

Scientific Drilling

Gyroscopic Survey Report
for
DEVON

30-015 30406

Well Location	EDDY COUNTY, NEW MEXICO
Well Name	COTTON DREW UNIT # 110H
Rig Name	MCVAY #9
Survey Date	11/7/2010
Latitude	32.18 deg
North Reference	Grid North
Grid Correction	-0.31 deg
Depth Reference	RKB
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 359.66Azim (deg)
Definitive Survey	FINAL GYRO SURVEY
Operator	FRANK RENTERIA

Comments

20' FOOT KB

RECEIVED

MAR 15 2011

NMOCD ARTESIA

Well Name:		COTTON DREW UNIT # 110H							
Survey:		FINAL GYRO SURVEY							
Survey Date:		11/7/2010							
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	1.64	212.87	99.99	-1.20	-1.20	-0.78	1.64	1.43	212.87
200.00	1.37	215.25	199.95	-3.37	-3.38	-2.24	0.27	4.06	213.57
300.00	1.24	216.48	299.93	-5.21	-5.23	-3.58	0.13	6.34	214.38
400.00	0.88	220.72	399.91	-6.65	-6.68	-4.72	0.37	8.18	215.25
500.00	1.22	224.82	499.89	-7.98	-8.02	-5.97	0.36	10.00	216.69
600.00	1.33	232.24	599.87	-9.44	-9.49	-7.64	0.20	12.18	218.86
700.00	1.42	240.40	699.84	-10.75	-10.81	-9.64	0.21	14.48	221.72
800.00	0.90	273.48	799.82	-11.30	-11.37	-11.50	0.83	16.17	225.33
900.00	0.90	293.12	899.81	-10.94	-11.02	-13.01	0.31	17.05	229.75
1000.00	0.82	309.88	999.80	-10.16	-10.25	-14.28	0.26	17.58	234.34
1100.00	0.80	313.93	1099.78	-9.21	-9.30	-15.34	0.06	17.94	238.76
1200.00	0.63	324.57	1199.78	-8.28	-8.37	-16.15	0.22	18.20	242.60
1300.00	0.66	337.13	1299.77	-7.30	-7.39	-16.70	0.15	18.26	246.11
1400.00	0.69	335.45	1399.76	-6.21	-6.32	-17.17	0.03	18.30	249.80
1500.00	0.67	327.22	1499.76	-5.17	-5.28	-17.74	0.10	18.51	253.43
1600.00	0.66	333.42	1599.75	-4.16	-4.27	-18.31	0.07	18.80	256.88
1700.00	0.54	330.81	1699.74	-3.23	-3.34	-18.80	0.12	19.10	259.93
1800.00	0.47	331.54	1799.74	-2.45	-2.56	-19.23	0.07	19.40	262.41
1900.00	0.58	345.77	1899.74	-1.59	-1.71	-19.55	0.17	19.63	265.01
2000.00	0.46	353.02	1999.73	-0.70	-0.82	-19.72	0.14	19.74	267.63
2100.00	0.21	352.55	2099.73	-0.12	-0.24	-19.80	0.25	19.80	269.31
2200.00	0.14	348.23	2199.73	0.19	0.07	-19.85	0.07	19.85	270.20
2300.00	0.28	89.73	2299.73	0.31	0.19	-19.63	0.34	19.63	270.56
2400.00	0.38	96.64	2399.73	0.27	0.16	-19.05	0.10	19.05	270.47
2500.00	0.45	117.78	2499.73	0.04	-0.07	-18.38	0.17	18.38	269.80
2600.00	0.75	148.71	2599.72	-0.70	-0.80	-17.69	0.43	17.71	267.40
2700.00	0.78	147.57	2699.71	-1.83	-1.93	-16.99	0.04	17.10	263.51
2800.00	0.83	156.11	2799.70	-3.08	-3.17	-16.33	0.13	16.64	259.01
2900.00	0.94	156.77	2899.69	-4.50	-4.59	-15.71	0.10	16.37	253.72
3000.00	0.96	152.89	2999.68	-5.99	-6.08	-15.01	0.07	16.20	247.94
3100.00	1.04	155.96	3099.66	-7.57	-7.65	-14.26	0.10	16.19	241.78
3200.00	1.22	125.90	3199.64	-9.03	-9.10	-13.03	0.61	15.89	235.05
3300.00	1.23	119.17	3299.62	-10.19	-10.25	-11.23	0.14	15.20	227.60
3400.00	0.94	119.60	3399.60	-11.12	-11.18	-9.58	0.28	14.72	220.59
3500.00	0.85	134.42	3499.59	-12.05	-12.10	-8.34	0.25	14.70	214.55
3600.00	0.95	122.13	3599.58	-13.02	-13.06	-7.10	0.22	14.87	208.53
3700.00	1.81	111.38	3699.55	-14.05	-14.08	-4.93	0.90	14.92	199.28
3800.00	2.05	112.57	3799.49	-15.34	-15.35	-1.80	0.24	15.45	186.69

