



Scientific Drilling

Gyroscopic Survey Report
for
C.O.G.

Well Location	EDDY COUNTY, NEW MEXICO
Well Name	MESQUITE STATE #2
Rig Name	ARIES P/U
Survey Date	5/18/2010
Latitude	0.00 deg
North Reference	Grid North
Grid Correction	-0.13 deg
Depth Reference	RKB
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 0.00Azim (deg)
Definitive Survey	FINAL OUTRUN
Operator	LEO GARZA

Comments

ZERO REFERENCE IS K.B. OF 10 FOOT

MR



Survey Report

Well Name:		MESQUITE STATE #2							
Survey:		FINAL OUTFUN							
Survey Date:		5/18/2010							
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	0.17	54 09	100.00	0.09	0.09	0.12	0.17	0.15	54.09
200.00	0.12	262.70	200 00	0.16	0 16	0 13	0.28	0 21	39.87
300 00	0 34	245.12	300.00	0.02	0.02	-0.24	0 23	0 24	274.81
400 00	0.35	253 54	400.00	-0.19	-0.19	-0.80	0 05	0.83	256 65
500.00	0.19	231 31	500 00	-0.38	-0 38	-1 23	0.18	1 28	252.68
600.00	0.19	200.39	600 00	-0.64	-0.64	-1.41	0.10	1.55	245 60
700 00	0 19	215.28	699.99	-0.93	-0.93	-1.57	0 05	1.82	239 29
800 00	0 52	181.68	799.99	-1.52	-1.52	-1.68	0 37	2 26	227.83
900.00	0.60	184.92	899.99	-2 50	-2 50	-1.74	0.09	3.04	214.81
1000 00	0 52	188 75	999.98	-3.47	-3.47	-1.85	0.09	3.93	208.05
1100.00	0 54	201 83	1099 98	-4.36	-4.36	-2.09	0.12	4 83	205 66
1200 00	0 63	203.08	1199.97	-5.30	-5 30	-2.48	0.09	5 85	205 11
1300 00	0 65	210.63	1299.97	-6.29	-6.29	-2 99	0 09	6.96	205 40
1400 00	0.67	207 33	1399.96	-7.29	-7.29	-3.54	0.04	8 11	205.91
1500 00	0.70	195 38	1499.95	-8.40	-8.40	-3.97	0.15	9 29	205.30
1600 00	0 83	202 78	1599.94	-9.66	-9.66	-4.42	0 17	10 63	204.56
1700.00	0 71	211.60	1699.94	-10 86	-10.86	-5.02	0.17	11.97	204.82
1800 00	0.72	203.97	1799.93	-11.96	-11.96	-5 60	0 10	13.21	205.09
1900.00	0.84	207 71	1899 92	-13 18	-13 18	-6 19	0.13	14.56	205.18
2000 00	0.77	217.36	1999.91	-14.36	-14.36	-6.94	0.15	15 95	205 80
2100 00	0.68	219.14	2099.90	-15.36	-15.36	-7.73	0 09	17.19	206.71
2200 00	0 62	211.85	2199.89	-16.28	-16.28	-8.39	0 11	18.31	207 26
2300.00	0.54	216.98	2299.89	-17.11	-17.11	-8.95	0 09	19 31	207 62
2400.00	0.53	194.93	2399.89	-17.94	-17.94	-9.36	0 21	20 23	207.55
2500.00	0 58	179.72	2499.88	-18.89	-18 89	-9 47	0.15	21 13	206.64
2600.00	0 58	176 13	2599.88	-19 90	-19 90	-9 44	0.04	22.02	205.37
2700.00	0.54	180.61	2699.87	-20.88	-20 88	-9 41	0.06	22.90	204.26
2800 00	0.60	184 19	2799.87	-21.87	-21 87	-9.45	0.07	23.83	203.37
2900 00	0.58	189.43	2899.86	-22.90	-22.90	-9.57	0.06	24.82	202.69
3000.00	0 49	207 52	2999.86	-23.78	-23 78	-9.85	0 19	25 74	202.51
3100 00	0 41	198 94	3099.85	-24 49	-24 49	-10.16	0.10	26.52	202.54
3200.00	0.54	196.07	3199.85	-25.29	-25 29	-10.41	0 13	27.35	202 38
3300.00	0.63	188.45	3299.84	-26.28	-26.28	-10.62	0.11	28.35	202.01
3400.00	0.67	185.35	3399.84	-27 41	-27 41	-10.76	0 06	29.45	201 43
3500.00	0 65	186 54	3499 83	-28 55	-28.55	-10.88	0.03	30 56	200 86
3600.00	0.53	167.00	3599.83	-29 56	-29 56	-10.84	0.23	31.49	200.13
3700.00	0.55	161.27	3699.82	-30.47	-30 47	-10.58	0 06	32 26	199.15
3800.00	0.81	163.41	3799.81	-31.61	-31 61	-10 22	0 26	33 22	197 92



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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	0.64	173.20	3899.81	-32.84	-32.84	-9.95	0.21	34.31	196.86
4000.00	0.69	161.28	3999.80	-33.96	-33.96	-9.70	0.15	35.32	195.94
4100.00	0.47	156.24	4099.79	-34.90	-34.90	-9.34	0.22	36.13	194.98
4200.00	0.28	203.23	4199.79	-35.51	-35.51	-9.27	0.35	36.70	194.63
4300.00	0.42	203.33	4299.79	-36.07	-36.07	-9.51	0.14	37.30	194.77
4400.00	0.12	196.25	4399.79	-36.51	-36.51	-9.69	0.31	37.77	194.86
4500.00	0.14	177.51	4499.79	-36.73	-36.73	-9.71	0.05	37.99	194.81
4600.00	0.13	199.18	4599.79	-36.96	-36.96	-9.74	0.05	38.22	194.77
4700.00	0.17	182.00	4699.79	-37.22	-37.22	-9.78	0.06	38.48	194.73
4800.00	0.22	176.65	4799.79	-37.56	-37.56	-9.78	0.05	38.81	194.59
4900.00	0.27	198.79	4899.79	-37.97	-37.97	-9.84	0.10	39.23	194.53
5000.00	0.33	206.30	4999.79	-38.45	-38.45	-10.04	0.07	39.74	194.64
5100.00	0.31	173.75	5099.78	-38.97	-38.97	-10.14	0.18	40.27	194.58
5200.00	0.22	184.19	5199.78	-39.44	-39.44	-10.12	0.10	40.72	194.40
5300.00	0.03	337.92	5299.78	-39.61	-39.61	-10.15	0.26	40.89	194.37
5370.00	0.26	211.69	5369.78	-39.72	-39.72	-10.24	0.40	41.02	194.46