

Gyroscopic Survey Report for:

ANADARKO

API: 05-123-24558

Well Location: WELD COUNTY, CO

Well Name: SARCHET 22-21

Rig Number: CORETECH 2

Survey Date: 3/10/2014

Coordinates 40.2102200°N -104.78703°W

North Reference: True North

Grid Correction: None

Depth Reference: GROUND LEVEL (4960.00 ft)

Calculation Method: Minimum Curvature

Section (VS) Ref: 0.00N (ft), 0.00E (ft), 206.92Azim (deg)

Definitive Survey: SARCHET 22-21

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	1.27	90.57	99.99	-0.49	-0.01	1.11	1.27	1.11	90.57
200	0.86	104.9	199.97	-1.14	-0.22	2.94	0.48	2.95	94.19
300	0.81	106.5	299.96	-1.42	-0.61	4.34	0.06	4.39	97.99
400	0.64	106.91	399.96	-1.65	-0.97	5.55	0.18	5.64	99.93
500	0.72	120.15	499.95	-1.71	-1.45	6.63	0.18	6.78	102.34
600	0.86	128.26	599.94	-1.53	-2.23	7.76	0.18	8.07	106.03
700	0.9	124.15	699.93	-1.28	-3.13	9	0.07	9.53	109.2
800	1	134.88	799.91	-0.91	-4.19	10.26	0.2	11.08	112.19
900	1.05	139.21	899.9	-0.3	-5.49	11.47	0.09	12.72	115.57
1000	1.31	145.52	999.88	0.6	-7.13	12.72	0.29	14.58	119.26
1100	1.46	148.22	1099.85	1.8	-9.15	14.04	0.16	16.76	123.1
1200	1.31	159.75	1199.82	3.25	-11.31	15.1	0.31	18.87	126.83
1300	1.16	153.17	1299.8	4.62	-13.29	15.96	0.21	20.77	129.79
1400	1.01	155.85	1399.78	5.78	-15	16.78	0.17	22.5	131.8
1500	1.04	174.02	1499.76	7.09	-16.7	17.23	0.33	24	134.11

1600	0.7	187.21	1599.75	8.43	-18.22	17.25	0.4	25.09	136.57
1700	0.5	206.07	1699.74	9.45	-19.22	16.98	0.28	25.64	138.54
1800	0.33	265.44	1799.74	10.03	-19.63	16.5	0.44	25.65	139.95
1900	0.52	276.54	1899.74	10.34	-19.6	15.77	0.21	25.16	141.19
2000	0.44	266.44	1999.74	10.69	-19.58	14.93	0.12	24.62	142.67
2100	0.15	116.77	2099.74	10.89	-19.66	14.66	0.57	24.52	143.28
2200	0.45	154.64	2199.73	11.13	-20.07	14.95	0.34	25.02	143.32
2300	0.46	237.57	2299.73	11.71	-20.64	14.77	0.6	25.38	144.41
2400	0.62	274.33	2399.73	12.27	-20.82	13.89	0.38	25.02	146.29
2500	0.15	303.96	2499.72	12.46	-20.7	13.24	0.5	24.57	147.4
2600	0.26	217.13	2599.72	12.67	-20.81	12.99	0.29	24.53	148.02
2700	0.29	190.77	2699.72	13.14	-21.24	12.81	0.13	24.8	148.91
2800	0.47	169.33	2799.72	13.71	-21.89	12.84	0.23	25.38	149.62
2900	0.28	174.24	2899.72	14.24	-22.54	12.94	0.19	25.99	150.15
3000	0.59	195.49	2999.72	14.95	-23.28	12.82	0.34	26.57	151.15
3100	0.76	210.46	3099.71	16.12	-24.34	12.35	0.25	27.3	153.1
3200	0.88	192.81	3199.7	17.52	-25.66	11.84	0.28	28.26	155.23
3300	0.82	194.99	3299.69	18.96	-27.1	11.49	0.06	29.44	157.03
3400	0.83	210.94	3399.68	20.39	-28.42	10.93	0.23	30.45	158.96
3500	0.41	206.81	3499.67	21.47	-29.36	10.39	0.42	31.14	160.5
3600	0.37	273.86	3599.67	21.96	-29.66	9.91	0.43	31.27	161.52
3700	0.33	249.46	3699.67	22.3	-29.74	9.32	0.15	31.16	162.6
3800	0.86	251.86	3799.66	23.04	-30.07	8.34	0.53	31.21	164.5
3900	1.23	264.02	3899.65	24.15	-30.42	6.56	0.43	31.12	167.82
4000	1.11	260.66	3999.62	25.3	-30.68	4.54	0.14	31.02	171.58
4100	0.86	258.52	4099.61	26.34	-30.99	2.86	0.25	31.12	174.74
4200	1.07	213.52	4199.6	27.73	-31.92	1.61	0.76	31.96	177.12
4300	1.62	174.66	4299.57	29.85	-34.1	1.22	1.03	34.12	177.95
4400	1.93	159.84	4399.52	32.19	-37.09	1.93	0.55	37.14	177.01
4500	1.96	160.75	4499.47	34.52	-40.28	3.08	0.05	40.4	175.63
4600	1.87	166.77	4599.41	36.96	-43.49	4.02	0.22	43.67	174.72
4700	1.85	169.34	4699.36	39.48	-46.66	4.69	0.09	46.89	174.26
4800	1.8	172.45	4799.31	42.05	-49.8	5.19	0.11	50.07	174.05
4900	2.29	177.12	4899.24	45.08	-53.35	5.5	0.51	53.64	174.11

