



Company: EXXON MOBIL
Lease/Well: PICEANCE CREEK UNIT/297-11-C9

Rig Name: PRODUCTION
State/County: COLORADO/RIO BLANCO

Latitude: 39.90
GRID North is 1.78 Degrees West of True North
VS-Azi: 0.00 Degrees



DEPTH REFERENCE : KB = 0'

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: pcu297-11c9raw.ut
Minimum Curvature Method
Report Date/Time: 8/17/2010 / 11:01

Vaughn Energy Services
Rifle, Colorado
970 456 2071
Surveyor: S. Anderson
PCU 297-11-C9

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
200.00	0.37	4.27	200.00	0.64	0.05	0.64	0.65	4.27	0.18
400.00	2.92	227.00	399.92	-2.19	-3.63	-2.19	4.24	238.93	1.60
600.00	6.70	220.26	599.18	-14.57	-14.90	-14.57	20.84	225.64	1.91
800.00	10.10	214.22	797.01	-37.98	-32.30	-37.98	49.86	220.38	1.76
1000.00	12.71	208.53	993.05	-71.82	-52.68	-71.82	89.07	216.26	1.42
1200.00	12.99	204.18	1188.04	-111.66	-72.40	-111.66	133.08	212.96	0.50
1400.00	13.25	201.49	1382.82	-153.50	-90.00	-153.50	177.93	210.38	0.33
1600.00	13.16	206.37	1577.54	-195.22	-108.51	-195.22	223.35	209.07	0.56
1800.00	13.40	209.63	1772.20	-235.77	-130.08	-235.77	269.27	208.89	0.39
2000.00	12.81	210.56	1966.99	-275.01	-152.81	-275.01	314.61	209.06	0.32
2200.00	13.25	212.27	2161.84	-313.48	-176.31	-313.48	359.66	209.36	0.29
2400.00	12.21	208.71	2356.92	-351.41	-198.71	-351.41	403.71	209.49	0.65
2600.00	12.81	211.31	2552.17	-388.91	-220.39	-388.91	447.02	209.54	0.41
2800.00	14.94	210.67	2746.33	-430.03	-245.07	-430.03	494.96	209.68	1.07
3000.00	14.35	210.91	2939.83	-473.47	-270.94	-473.47	545.51	209.78	0.30
3200.00	14.33	208.26	3133.60	-516.52	-295.38	-516.52	595.02	209.76	0.33
3400.00	14.06	208.71	3327.50	-559.63	-318.77	-559.63	644.05	209.67	0.14
3600.00	14.23	208.69	3521.43	-602.50	-342.24	-602.50	692.91	209.60	0.09
3800.00	14.41	208.37	3715.22	-645.95	-365.86	-645.95	742.37	209.53	0.10
4000.00	14.01	207.00	3909.11	-689.41	-388.67	-689.41	791.42	209.41	0.26

