	2.3	8271.4	2.5
59	10287	89.30	88.50	63	8,295.68	2,238.8	66.5	2,237.9	0.0	0.2	8271.5	2.4
60	10351	89.40	88.50	64	8,296.40	2,302.8	68.2	2,301.8	0.2	0.2	8271.5	2.4
61	10414	89.30	88.00	63	8,297.12	2,365.8	70.1	2,364.8	-0.2	0.8	8271.5	2.4
62	10477	89.20	87.50	63	8,297.94	2,428.8	72.6	2,427.8	-0.2	0.8	8271.7	2.2
63	10541	89.20	87.00	64	8,298.84	2,492.8	75.7	2,491.7	0.0	0.8	8271.9	2.0
64	10605	88.90	87.70	64	8,299.90	2,556.8	78.6	2,555.6	-0.5	1.2	8272.2	1.6
65	10668	88.50	87.50	63	8,301.33	2,619.8	81.3	2,618.5	-0.6	0.7	8273.0	0.9
66	10732	89.50	87.10	64	8,302.44	2,683.7	84.3	2,682.4	1.6	1.7	8273.4	0.5
67	10796	90.30	86.60	64	8,302.56	2,747.7	87.8	2,746.3	1.3	1.5	8272.8	1.1
68	10859	89.30	87.50	63	8,302.78	2,810.7	91.1	2,809.3	-1.6	2.1	8272.4	1.5
69	10923	89.30	88.20	64	8,303.56	2,874.7	93.5	2,873.2	0.0	1.1	8272.4	1.4
70	10987	89.90	88.40	64	8,304.00	2,938.7	95.4	2,937.2	0.9	1.0	8272.2	1.7
71	11050	89.70	89.60	63	8,304.22	3,001.7	96.5	3,000.2	-0.3	1.9	8271.7	2.1
72	11113	88.50	89.60	63	8,305.21	3,064.6	96.9	3,063.1	-1.9	1.9	8272.0	1.8
73	11177	87.70	89.60	64	8,307.34	3,128.6	97.3	3,127.1	-1.3	1.2	8273.5	0.4



Stryker Energy Directional Services, LLC

SURVEY CALCULATION REPORT

Minimum Curvature Calculations

Operator: Mewbourne Oil Company
 Lease Name: Bradley 28 Federal Com #003H
 API/Job Number: 30-015-40246 S12-080
 Comments: Tie-in to Vaughn Energy Gyro Survey
 Survey Company: Stryker Energy Directional Services, LLC

6/27/12

Target KBTVD: 8,274 Feet
 Target Angle: 89.38 Degrees
 Section Plane: 88.44 Degrees
 Declination Corrected to Grid: 7.51 Degrees
 Bit to Survey Offset: 57 Feet

