

Gyroscopic Survey Report for:

ANADARKO

API: 05-123-23496
 Well Location: WELD COUNTY, CO
 Well Name: BARCLAY 15-14
 Rig Number: CORETECH 2
 Survey Date: 3/3/2014
 Coordinates: 40.1324300°N -104.85603°W
 North Reference: True North
 Grid Correction: None
 Depth Reference: GROUND LEVEL (4930.00 ft)
 Calculation Method: Minimum Curvature
 Section (VS) Ref: 0.00N (ft), 0.00E (ft), 110.70Azim (deg)
 Definitive Survey: BARCLAY 15-14
 Operator(s): C JAQUES

Measured Depth ft	Inclination deg	Azimuth deg	True Vertical Depth ft	Vertical Section ft	+N/-S ft	+E/-W ft	Dogleg Severity °/100ft	Closure Distance ft	Closure Direction deg
0	0	0	0	0	0	0	Invalid	0	0
100	0.46	21.82	100	0.01	0.37	0.15	0.46	0.4	21.82
200	0.47	46.75	200	0.2	1.03	0.6	0.2	1.19	30.18
300	0.88	51.49	299.99	0.77	1.79	1.5	0.41	2.33	39.93
400	1.07	59.93	399.97	1.75	2.73	2.91	0.24	3.99	46.74
500	1.16	62.52	499.96	3.02	3.67	4.61	0.1	5.89	51.49
600	1.74	71.34	599.92	4.87	4.62	6.95	0.62	8.34	56.37
700	3.07	101.06	699.84	8.68	4.59	11.02	1.78	11.94	67.37
800	4.87	123.39	799.6	15.47	1.74	17.2	2.34	17.29	84.22
900	6.45	140.53	899.11	24.49	-4.94	24.32	2.3	24.81	101.48
1000	6.25	141.45	998.5	34.05	-13.53	31.28	0.23	34.08	113.39
1100	6.06	141.63	1097.92	43.25	-21.92	37.95	0.19	43.83	120.02
1200	5.65	141.64	1197.4	52	-29.92	44.28	0.42	53.44	124.05
1300	5.17	140.95	1296.96	60.11	-37.28	50.17	0.48	62.51	126.61
1400	4.77	140.23	1396.58	67.63	-43.98	55.68	0.41	70.95	128.31
1500	4.29	139.24	1496.27	74.54	-50.01	60.78	0.49	78.71	129.45
1600	3.78	142.51	1596.02	80.63	-55.47	65.23	0.56	85.63	130.37
1700	3.28	140.1	1695.83	85.93	-60.28	69.08	0.52	91.68	131.11
1800	2.65	139	1795.69	90.46	-64.22	72.43	0.64	96.81	131.56
1900	2.34	139	1895.6	94.29	-67.51	75.29	0.31	101.12	131.88
2000	2.06	132.87	1995.52	97.75	-70.27	77.94	0.36	104.94	132.04
2100	1.92	126.39	2095.46	101.02	-72.48	80.6	0.27	108.4	131.96
2200	1.38	101.78	2195.42	103.82	-73.72	83.13	0.88	111.11	131.57
2300	1.19	83.52	2295.4	105.94	-73.85	85.34	0.45	112.86	130.87
2400	1.09	57.98	2395.38	107.44	-73.22	87.18	0.52	113.85	130.03