5000	1.84	178.65	4999.18	48.23	-56.95	5.64	0.45	57.23	174.35
5100	1.47	180.73	5099.14	50.79	-59.84	5.66	0.37	60.11	174.6
5200	1.13	191.17	5199.11	52.89	-62.09	5.45	0.41	62.33	174.98
5300	0.49	210.9	5299.1	54.27	-63.43	5.04	0.69	63.63	175.46
5400	0.39	243.35	5399.1	54.97	-63.95	4.52	0.26	64.11	175.96
5500	0.37	260.35	5499.09	55.44	-64.16	3.89	0.11	64.27	176.53
5600	0.47	276.9	5599.09	55.78	-64.16	3.16	0.16	64.24	177.18
5700	0.64	290.3	5699.09	55.98	-63.92	2.22	0.21	63.96	178.01
5800	0.59	292.47	5799.08	56.09	-63.53	1.22	0.06	63.54	178.9
5900	0.63	291.68	5899.08	56.18	-63.13	0.24	0.04	63.13	179.78
6000	0.77	295.26	5999.07	56.25	-62.64	-0.88	0.15	62.65	180.8
6100	0.89	292.36	6099.06	56.33	-62.06	-2.2	0.12	62.1	182.03
6200	0.88	274.02	6199.05	56.69	-61.71	-3.68	0.28	61.82	183.42
6300	0.91	271.6	6299.03	57.33	-61.63	-5.24	0.05	61.85	184.86
6400	0.89	269.12	6399.02	58.03	-61.62	-6.81	0.04	62	186.31
6500	1.13	256.92	6499.01	59.02	-61.86	-8.55	0.32	62.44	187.87
6600	1.37	265.94	6598.98	60.27	-62.16	-10.7	0.31	63.08	189.76
6700	1.51	255.59	6698.95	61.76	-62.58	-13.17	0.3	63.95	191.89
6800	1.84	257.78	6798.91	63.65	-63.25	-16.02	0.33	65.25	194.22
6900	2.17	249.18	6898.85	66.06	-64.26	-19.36	0.44	67.11	196.77
7000	2.63	250.88	6998.76	69.11	-65.68	-23.3	0.46	69.69	199.53
7100	2.98	246.78	7098.64	72.76	-67.46	-27.85	0.41	72.98	202.43
7200	3.06	236.57	7198.5	77.08	-69.96	-32.47	0.54	77.12	204.9
7300	3.24	236.63	7298.35	81.85	-72.98	-37.06	0.17	81.85	206.92