Lead Driller: Gary Burow

Survey Number	Measured Depth	Drift (Degrees)	Azimuth (Degrees)	Course Length	TVD (Feet)	Vertical Section	+N/-S (Feet)	+E/-W (Feet)	BUR	DLS	KBTVD	+Above -Below Target
74	11240	87.60	89.60	63	8,309.92	3,191.5	97.8	3,190.1	-0.2	0.2	8275.4	-1.5
75	11304	88.50	89.10	64	8,312.10	3,255.5	98.5	3,254.0	1.4	1.6	8276.9	-3.0
76	11367	89.70	88.50	63	8,313.09	3,318.5	99.8	3,317.0	1.9	2.1	8277.2	-3.3
77	11430	89.60	87.80	63	8,313.47	3,381.5	101.9	3,380.0	-0.2	1.1	8276.9	-3.0
78	11494	89.10	87.00	64	8,314.20	3,445.5	104.8	3,443.9	-0.8	1.5	8276.9	-3.0
79	11558	89.60	87.70	64	8,314.92	3,509.4	107.7	3,507.8	0.8	1.3	8276.9	-3.1
80	11621	90.70	88.20	63	8,314.76	3,572.4	110.0	3,570.8	1.7	1.9	8276.1	-2.2
81	11685	90.50	87.30	64	8,314.09	3,636.4	112.5	3,634.7	-0.3	1.4	8274.7	-0.9
82	11749	90.60	86.60	64	8,313.47	3,700.4	115.9	3,698.6	0.2	1.1	8273.4	0.4
83	11812	89.40	86.60	63	8,313.47	3,763.4	119.6	3,761.5	-1.9	1.9	8272.7	1.1
84	11876	88.10	87.00	64	8,314.87	3,827.3	123.2	3,825.4	-2.0	2.1	8273.5	0.4
85	11939	88.20	88.20	63	8,316.90	3,890.3	125.8	3,888.3	0.2	1.9	8274.8	-0.9
86	12003	88.30	88.50	64	8,318.86	3,954.2	127.7	3,952.2	0.2	0.5	8276.1	-2.2
87	12067	88.30	88.20	64	8,320.76	4,018.2	129.5	4,016.2	0.0	0.5	8277.3	-3.4
88	12131	89.10	88.40	64	8,322.21	4,082.2	131.4	4,080.1	1.3	1.3	8278.0	-4.2
89	12194	89.90	88.90	63	8,322.76	4,145.2	132.9	4,143.1	1.3	1.5	8277.9	-4.0
90	12258	90.00	88.50	64	8,322.81	4,209.2	134.4	4,207.1	0.2	0.6	8277.3	-3.4
91	12321	89.70	87.50	63	8,322.98	4,272.2	136.6	4,270.1	-0.5	1.7	8276.7	-2.9
92	12385	89.50	86.80	64	8,323.43	4,336.2	139.7	4,334.0	-0.3	1.1	8276.5	-2.6
TD	12442	89.50	86.80	57	8,323.92	4,393.1	142.9	4,390.9	0.0	0.0	8276.4	-2.5

Closure Distance: 4393.2 Feet
 Closure Direction: 88.1 Degrees
 Distance from Line: -23.3 Feet

Curve				Lateral Targets								
Target	1	2	3	Target	1	2	3	4	5	6	7	8
VS	473.15			MD	9100	9600	10100	10600	11100	11600	12100	12442
TVD	8279			TVD	8285	8290	8296	8301	8307	8312	8317	8320
				INC	89.6							

Closure Distance @ EOH: 4393.2 Feet
 Distance from line @ EOH: -23.3 Feet

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
BRADLEY 28 FED COM 3H
EDDY

047-0094

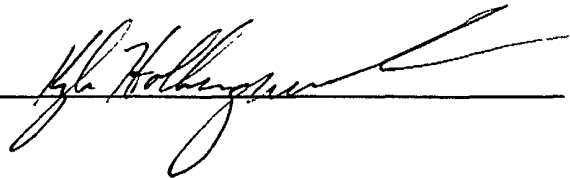
STATE OF NEW MEXICO
DEVIATION REPORT

321	1.23
472	1.01
713	0.40
1,013	0.52
1,300	1.00
1,616	0.93
1,893	1.26
2,304	2.10
2,429	2.09
2,524	1.70
2,770	1.42
3,031	1.28
3,252	0.84
3,507	1.02
3,819	0.85
4,073	0.86
4,389	0.45
4,706	1.92
4,801	2.13
4,896	2.19
4,992	1.69
5,119	1.79
5,247	1.69
5,404	1.31
5,629	0.16
5,818	1.08
6,007	1.26
6,132	1.92
6,290	1.08
6,449	1.77
6,576	2.92
6,671	2.39
6,766	2.84
6,825	2.96
6,986	2.48
7,111	2.12
7,238	1.55
7,429	1.65

STATE OF TEXAS

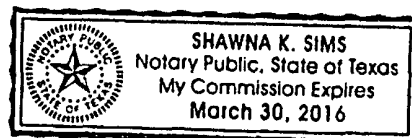
COUNTY OF MIDLAND

BY:



The foregoing instrument was acknowledged before me on 7/30/12, by
Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.