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
4200.00	14.26	206.27	4103.05	-733.06	-410.56	-733.06	840.20	209.25	0.16
4400.00	14.32	205.45	4296.86	-777.48	-432.10	-777.48	889.48	209.06	0.11
4600.00	11.93	203.30	4491.63	-818.81	-450.91	-818.81	934.76	208.84	1.22
4800.00	7.31	206.45	4688.76	-849.21	-464.76	-849.21	968.07	208.69	2.33
5000.00	3.40	207.50	4887.85	-865.87	-473.17	-865.87	986.72	208.66	1.96
5200.00	0.19	143.68	5087.73	-871.40	-475.71	-871.40	992.80	208.63	1.66
5400.00	0.52	121.43	5287.72	-872.15	-474.73	-872.15	992.98	208.56	0.17
5600.00	0.74	102.91	5487.71	-872.91	-472.70	-872.91	992.68	208.44	0.15
5800.00	1.23	97.73	5687.68	-873.48	-469.33	-873.48	991.59	208.25	0.25
6000.00	2.05	98.56	5887.60	-874.30	-463.67	-874.30	989.65	207.94	0.41
6200.00	1.25	115.95	6087.52	-875.79	-458.19	-875.79	988.40	207.62	0.47
6400.00	1.47	123.49	6287.46	-878.15	-454.10	-878.15	988.61	207.34	0.14
6600.00	1.13	158.74	6487.41	-881.40	-451.25	-881.40	990.19	207.11	0.42
6800.00	1.25	179.74	6687.37	-885.41	-450.53	-885.41	993.44	206.97	0.22
7000.00	1.40	200.23	6887.32	-889.88	-451.36	-889.88	997.81	206.89	0.25
7200.00	1.22	203.77	7087.26	-894.14	-453.07	-894.14	1002.37	206.87	0.10
7400.00	0.87	184.00	7287.23	-897.61	-454.04	-897.61	1005.91	206.83	0.25
7600.00	0.87	160.15	7487.21	-900.56	-453.63	-900.56	1008.35	206.74	0.18
7800.00	0.95	157.61	7687.18	-903.53	-452.47	-903.53	1010.49	206.60	0.05
8000.00	0.99	158.25	7887.15	-906.68	-451.20	-906.68	1012.74	206.46	0.02
8200.00	1.18	150.76	8087.12	-910.08	-449.55	-910.08	1015.06	206.29	0.12
8400.00	0.86	149.01	8287.09	-913.16	-447.78	-913.16	1017.04	206.12	0.16
8600.00	1.03	148.93	8487.06	-915.98	-446.08	-915.98	1018.83	205.97	0.08
8800.00	2.03	138.57	8686.99	-920.17	-442.81	-920.17	1021.17	205.70	0.52
9000.00	1.87	144.27	8886.87	-925.47	-438.57	-925.47	1024.13	205.36	0.12
9200.00	1.49	142.14	9086.78	-930.17	-435.07	-930.17	1026.89	205.07	0.19
9400.00	1.61	148.19	9286.71	-934.60	-432.00	-934.60	1029.61	204.81	0.10
9600.00	1.85	155.09	9486.62	-939.91	-429.16	-939.91	1033.25	204.54	0.16
9800.00	1.49	166.91	9686.54	-945.37	-427.21	-945.37	1037.42	204.32	0.25
10000.00	1.43	186.35	9886.47	-950.39	-426.90	-950.39	1041.87	204.19	0.25
10200.00	1.72	240.44	10086.41	-954.36	-429.78	-954.36	1046.66	204.24	0.73
10400.00	1.60	247.72	10286.32	-956.89	-434.97	-956.89	1051.11	204.44	0.12
10600.00	0.91	161.65	10486.29	-959.45	-437.05	-959.45	1054.30	204.49	0.89
10800.00	1.28	129.14	10686.25	-962.36	-434.82	-962.36	1056.04	204.31	0.35
11000.00	1.20	91.49	10886.21	-963.83	-430.99	-963.83	1055.80	204.09	0.40
11200.00	1.24	89.91	11086.16	-963.88	-426.73	-963.88	1054.11	203.88	0.03
11400.00	1.11	84.98	11286.12	-963.71	-422.63	-963.71	1052.31	203.68	0.08
11600.00	1.58	79.08	11486.07	-963.01	-418.00	-963.01	1049.82	203.46	0.25
11800.00	2.62	77.34	11685.93	-961.49	-410.83	-961.49	1045.58	203.14	0.52
12000.00	2.68	77.09	11885.71	-959.44	-401.81	-959.44	1040.18	202.72	0.03
12200.00	2.03	81.63	12085.55	-957.89	-393.76	-957.89	1035.66	202.35	0.34
12400.00	3.18	83.79	12285.34	-956.77	-384.76	-956.77	1031.24	201.91	0.58

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
12600.00	2.52	87.63	12485.09	-955.99	-374.86	-955.99	1026.86	201.41	0.34
12622.00	2.58	92.16	12507.07	-955.99	-373.88	-955.99	1026.50	201.36	0.95