Well Name:		COTTON DREW UNIT # 110H							
Survey:		FINAL GYRO SURVEY							
Survey Date:		11/7/2010							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
3900.00	2.28	114.39	3899.42	-16.87	-16.86	1.67	0.24	16.94	174.36
4000.00	3.37	126.76	3999.30	-19.47	-19.43	5.83	1.24	20.29	163.30
4100.00	4.12	134.77	4099.08	-23.78	-23.72	10.73	0.91	26.03	155.66
4200.00	4.36	135.98	4198.81	-29.08	-28.98	15.92	0.26	33.07	151.22
4300.00	3.97	136.94	4298.54	-34.37	-34.25	20.93	0.40	40.14	148.57
4400.00	2.93	139.86	4398.36	-38.88	-38.74	24.94	1.06	46.07	147.22
4500.00	2.63	140.68	4498.24	-42.63	-42.47	28.05	0.30	50.89	146.56
4600.00	2.26	139.55	4598.15	-45.92	-45.74	30.78	0.38	55.13	146.06
4700.00	1.89	140.61	4698.09	-48.71	-48.51	33.10	0.37	58.73	145.69
4800.00	1.77	144.60	4798.04	-51.26	-51.05	35.05	0.18	61.92	145.53
4900.00	1.73	143.95	4897.99	-53.75	-53.53	36.83	0.04	64.98	145.47
5000.00	1.40	145.47	4997.95	-55.99	-55.76	38.42	0.33	67.72	145.44
5100.00	1.12	149.65	5097.93	-57.85	-57.62	39.61	0.30	69.92	145.50
5200.00	0.97	150.74	5197.91	-59.44	-59.20	40.51	0.16	71.73	145.61
5300.00	0.81	145.44	5297.90	-60.76	-60.52	41.32	0.18	73.28	145.67
5400.00	0.65	126.46	5397.89	-61.68	-61.43	42.18	0.29	74.52	145.53
5500.00	0.58	141.51	5497.89	-62.42	-62.16	42.95	0.17	75.56	145.36
5600.00	0.66	129.47	5597.88	-63.19	-62.93	43.71	0.15	76.62	145.22
5700.00	0.58	108.56	5697.87	-63.72	-63.46	44.64	0.24	77.58	144.88
5800.00	0.38	119.97	5797.87	-64.05	-63.78	45.40	0.22	78.29	144.56
5900.00	0.37	111.54	5897.87	-64.34	-64.07	46.00	0.06	78.87	144.33
6000.00	0.18	138.51	5997.87	-64.58	-64.31	46.40	0.23	79.30	144.19
6100.00	0.10	104.22	6097.87	-64.72	-64.44	46.59	0.11	79.52	144.13
6200.00	0.09	62.57	6197.87	-64.70	-64.43	46.75	0.07	79.60	144.03
6300.00	0.03	148.18	6297.87	-64.69	-64.41	46.84	0.10	79.64	143.98
6400.00	0.15	123.83	6397.87	-64.78	-64.50	46.96	0.12	79.78	143.94
6500.00	0.20	181.35	6497.87	-65.03	-64.75	47.06	0.17	80.04	143.99
6600.00	0.17	125.15	6597.87	-65.29	-65.01	47.18	0.18	80.33	144.03
6700.00	0.26	120.20	6697.86	-65.49	-65.21	47.50	0.09	80.68	143.93
6800.00	0.41	127.20	6797.86	-65.83	-65.55	47.99	0.15	81.23	143.79
6900.00	0.44	129.41	6897.86	-66.29	-66.01	48.57	0.03	81.95	143.65
7000.00	0.55	128.30	6997.86	-66.84	-66.55	49.24	0.11	82.78	143.50
7100.00	0.63	128.52	7097.85	-67.48	-67.18	50.04	0.08	83.77	143.32
7200.00	0.79	127.08	7197.84	-68.24	-67.94	51.02	0.16	84.96	143.09
7300.00	0.71	135.23	7297.84	-69.10	-68.79	52.01	0.13	86.24	142.91
7400.00	0.71	122.05	7397.83	-69.88	-69.56	52.97	0.16	87.44	142.71
7500.00	0.54	125.74	7497.82	-70.48	-70.17	53.87	0.18	88.46	142.48
7600.00	0.52	160.39	7597.82	-71.19	-70.87	54.41	0.32	89.35	142.49

Well Name: COTTON DREW UNIT # 110H
Survey: FINAL GYRO SURVEY
Survey Date: 11/7/2010

MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
7628.00	0.59	171.39	7625.82	-71.46	-71.13	54.47	0.45	89.60	142.56