Notary Public for Midland County, Texas
My Commission Expires:



Operating Company Mewbourne
Well Name & Number Bradley 28 Fed #3H
Sales Ticket Number 4752456
Date 6/29/2012

Company Rep David/Shawn Puryear
Field Bradley
BOT Service Rep Armando Gonzalez
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	8,605.00	9,960	6,230		
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,106.28	12,410	10,680		
Bott Liner												
TVD		8,323.00		KOP		7,802.00		Open Hole		6.125	Casing Vol. (bbl)	318.1
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
Liner Top	1	JR Setting Sleeve_RH Profile	8313 72							

Zone Length										
		JR Sleeve_S3 Hyd Set Packer	8313 72	8.66	5 813	3.875				
		4-1/2-13.5 LTC Nipple	8322 38	8 08	5.000	3 920				
		8 Joints of 4-1/2-13 5 LTC Casing	8330.46	348 17	5 000	3.920				
30		3 625 EX Frac Sleeve	8678 63	3.90	5 750		3.525	2375	316	318
164.6		2 Joint of 4-1/2-13.5 LTC Casing	8682.53	87 08	5.000	3.920				
		Baker Open Hole Packer	8769 61	3 89	5.820	3 875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	8773 50	43.56	5.000	3.920				
29		3.500 EX-C Frac Sleeve	8817 06	3 53	5.750		3.448	2375	302	318
94.5		1 Joint of 4-1/2-13.5 LTC Casing	8820.59	43 52	5.000	3 920				
		Baker Open Hole Packer	8864.11	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	8868.00	43.55	5.000	3.920				
28		3.438 EX-C Frac Sleeve	8911.55	3.53	5.750		3.385	2375	291	318
138.1		2 Joint of 4-1/2-13.5 LTC Casing	8915.08	87.13	5.000	3.920				
		Baker Open Hole Packer	9002.21	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	9006.10	43 57	5.000	3.920				
27		3.375 EX_C Frac Sleeve	9049 67	3.53	5.750		3.323	2375	281	318
138		2 Joint of 4-1/2-13 5 LTC Casing	9053.20	87 03	5.000	3.920				
		Baker Open Hole Packer	9140.23	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9144.12	87.09	5.000	3.920				
26		3 313 EX-C Frac Sleeve	9231.21	3.53	5.750		3.260	2375	270	318
138		1 Joints of 4-1/2-13 5 LTC Casing	9234 74	43.50	5.000	3.920				
		Baker Open Hole Packer	9278.24	3.89	5.820	3.875		2154		

Operating Company Mewbourne
Well Name & Number Bradley 28 Fed #3H
Sales Ticket Number 4752456
Date 6/29/2012

Company Rep David/Shawn Puryear
Field Bradley
BOT Service Rep Armando Gonzalez
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	8,605.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,106.28	12,410	10,680	
Bott Liner											
TVD		8,323.00		KOP		7,802.00		Open Hole	6.125	Casing Vol. (bbl)	318.1
Carry Fluid Weight (ppg)			8.4		Propanant Content (ppa)				Max Drill Out Size		0

		Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
25 138.1			2 Joints of 4-1/2-13 5 LTC Casing	9282.13	87.09	5.000	3.920				
			3.250 EX-C Frac Sleeve	9369.22	3.53	5.750		3.198	2375	260	318
			1 Joint of 4-1/2-13 5 LTC Casing	9372.75	43.54	5.000	3.920				
			Baker Open Hole Packer	9416.29	3.89	5.820	3.875		2154		
24 137.9			2 Joints of 4-1/2-13 5 LTC Casing	9420.18	87.00	5.000	3.920				
			3.188 EX-C Frac Sleeve	9507.18	3.53	5.750		3.135	2375	250	318
			1 Joints of 4-1/2-13 5 LTC Casing	9510.71	43.52	5.000	3.920				
			Baker Open Hole Packer	9554.23	3.89	5.820	3.875		2154		
23 137.9			1 Joints of 4-1/2-13.5 LTC Casing	9558.12	43.52	5.000	3.920				
			3.125 EX-C Frac Sleeve	9601.64	3.53	5.750		3.073	2375	240	318
			2 Joint of 4-1/2-13.5 LTC Casing	9605.17	86.99	5.000	3.920				
			Baker Open Hole Packer	9692.16	3.89	5.820	3.875		2154		
22 94.24			1 Joints of 4-1/2-13 5 LTC Casing	9696.05	43.24	5.000	3.920				
			3.063 EX-C Frac Sleeve	9739.29	3.53	5.750		3.010	2375	230	318
			1 Joints of 4-1/2-13 5 LTC Casing	9742.82	43.58	5.000	3.920				
			Baker Open Hole Packer	9786.40	3.89	5.820	3.875		2154		
21 138			2 Joints of 4-1/2-13.5 LTC Casing	9790.29	87.07	5.000	3.920				
			3.000 EX-C Frac sleeve	9877.36	3.53	5.750		2.948	2375	221	318
			1 Joint of 4-1/2-13.5 LTC Casing	9880.89	43.54	5.000	3.920				
			Baker Open Hole Packer	9924.43	3.89	5.820	3.875		2154		
20 138.3			1 Joints of 4-1/2-13 5 LTC Casing	9928.32	43.74	5.000	3.920				
			2.938 EX-C Frac Sleeve	9972.06	3.53	5.750		2.885	2375	212	318
			2 Joints of 4-1/2-13.5 LTC Casing	9975.59	87.09	5.000	3.920				
			Baker Open Hole Packer	10062.68	3.89	5.820	3.875		2154		
19			1 Joint of 4-1/2-13.5 LTC Casing	10066.57	43.54	5.000	3.920				
			2.875 EX-C Frac Sleeve	10110.11	3.53	5.750		2.823	2375	203	318

Operating Company Mewbourne
Well Name & Number Bradley 28 Fed #3H
Sales Ticket Number 4752456
Date 6/29/2012

Company Rep David/Shawn Puryear
Field Bradley
BOT Service Rep Armando Gonzalez
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	8,605.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,106.28	12,410	10,680	
Bott Liner											
TVD		8,323.00		KOP		7,802.00		Open Hole	6.125	Casing Vol. (bbl)	318.1
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Ma. Rate (BPM)	Disp (BBL)
138		2 Joints of 4-1/2-13.5 LTC Casing	10113.64	87.04	5.000	3.920				
		Baker Open Hole Packer	10200.68	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	10204.57	43.51	5.000	3.920				
18		2.813 EX_C Frac Sleeve	10248.08	3.53	5.750		2.760	2375	194	318
94.46		1 Joints of 4-1/2-13.5 LTC Casing	10251.61	43.53	5.000	3.920				
		Baker Open Hole Packer	10295.14	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	10299.03	43.53	5.000	3.920				
17		2.750 EX_C Frac Sleeve	10342.56	3.53	5.750		2.698	2375	185	318
138.2		2 Joints of 4-1/2-13.5 LTC Casing	10346.09	87.23	5.000	3.920				
		Baker Open Hole Packer	10433.32	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	10437.21	43.52	5.000	3.920				
16		2.688 EX_C Frac Sleeve	10480.73	3.53	5.750		2.635	2375	177	318
138		2 Joints of 4-1/2-13.5 LTC Casing	10484.26	87.04	5.000	3.920				
		Baker Open Hole Packer	10571.30	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10575.19	43.58	5.000	3.920				
15		2.625 EX_C Frac Sleeve	10618.77	3.53	5.750		2.573	2375	168	318
94.55		1 Joint of 4-1/2-13.5 LTC Casing	10622.30	43.55	5.000	3.920				
		Baker Open Hole Packer	10665.85	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10669.74	43.55	5.000	3.920				
14		2.563 EX_C Frac Sleeve	10713.29	3.53	5.750		2.510	2375	160	318
137.9		2 Joints of 4-1/2-13.5 LTC Casing	10716.82	86.95	5.000	3.920				
		Baker Open Hole Packer	10803.77	3.89	5.820	3.875		2154		
		1 Joints of 4-1/2-13.5 LTC Casing	10807.66	43.56	5.000	3.920				
13		2.500 EX_C Frac Sleeve	10851.22	3.53	5.750		2.448	2375	152	318
138		2 Joint of 4-1/2-13.5 LTC Casing	10854.75	87.03	5.000	3.920				
		Baker Open Hole Packer	10941.78	3.89	5.820	3.875		2154		

