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SURVEY REPORT
CONOCO
SAN JUAN 28-7 #252

RIO ARRIBA COUNTY, NEW MEXICO
DISTRICT THREE

SEPTEMBER 19, 2001



30-039-21653

32-28N-07W

790 /N 1850/W

776 /N 1843/W

BHL

A Gyrodata Directional Survey

for

Conoco Inc.

Location: MAST TRUCK, RIO ARriba COUNTY, NEW MEXICO
Well: SAN JUAN 28-7 #252, 2-3/8" TUBING

Job Number: MD0701GME287

Run Date: 7/24/01 10:42:57 AM

Surveyor: Mike Shepherd

Calculation Method: MINIMUM CURVATURE

Survey Latitude: 36.622940 deg. N

Azimuth Correction:

Gyro: Bearings are Relative to True North

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location



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MEASURED DEPTH feet	IN C L deg.	AZIMUTH deg.	BORE HOLE BEARING deg. min.	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.0	0.00	0.00	N 0 0 E	0.00	0.0	0.0 0.0	0.00 N 0.00 E

0 - 4500 FT RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 2-3/8" TUBING

ALL MEASUREMENTS AND COORDINATES REFERENCED TO MAST TRUCK UNIT - BLUE JET

100.0	0.81	78.77	N 78 46 E	0.81	100.0	0.7 78.8	0.14 N 0.70 E
200.0	0.80	40.30	N 40 18 E	0.53	200.0	2.0 66.3	0.81 N 1.85 E
300.0	0.96	32.46	N 32 27 E	0.20	300.0	3.4 53.3	2.05 N 2.75 E
400.0	1.08	29.53	N 29 32 E	0.13	400.0	5.1 45.7	3.57 N 3.66 E
500.0	0.98	33.03	N 33 2 E	0.12	499.9	6.9 41.9	5.10 N 4.59 E
600.0	0.85	39.33	N 39 20 E	0.16	599.9	8.4 40.8	6.39 N 5.52 E
700.0	0.97	35.44	N 35 26 E	0.13	699.9	10.0 40.3	7.65 N 6.48 E
800.0	1.09	36.27	N 36 16 E	0.12	799.9	11.8 39.6	9.10 N 7.53 E
900.0	1.07	39.99	N 39 59 E	0.07	899.9	13.7 39.4	10.58 N 8.69 E
1000.0	0.99	56.71	N 56 43 E	0.31	999.9	15.5 40.4	11.77 N 10.01 E
1100.0	0.83	61.67	N 61 40 E	0.18	1099.9	17.0 42.1	12.59 N 11.37 E
1200.0	0.45	66.48	N 66 29 E	0.39	1199.8	18.0 43.4	13.09 N 12.37 E
1300.0	0.33	32.10	N 32 6 E	0.26	1299.8	18.6 43.7	13.49 N 12.88 E
1400.0	0.37	11.53	N 11 32 E	0.13	1399.8	19.2 43.0	14.05 N 13.10 E
1500.0	0.36	338.32	N 21 41 W	0.21	1499.8	19.6 41.7	14.65 N 13.05 E
1600.0	0.49	334.84	N 25 9 W	0.13	1599.8	19.9 39.8	15.32 N 12.75 E
1700.0	0.66	324.08	N 35 55 W	0.20	1699.8	20.3 37.1	16.17 N 12.23 E
1800.0	0.78	339.20	N 20 48 W	0.22	1799.8	20.8 34.0	17.27 N 11.66 E
1900.0	0.81	348.16	N 11 50 W	0.13	1899.8	21.7 31.2	18.60 N 11.27 E
2000.0	0.73	356.57	N 3 26 W	0.14	1999.8	22.8 29.1	19.92 N 11.09 E

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2500.0	0.79	222.21	S 42 12 W	0.28	2499.8	22.3 22.7	20.54 N 8.58 E
3000.0	0.69	243.06	S 63 4 W	0.06	2999.7	17.0 12.1	16.62 N 3.56 E
3500.0	0.59	245.56	S 65 34 W	0.02	3499.7	14.3 354.0	14.18 N 1.48 W
4000.0	0.33	248.11	S 68 7 W	0.05	3999.7	13.6 337.8	12.58 N 5.14 W
4500.0	0.55	354.49	N 5 30 W	0.14	4499.7	15.9 335.2	14.46 N 6.69 W

Final Station Closure: Distance: 15.93 ft Az: 335.17 deg.