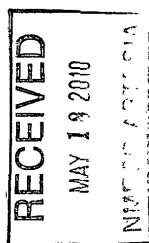


30-015-37481



A Gyrodata Directional Survey

for

MEWBOURNE

Location: PATTERSON #47, EDDY COUNTY, NEW MEXICO
Lease: BRADLEY 29FED COM Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0310GMS146

Run Date: 3/2/2010 12:25:45 AM

Surveyor: AJ EATON

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Directional Drilling Company

Survey Latitude: 32.714040 deg. N Longitude: -103.990890 deg. W

Azimuth Correction:

Gyro: -0.19000 deg to Grid North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

A Gyrodata Directional Survey

MEWBOURNE

Location: PATTERSON #47, EDDY COUNTY, NEW MEXICO

Lease: BRADLEY 27 FED COM Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0310GMS146

RECEIVED
MAY 18 2010
NMOCD ARTESIA

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.00	0.00	0.0 0.0	0.00 N 0.00 E

0 TO 9000 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO PATTERSON #47 R.K.B. (+ 14 FT.)

100.00	0.72	105.07	0.72	100.00	0.6 105.1	0.16 S 0.60 E
200.00	0.70	111.68	0.08	199.99	1.9 107.2	0.55 S 1.77 E
300.00	0.69	98.23	0.16	299.98	3.1 106.3	0.86 S 2.93 E
400.00	0.62	107.55	0.13	399.98	4.2 105.3	1.11 S 4.04 E
500.00	0.61	93.04	0.16	499.97	5.3 104.3	1.30 S 5.09 E
600.00	0.63	91.80	0.02	599.96	6.3 102.3	1.34 S 6.18 E
700.00	0.69	110.19	0.22	699.96	7.5 102.2	1.57 S 7.29 E
800.00	0.72	87.52	0.28	799.95	8.7 101.7	1.75 S 8.49 E
900.00	0.73	84.47	0.04	899.94	9.9 99.7	1.66 S 9.75 E
1000.00	0.82	72.93	0.18	999.93	11.2 97.2	1.39 S 11.08 E
1100.00	1.03	80.37	0.24	1099.92	12.7 94.6	1.03 S 12.66 E
1200.00	1.83	74.77	0.81	1199.89	15.1 91.7	0.46 S 15.09 E
1300.00	1.84	74.63	0.01	1299.84	18.2 88.8	0.39 N 18.17 E
1400.00	1.73	65.80	0.29	1399.79	21.1 86.1	1.43 N 21.10 E
1500.00	1.65	59.40	0.21	1499.75	23.9 83.3	2.78 N 23.72 E
1600.00	1.62	51.57	0.23	1599.70	26.4 80.4	4.39 N 26.06 E
1700.00	1.98	46.14	0.40	1699.66	29.1 77.2	6.47 N 28.41 E
1800.00	1.89	40.59	0.21	1799.60	32.0 73.8	8.91 N 30.73 E
1900.00	1.94	29.23	0.38	1899.54	34.6 70.4	11.64 N 32.62 E

A Gyrodata Directional Survey

MEWBOURNE

Location: PATTERSON #47, EDDY COUNTY, NEW MEXICO

Lease: BRADLEY 27 FED COM Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0310GMS146

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2000.00	1.92	25.20	0.14	1999.49	37.2 66.8	14.63 N 34.17 E
2100.00	1.55	21.35	0.39	2099.44	39.4 63.8	17.41 N 35.37 E
2200.00	1.53	15.91	0.15	2199.40	41.4 61.1	19.96 N 36.23 E
2300.00	1.76	15.38	0.23	2299.36	43.4 58.4	22.73 N 37.01 E
2400.00	1.78	13.00	0.08	2399.31	45.7 55.7	25.72 N 37.76 E
2500.00	1.79	14.39	0.04	2499.27	48.0 53.3	28.75 N 38.50 E
2600.00	1.81	12.02	0.08	2599.22	50.5 51.0	31.81 N 39.22 E
2700.00	1.85	8.21	0.13	2699.17	53.0 48.7	34.95 N 39.78 E
2800.00	1.74	0.46	0.27	2799.12	55.2 46.4	38.06 N 40.02 E
2900.00	1.49	347.11	0.45	2899.08	57.0 44.2	40.84 N 39.74 E
3000.00	1.50	347.27	0.02	2999.04	58.4 42.1	43.38 N 39.16 E
3100.00	1.46	342.64	0.13	3099.01	59.9 40.0	45.88 N 38.50 E
3200.00	1.37	338.27	0.14	3198.98	61.2 38.0	48.21 N 37.67 E
3300.00	1.19	332.24	0.23	3298.96	62.2 36.2	50.24 N 36.74 E
3400.00	0.90	335.57	0.30	3398.94	63.1 34.7	51.87 N 35.94 E
3500.00	0.96	338.41	0.08	3498.93	64.0 33.5	53.36 N 35.31 E
3600.00	0.89	337.16	0.07	3598.91	64.9 32.3	54.86 N 34.70 E
3700.00	0.83	335.89	0.07	3698.90	65.8 31.2	56.24 N 34.10 E
3800.00	0.80	321.82	0.20	3798.89	66.4 30.2	57.44 N 33.37 E
3900.00	0.87	319.35	0.08	3898.88	67.0 29.0	58.57 N 32.44 E
4000.00	0.90	316.07	0.06	3998.87	67.5 27.7	59.71 N 31.40 E
4100.00	0.97	307.60	0.15	4098.85	67.9 26.4	60.79 N 30.19 E
4200.00	1.04	306.34	0.08	4198.84	68.2 25.0	61.85 N 28.79 E
4300.00	1.19	303.66	0.15	4298.82	68.6 23.4	62.96 N 27.19 E