2500	0.8	26.84	2495.37	108.09	-72.1	88.31	0.58	114	129.23
2600	0.89	2.72	2595.36	107.93	-70.7	88.66	0.36	113.4	128.57
2700	1.33	340.81	2695.34	106.95	-68.84	88.31	0.61	111.97	127.94
2800	1.37	335.96	2795.31	105.36	-66.65	87.44	0.12	109.95	127.31
2900	1.25	335.11	2895.28	103.74	-64.57	86.5	0.13	107.94	126.74
3000	0.96	332.97	2995.26	102.34	-62.83	85.66	0.29	106.23	126.26
3100	1.03	340.76	3095.25	101.14	-61.24	84.98	0.15	104.74	125.78
3200	1.14	332.52	3195.23	99.82	-59.5	84.22	0.19	103.12	125.24
3300	1.5	332.91	3295.2	98.12	-57.46	83.17	0.36	101.09	124.64
3400	1.56	324.26	3395.17	96.01	-55.19	81.78	0.24	98.66	124.01
3500	1.53	319.52	3495.13	93.71	-53.08	80.12	0.13	96.11	123.52
3600	1.64	315.12	3595.1	91.24	-51.05	78.25	0.17	93.43	123.12
3700	1.43	303.79	3695.06	88.73	-49.34	76.2	0.37	90.78	122.92
3800	1.02	271.44	3795.04	86.67	-48.62	74.27	0.79	88.78	123.21
3900	0.88	249.51	3895.02	85.25	-48.87	72.66	0.39	87.57	123.92
4000	0.43	268.25	3995.02	84.33	-49.15	71.57	0.5	86.82	124.48
4100	0.46	339.78	4095.01	83.72	-48.78	71.06	0.52	86.19	124.47
4200	1.09	352.37	4195.01	83	-47.46	70.79	0.65	85.23	123.84
4300	1.68	349.96	4294.98	81.8	-45.07	70.41	0.59	83.6	122.62
4400	1.26	345.38	4394.94	80.41	-42.56	69.88	0.44	81.82	121.34
4500	1.26	338.51	4494.92	79.04	-40.47	69.2	0.15	80.16	120.32
4600	1.5	323.99	4594.89	77.21	-38.39	68.02	0.42	78.11	119.44
4700	1.62	316.72	4694.85	74.84	-36.3	66.28	0.23	75.57	118.71
4800	1.86	320.63	4794.81	72.16	-34.02	64.29	0.26	72.73	117.89
4900	2.02	316.99	4894.75	69.18	-31.48	62.06	0.21	69.58	116.9
5000	1.8	300.48	4994.69	66.05	-29.39	59.5	0.59	66.36	116.29
5100	1.75	281.39	5094.65	63	-28.29	56.65	0.59	63.33	116.54
5200	1.67	273.79	5194.6	60.1	-27.9	53.71	0.24	60.52	117.45
5300	1.39	264.98	5294.57	57.61	-27.91	51.04	0.36	58.17	118.67
5400	1.1	251.95	5394.54	55.77	-28.31	48.92	0.41	56.52	120.06
5500	0.95	253.26	5494.53	54.37	-28.85	47.22	0.16	55.33	121.42
5600	0.99	235.24	5594.51	53.22	-29.58	45.71	0.31	54.45	122.9
5700	0.91	212.94	5694.5	52.56	-30.74	44.57	0.38	54.14	124.59
5800	0.86	190.54	5794.49	52.52	-32.14	44	0.35	54.49	126.14
5900	0.79	167.75	5894.48	53.03	-33.55	44.01	0.33	55.34	127.32
6000	0.98	158.07	5994.47	53.99	-35.02	44.48	0.24	56.61	128.21
6100	0.41	156.35	6094.46	54.82	-36.14	44.94	0.57	57.67	128.81
6200	0.24	40.62	6194.46	55.14	-36.31	45.22	0.56	58	128.76
6300	0.58	68.59	6294.46	55.59	-35.96	45.84	0.38	58.26	128.12
6400	1	77.21	6394.45	56.7	-35.58	47.16	0.44	59.08	127.03
6500	1.15	77.61	6494.43	58.27	-35.17	49	0.15	60.31	125.67
6600	1.42	70.29	6594.4	60.05	-34.54	51.14	0.32	61.71	124.03
6700	1.59	67.14	6694.37	62	-33.58	53.59	0.19	63.24	122.07
6800	1.61	57.69	6794.33	63.85	-32.29	56.06	0.26	64.69	119.94
6900	1.5	52.3	6894.29	65.39	-30.74	58.28	0.18	65.89	117.81
7000	1.26	51.3	6994.26	66.63	-29.25	60.18	0.24	66.91	115.92
7100	1.16	60.51	7094.24	67.84	-28.06	61.92	0.22	67.98	114.38
7200	1.22	61.65	7194.22	69.19	-27.05	63.74	0.06	69.25	113
7300	1.1	73.64	7294.2	70.66	-26.28	65.61	0.27	70.67	111.83
7400	1.57	74.79	7394.17	72.54	-25.65	67.85	0.47	72.54	110.7