

A Gyrodata Directional Survey
for

CONOCO PHILLIPS

Location: POOL # 680, LEA COUNTY, NEW MEXICO
Well: EVG@SAU 3229-10, 2 7/8" DRILLPIPE

Job Number: MD0503GW175

Run Date: 5/9/2003 10:33:59 AM

Surveyor: Mike Martinez

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 32.789640 deg. N Longitude: 103.488360 deg. W

Azimuth Correction:

Gyro: -0.46000 deg West to Grid North

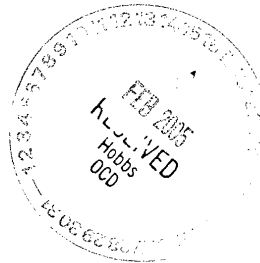
Proposed Well Direction: 103.500 deg

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

SUR: K-32-17s-35e, 2000/S & 2630/W
BHL: I-32-17s-35e, 1587/S & 4841/W
API # 30-025-32061



7/ 15
P. 3
337 491 5356
2- 8-05: 8:52AM: INC

A Gyrodata Directional Survey

CONOCO PHILLIPS

Well: EVGTSAU 3229-10, 2 7/8" DRILLPIPE

Location: POOL # 680, LEA COUNTY, NEW MEXICO

Job Number: MD0503GW175

MEASURED INCL DEPTH feet	deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	N 0 0 E	0.00	0.00	0.0 0.0	0.00 N 0.00 E
0'-4213' RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 2 7/8" DRILLPIPE ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO POOL # 680 R.K.B.							
100.00	0.27	254.14	S 74 9 W	0.27	100.00	0.2 254.1	0.07 S 0.23 W
200.00	0.18	261.40	S 81 24 W	0.10	200.00	0.6 256.0	0.15 S 0.62 W
300.00	0.30	235.19	S 55 12 W	0.16	300.00	1.0 251.7	0.33 S 0.99 W
400.00	0.30	219.94	S 39 57 W	0.08	400.00	1.5 243.7	0.68 S 1.38 W
500.00	0.31	218.60	S 38 36 W	0.01	500.00	2.0 237.5	1.09 S 1.72 W
600.00	0.32	217.54	S 37 33 W	0.01	599.99	2.6 233.4	1.53 S 2.05 W
700.00	0.47	202.70	S 22 42 W	0.18	699.99	3.2 228.3	2.12 S 2.38 W
800.00	0.53	195.32	S 15 19 W	0.09	799.99	4.0 222.1	2.95 S 2.66 W
900.00	0.55	195.15	S 15 9 W	0.02	899.98	4.8 217.0	3.86 S 2.91 W
1000.00	0.57	193.16	S 13 9 W	0.03	999.98	5.7 213.2	4.81 S 3.15 W
1100.00	0.62	189.94	S 9 56 W	0.06	1099.97	6.7 209.9	5.83 S 3.35 W
1200.00	0.64	193.33	S 13 20 W	0.04	1199.97	7.8 207.4	6.90 S 3.58 W
1300.00	0.30	210.74	S 30 44 W	0.37	1299.96	8.6 206.6	7.67 S 3.84 W
1400.00	0.26	219.80	S 39 48 W	0.06	1399.96	9.1 207.0	8.07 S 4.12 W

Job Number: MD0503GW175

MEASURED INCL DEPTH feet	deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEGG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
1500.00	0.31	233.10	S 53 6 W	0.09	1499.96	9.5 208.0	8.40 S 4.48W
1600.00	0.33	238.35	S 58 21 W	0.03	1599.96	10.0 209.5	8.72 S 4.94W
1700.00	0.34	232.92	S 52 55 W	0.04	1699.96	10.5 210.9	9.05 S 5.42W
1800.00	0.40	245.69	S 65 41 W	0.10	1799.96	11.1 212.5	9.37 S 5.97W
1900.00	0.42	253.41	S 73 25 W	0.06	1899.95	11.7 214.6	9.61 S 6.64W
2000.00	0.51	277.59	N 82 25 W	0.21	1999.95	12.2 217.6	9.66 S 7.43W
2100.00	0.58	298.44	N 61 34 W	0.21	2099.95	12.5 221.6	9.36 S 8.32W
2200.00	0.64	312.30	N 47 42 W	0.16	2199.94	12.7 226.4	8.74 S 9.18W
2300.00	0.59	322.69	N 37 19 W	0.12	2299.93	12.7 231.3	7.95 S 9.91W
2400.00	0.46	331.65	N 28 21 W	0.15	2399.93	12.7 235.4	7.19 S 10.41W
2500.00	0.47	325.48	N 34 31 W	0.05	2499.93	12.6 239.1	6.49 S 10.84W
2600.00	0.62	318.38	N 41 37 W	0.16	2599.92	12.8 243.3	5.75 S 11.43W
2700.00	0.67	334.16	N 25 50 W	0.18	2699.92	13.0 248.2	4.82 S 12.04W
2800.00	0.75	339.10	N 20 54 W	0.10	2799.91	13.1 253.6	3.68 S 12.53W
2900.00	0.78	344.83	N 15 10 W	0.08	2899.90	13.2 259.4	2.42 S 12.94W
3000.00	0.83	341.83	N 18 10 W	0.07	2999.89	13.4 265.4	1.07 S 13.35W
3100.00	0.77	336.71	N 23 17 W	0.10	3099.88	13.8 271.0	0.24 N 13.84W
3200.00	0.58	347.00	N 13 0 W	0.22	3199.87	14.3 275.4	1.34 N 14.22W

A Gyrodata Directional Survey

CONOCO PHILLIPS

Well: EVGTSAU 3229-10, 2 7/8" DRILLPIPE

Location: POOL # 680, LEA COUNTY, NEW MEXICO

Job Number: MD0503GW175

MEASURED INCL DEPTH feet	deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg/ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
3300.00	0.61	12.88	N 12 53 E	0.27	3299.87	14.4 279.4	2.36 N 14.21 W
3400.00	0.60	353.30	N 6 42 W	0.21	3399.86	14.6 283.5	3.40 N 14.15 W
3500.00	0.73	358.61	N 1 23 W	0.14	3499.85	14.9 287.8	4.56 N 14.23 W
3600.00	0.77	13.65	N 13 39 E	0.20	3599.85	15.3 292.6	5.85 N 14.09 W
3700.00	0.86	2.16	N 2 9 E	0.19	3699.84	15.7 297.6	7.26 N 13.90 W
3800.00	1.10	12.74	N 12 44 E	0.29	3799.82	16.3 303.2	8.95 N 13.66 W
3900.00	1.12	24.18	N 24 11 E	0.22	3899.80	16.9 309.5	10.77 N 13.05 W
4000.00	1.49	20.01	N 20 0 E	0.38	3999.78	17.7 316.6	12.89 N 12.20 W
4100.00	1.36	30.09	N 30 6 E	0.28	4099.75	18.8 323.6	15.14 N 11.16 W
4200.00	1.69	24.87	N 24 52 E	0.35	4199.71	20.1 330.4	17.50 N 9.95 W
4213.00	1.75	27.15	N 27 9 E	0.75	4212.70	20.4 331.3	17.85 N 9.78 W

Final Station Closure: Distance: 20.35 ft Az: 331.28 deg.