A Gyrodata Directional Survey

MEWBOURNE

Location: PATTERSON #47, EDDY COUNTY, NEW MEXICO

Lease: BRADLEY 27 FED COM Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0310GMS146

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4400.00	1.15	303.22	0.04	4398.80	69.0 21.7	64.09 N 25.49 E
4500.00	1.28	295.62	0.21	4498.78	69.3 20.0	65.12 N 23.64 E
4600.00	1.25	289.68	0.13	4598.75	69.4 18.1	65.97 N 21.60 E
4700.00	1.29	289.01	0.04	4698.73	69.5 16.3	66.71 N 19.51 E
4800.00	1.33	291.68	0.07	4798.70	69.7 14.4	67.50 N 17.36 E
4900.00	1.27	292.09	0.06	4898.68	70.0 12.6	68.35 N 15.26 E
5000.00	1.11	287.31	0.19	4998.65	70.3 10.9	69.05 N 13.31 E
5100.00	1.14	286.65	0.03	5098.64	70.6 9.3	69.63 N 11.43 E
5200.00	1.12	287.19	0.02	5198.62	70.8 7.7	70.20 N 9.55 E
5300.00	1.31	280.13	0.24	5298.59	71.1 6.0	70.69 N 7.49 E
5400.00	1.84	276.25	0.54	5398.56	71.2 3.8	71.07 N 4.76 E
5500.00	2.08	277.77	0.24	5498.50	71.5 1.1	71.49 N 1.37 E
5600.00	2.15	272.18	0.22	5598.43	71.8 358.2	71.80 N 2.29 W
5700.00	2.12	273.82	0.07	5698.36	72.2 355.2	72.00 N 6.01 W
5800.00	2.11	274.88	0.04	5798.29	72.9 352.4	72.28 N 9.68 W
5900.00	1.97	275.67	0.14	5898.23	73.8 349.7	72.60 N 13.23 W
6000.00	1.98	279.72	0.14	5998.17	74.9 347.2	73.06 N 16.64 W
6100.00	1.99	282.80	0.11	6098.11	76.4 344.8	73.74 N 20.04 W
6200.00	1.90	292.32	0.34	6198.05	78.3 342.7	74.75 N 23.27 W
6300.00	1.88	295.13	0.10	6298.00	80.5 340.9	76.08 N 26.28 W
6400.00	1.86	302.23	0.23	6397.94	82.9 339.4	77.64 N 29.14 W
6500.00	1.71	303.01	0.16	6497.90	85.4 338.2	79.32 N 31.76 W
6600.00	1.63	296.47	0.21	6597.85	87.7 337.0	80.76 N 34.28 W
6700.00	1.42	300.95	0.24	6697.82	89.8 335.9	82.04 N 36.62 W

A Gyrodata Directional Survey

MEWBOURNE

Location: PATTERSON #47, EDDY COUNTY, NEW MEXICO

Lease: BRADLEY 27 FED COM Well: #1, 4-1/2" DRILLPIPE

Job Number: MD0310GMS146

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
6800.00	1.29	302.51	0.14	6797.79	91.8 335.1	83.28 N 38.63 W
6900.00	1.33	297.77	0.12	6897.76	93.7 334.3	84.43 N 40.61 W
7000.00	1.12	291.17	0.25	6997.74	95.3 333.5	85.32 N 42.55 W
7100.00	0.88	268.52	0.46	7097.73	96.4 332.7	85.65 N 44.24 W
7200.00	1.04	260.44	0.21	7197.71	97.0 331.8	85.48 N 45.90 W
7300.00	1.10	264.48	0.10	7297.69	97.7 330.7	85.24 N 47.75 W
7400.00	1.14	268.41	0.09	7397.68	98.6 329.7	85.12 N 49.70 W
7500.00	1.08	267.94	0.07	7497.66	99.5 328.7	85.06 N 51.64 W
7600.00	1.17	263.61	0.12	7597.64	100.4 327.7	84.91 N 53.60 W
7700.00	1.10	258.56	0.12	7697.62	101.2 326.7	84.61 N 55.55 W
7800.00	1.34	238.26	0.49	7797.60	101.6 325.6	83.80 N 57.47 W
7900.00	1.39	229.67	0.21	7897.57	101.6 324.2	82.40 N 59.39 W
8000.00	1.25	226.61	0.15	7997.54	101.4 322.9	80.87 N 61.11 W
8100.00	1.19	198.75	0.59	8097.52	100.7 321.8	79.13 N 62.24 W
8200.00	1.18	203.93	0.11	8197.50	99.6 320.8	77.21 N 63.00 W
8300.00	1.31	204.43	0.13	8297.47	98.7 319.7	75.22 N 63.89 W
8400.00	1.06	173.72	0.68	8397.45	97.4 318.7	73.26 N 64.26 W
8500.00	1.24	141.54	0.66	8497.43	95.6 318.4	71.49 N 63.49 W
8600.00	1.14	124.50	0.37	8597.41	93.6 318.5	70.09 N 62.00 W
8700.00	1.33	132.44	0.26	8697.39	91.5 318.7	68.74 N 60.32 W
8800.00	1.32	135.96	0.08	8797.36	89.1 318.8	67.13 N 58.66 W
8900.00	1.43	152.10	0.40	8897.33	86.8 318.7	65.19 N 57.28 W
9000.00	1.47	154.66	0.07	8997.30	84.3 318.3	62.93 N 56.14 W

Final Station Closure: Distance: 84.34 ft Az: 318.26 deg.