



Scientific Drilling

Gyroscopic Survey Report
for
DEVON ENERGY

30-005-04129

Well Location	CHAVES COUNTY, NEW MEXICO
Well Name	LOVING 7 FEE #1H
Rig Name	MCVAY #10
Survey Date	9/9/2010
Latitude	33.46 deg
North Reference	Grid North
Grid Correction	-0.17 deg
Depth Reference	RKB
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 89.84Azim (deg)
Definitive Survey	FINAL INRUN
Operator	LEO GARZA

Comments

ZERO REFERENCE IS AT KB OF 19'.

RECEIVED

OCT 12 2011

NMOCD ARTESIA



Survey Report

Well Name:		LOVING 7 FEE #1H							
Survey:		FINAL INRUN							
Survey Date:		9/9/2010							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.78	172.51	100.00	0.09	-0.67	0.09	0.78	0.68	172.51
200.00	0.80	161.96	199.99	0.39	-2.01	0.39	0.15	2.05	168.92
300.00	0.59	153.57	299.98	0.83	-3.14	0.84	0.23	3.25	165.00
400.00	0.78	166.41	399.97	1.22	-4.26	1.23	0.24	4.43	163.89
500.00	0.49	160.82	499.97	1.51	-5.32	1.53	0.29	5.54	163.96
600.00	0.65	151.63	599.96	1.92	-6.23	1.94	0.19	6.52	162.69
700.00	0.35	120.67	699.96	2.46	-6.89	2.48	0.40	7.32	160.23
800.00	0.29	146.53	799.96	2.86	-7.25	2.88	0.16	7.80	158.36
900.00	0.32	114.64	899.96	3.25	-7.58	3.27	0.17	8.25	156.67
1000.00	0.53	111.11	999.95	3.93	-7.86	3.95	0.21	8.79	153.32
1100.00	0.39	77.12	1099.95	4.69	-7.95	4.71	0.30	9.24	149.33
1200.00	0.50	72.24	1199.95	5.45	-7.74	5.47	0.12	9.47	144.75
1300.00	0.60	89.95	1299.94	6.39	-7.60	6.41	0.20	9.94	139.85
1400.00	0.71	53.91	1399.94	7.41	-7.24	7.43	0.42	10.37	134.23
1500.00	0.81	44.28	1499.93	8.41	-6.37	8.42	0.16	10.56	127.09
1600.00	0.64	42.19	1599.92	9.28	-5.45	9.29	0.17	10.77	120.40
1700.00	0.77	60.90	1699.91	10.24	-4.71	10.26	0.26	11.29	114.66
1800.00	1.00	338.26	1799.90	10.51	-3.57	10.52	1.19	11.11	108.72
1900.00	0.97	332.12	1899.89	9.79	-2.00	9.80	0.11	10.00	101.55
2000.00	0.71	1.42	1999.88	9.42	-0.64	9.42	0.50	9.44	93.88
2100.00	0.85	351.67	2099.87	9.33	0.71	9.33	0.20	9.35	85.63
2200.00	0.72	351.77	2199.86	9.13	2.07	9.13	0.13	9.36	77.23
2300.00	0.68	17.40	2299.85	9.22	3.25	9.22	0.31	9.77	70.56
2400.00	0.58	359.19	2399.85	9.40	4.32	9.38	0.22	10.33	65.26
2500.00	0.44	28.84	2499.84	9.58	5.17	9.56	0.30	10.87	61.60
2600.00	0.56	29.21	2599.84	10.00	5.93	9.99	0.11	11.62	59.28
2700.00	0.25	19.74	2699.84	10.32	6.57	10.30	0.31	12.21	57.48
2800.00	0.51	17.68	2799.83	10.53	7.19	10.51	0.25	12.74	55.60
2900.00	0.21	68.01	2899.83	10.83	7.68	10.81	0.41	13.26	54.60
3000.00	0.23	68.70	2999.83	11.19	7.82	11.17	0.02	13.64	54.98
3100.00	0.24	6.04	3099.83	11.40	8.11	11.38	0.25	13.97	54.52
3200.00	0.12	287.18	3199.83	11.33	8.35	11.30	0.25	14.05	53.55
3300.00	0.08	111.75	3299.83	11.29	8.35	11.27	0.20	14.03	53.46
3400.00	0.15	313.28	3399.83	11.27	8.41	11.25	0.22	14.04	53.20
3500.00	0.29	122.37	3499.83	11.39	8.37	11.37	0.43	14.11	53.65
3600.00	0.19	46.85	3599.83	11.73	8.35	11.70	0.31	14.37	54.51
3700.00	0.10	136.51	3699.83	11.91	8.40	11.89	0.22	14.55	54.76
3800.00	0.48	92.09	3799.83	12.39	8.32	12.36	0.41	14.90	56.06



Survey Report

Well Name: LOVING 7 FEE #1H

Survey: FINAL INRUN

Survey Date: 9/9/2010

MD ft	Inc deg	Azim deg	TVD ft	VS ft	Northing ft	Easting ft	DLS deg/100ft	Closure Distance ft	Closure Angle deg
3900.00	0.52	33.26	3899.82	13.05	8.69	13.03	0.49	15.66	56.31
4000.00	0.46	25.35	3999.82	13.48	9.43	13.45	0.09	16.43	54.96
4100.00	0.45	46.46	4099.82	13.94	10.07	13.91	0.17	17.17	54.10
4200.00	0.64	18.22	4199.81	14.40	10.87	14.37	0.32	18.02	52.90
4300.00	0.68	22.60	4299.81	14.81	11.95	14.77	0.07	19.00	51.03
4400.00	0.47	52.45	4399.80	15.36	12.75	15.33	0.36	19.93	50.25
4500.00	0.44	1.13	4499.80	15.69	13.38	15.66	0.40	20.60	49.48
4600.00	0.17	354.31	4599.80	15.69	13.91	15.65	0.28	20.94	48.36
4700.00	0.29	10.25	4699.80	15.72	14.31	15.68	0.14	21.23	47.62
4800.00	0.31	16.15	4799.79	15.84	14.81	15.80	0.04	21.66	46.84
4900.00	0.18	55.49	4899.79	16.05	15.16	16.00	0.21	22.05	46.55
5000.00	0.27	128.43	4999.79	16.36	15.11	16.32	0.27	22.24	47.20
5100.00	0.48	206.79	5099.79	16.35	14.59	16.31	0.50	21.88	48.19
5200.00	0.40	106.82	5199.79	16.49	14.11	16.45	0.68	21.67	49.39
5230.00	0.78	124.59	5229.79	16.76	13.96	16.72	1.37	21.78	50.14