Operating Company Mewbourne
Well Name & Number Bradley 28 Fed #3H
Sales Ticket Number 4752456
Date 6/29/2012

Company Rep David/Shawn Puryear
Field Bradley
BOT Service Rep Armando Gonzalez
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	8,605.00	9,960	6,230
Top Liner	4 500	13.50	338000	3.920	3.795	LT&C	0.01492	4,106.28	12,410	10,680
Bott Liner										
TVD	8,323.00		KOP	7,802.00		Open Hole	6.125	Casing Vol. (bbl)	318.1	
Carry Fluid Weight (ppg)	8.4		Propant Content (ppa)				Max Drill Out Size		0	

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press.	Max Rate (BPM)	Displ (BBL)
12 137.7		1 Joints of 4-1/2-13 5 LTC Casing	10945.67	43.22	5 000	3 920				
		2 438 EX_C Frac Sleeve	10988.89	3.53	5.750		2.386	2375	145	318
		2 Joints of 4-1/2-13 5 LTC Casing	10992.42	87.09	5 000	3 920				
		Baker Open Hole Packer	11079.51	3.89	5 820	3 875		2154		
11 137.7		1 Joints of 4-1/2-13 5 LTC Casing	11083.40	43.24	5 000	3 920				
		2 375 EX_C Frac Sleeve	11126.64	3.53	5 750		2.323	2375	137	318
		2 Joint of 4-1/2-13.5 LTC Casing	11130.17	87.06	5 000	3 920				
		Baker Open Hole Packer	11217.23	3.89	5 820	3 875		2154		
10 94.34		1 Joints of 4-1/2-13 5 LTC Casing	11221.12	43.52	5 000	3 920				
		2.313 EX_C Frac Sleeve	11264.64	3.53	5 750		2.261	2375	130	318
		1 Joints of 4-1/2-13.5 LTC Casing	11268.17	43.40	5 000	3 920				
		Baker Open Hole Packer	11311.57	3.89	5 820	3 875		2154		
9 138.2		1 Joints of 4-1/2-13.5 LTC Casing	11315.46	43.55	5 000	3 920				
		2.250 BS Frac Sleeve	11359.01	3.90	5 750		2.150	2286	115	318
		2 Joint of 4-1/2-13.5 LTC Casing	11362.91	86.89	5 000	3 920				
		Baker Open Hole Packer	11449.80	3.89	5 820	3 875		2154		
8 138		1 Joints of 4-1/2-13.5 LTC Casing	11453.69	43.54	5 000	3 920				
		2 125 BS Frac Sleeve	11497.23	3.90	5 750		2.025	2286	102	318
		2 Joint of 4-1/2-13 5 LTC Casing	11501.13	86.62	5 000	3 920				
		Baker Open Hole Packer	11587.75	3.89	5 820	3 875		2154		
7 138.4		1 Joints of 4-1/2-13.5 LTC Casing	11591.64	43.31	5 000	3 920				
		2.000 BS Frac Sleeve	11634.95	3.90	5 750		1 900	2286	90	318
		2 Joints of 4-1/2-13.5 LTC Casing	11638.85	87.27	5 000	3 920				
		Baker Open Hole Packer	11726.12	3.89	5 820	3 875		2154		
6		1 Joints of 4-1/2-13 5 LTC Casing	11730.01	43.52	5 000	3 920				
		1 875 BS Frac Sleeve	11773.53	3.90	5 750		1.775	2286	79	318

Company Rep	David/Shawn Puryear
Field	Bradley
BOT Service Rep	Armando Gonzalez
District Location	Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	8,605.00	9,960	6,230	
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,106.28	12,410	10,680	
Bott Liner											
TVD		8,323.00		KOP		7,802.00		Open Hole	6.125	Casing Vol. (bbl)	318.1
Carry Fluid Weight (ppg)			8.4		Propan Content (ppa)				Max Drill Out Size		0

[illegible]