

Gyroscopic Survey Report for:

ANADARKO

API 05-123-20417

Well Location: WELD COUNTY, CO

Well Name: HSR-SHARKEY 9-35

Rig Number: CORETECH 2

Survey Date: 4/21/2014

COORDINATES 40.2670000°N -104.85139°W

North Reference: True North

Grid Correction: None

Depth Reference: GROUND LEVEL (4740.00 ft)

Calculation Method: Minimum Curvature

Section (VS) Ref: 0.00N (ft), 0.00E (ft), 264.66Azim (deg)

Definitive Survey: HSR-SHARKEY 9-35

Operator(s): C JAKUES

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	0 Invalid	0	0
100	0.11	280.44	100	0.1	0.02	-0.1	0.11	0.1	280.44
200	0.21	322.01	200	0.29	0.18	-0.31	0.14	0.36	300.26
300	0.06	93.05	300	0.34	0.32	-0.37	0.25	0.49	310.86
400	0.08	305.68	400	0.34	0.36	-0.38	0.13	0.52	313.47
500	0.89	242.51	500	1.12	0.04	-1.13	0.86	1.13	272.11
600	0.9	234.44	599.98	2.52	-0.77	-2.46	0.13	2.58	252.53
700	1.04	242.9	699.97	4.04	-1.64	-3.91	0.2	4.24	247.18
800	0.87	235.33	799.95	5.55	-2.49	-5.34	0.22	5.89	245.01
900	1.1	239.81	899.94	7.08	-3.4	-6.79	0.24	7.59	243.39
1000	1.02	252.95	999.92	8.82	-4.14	-8.47	0.25	9.43	243.93
1100	1.02	253.22	1099.91	10.56	-4.66	-10.18	0.01	11.19	245.38
1200	1.21	246.06	1199.89	12.44	-5.35	-11.99	0.24	13.13	245.96
1300	1.08	258.04	1299.87	14.37	-5.97	-13.88	0.27	15.11	246.72
1400	0.99	255.25	1399.85	16.16	-6.39	-15.63	0.1	16.89	247.78
1500	0.96	255.61	1499.84	17.84	-6.82	-17.28	0.04	18.58	248.48
1600	0.75	265.88	1599.83	19.32	-7.07	-18.75	0.25	20.04	249.34
1700	0.61	227.46	1699.82	20.4	-7.48	-19.79	0.47	21.16	249.31
1800	0.57	194.26	1799.81	20.99	-8.32	-20.31	0.34	21.94	247.73
1900	0.08	188.12	1899.81	21.18	-8.87	-20.44	0.49	22.28	246.54
2000	0.06	259.19	1999.81	21.24	-8.95	-20.5	0.08	22.37	246.41
2100	0.54	313.74	2099.81	21.6	-8.63	-20.89	0.51	22.6	247.55
2200	0.73	302.6	2199.81	22.41	-7.96	-21.77	0.22	23.18	249.91
2300	0.38	340.23	2299.8	23	-7.3	-22.42	0.49	23.58	251.95
2400	0.35	338.59	2399.8	23.17	-6.7	-22.64	0.03	23.61	253.51
2500	0.66	313.74	2499.79	23.63	-6.02	-23.17	0.37	23.94	255.44
2600	0.83	318.42	2599.79	24.43	-5.08	-24.06	0.18	24.59	258.07

2700	0.79	300.78	2699.78	25.41	-4.19	-25.13	0.25	25.48	260.53
2800	0.55	251.14	2799.77	26.43	-3.99	-26.18	0.6	26.48	261.33
2900	0.61	259.45	2899.77	27.43	-4.24	-27.15	0.11	27.48	261.12
3000	0.73	245.05	2999.76	28.57	-4.61	-28.26	0.21	28.63	260.73
3100	0.68	260.35	3099.75	29.77	-4.98	-29.43	0.19	29.85	260.39
3200	0.76	260.38	3199.74	31.02	-5.19	-30.67	0.07	31.11	260.39
3300	0.7	253.62	3299.73	32.28	-5.47	-31.91	0.1	32.38	260.27
3400	0.5	252.91	3399.73	33.31	-5.77	-32.91	0.2	33.41	260.05
3500	0.45	248.63	3499.73	34.11	-6.04	-33.69	0.06	34.23	259.83
3600	0.38	256.78	3599.72	34.81	-6.26	-34.38	0.09	34.95	259.67
3700	0.36	258.65	3699.72	35.46	-6.4	-35.01	0.02	35.59	259.64
3800	0.4	268.37	3799.72	36.12	-6.47	-35.67	0.07	36.25	259.71
3900	0.29	232.8	3899.72	36.68	-6.64	-36.22	0.23	36.82	259.62
4000	0.41	218.37	3999.72	37.14	-7.07	-36.64	0.15	37.32	259.08
4100	0.57	227.9	4099.71	37.79	-7.69	-37.24	0.18	38.02	258.34
4200	0.55	245.95	4199.71	38.65	-8.22	-38.05	0.18	38.92	257.81
4300	0.71	241.24	4299.7	39.67	-8.71	-39.03	0.17	39.99	257.42
4400	0.5	258.86	4399.7	40.68	-9.1	-40.01	0.28	41.03	257.19
4500	0.32	274.03	4499.69	41.39	-9.16	-40.71	0.21	41.73	257.32
4600	0.39	338.57	4599.69	41.76	-8.82	-41.11	0.38	42.05	257.89
4700	0.36	346.11	4699.69	41.9	-8.2	-41.31	0.06	42.12	258.77
4800	0.36	335.34	4799.69	42.05	-7.6	-41.52	0.07	42.21	259.62
4900	0.52	312.52	4899.68	42.46	-7.01	-41.99	0.24	42.57	260.52
5000	0.52	292.36	4999.68	43.16	-6.53	-42.74	0.18	43.24	261.31
5100	0.54	272.48	5099.68	44.03	-6.34	-43.63	0.18	44.08	261.73
5200	0.68	271.03	5199.67	45.08	-6.31	-44.69	0.14	45.13	261.96
5300	0.86	238.88	5299.66	46.34	-6.69	-45.92	0.46	46.4	261.71
5400	1.43	226.09	5399.64	47.99	-7.94	-47.46	0.62	48.12	260.5
5500	1.66	232.48	5499.61	50.19	-9.69	-49.51	0.29	50.44	258.93
5600	0.61	266.27	5599.58	51.95	-10.6	-51.19	1.2	52.28	258.3
5700	0.44	288.66	5699.58	52.84	-10.51	-52.09	0.27	53.14	258.59
5800	0.64	303.56	5799.58	53.62	-10.08	-52.91	0.24	53.87	259.21
5900	0.96	294.03	5899.57	54.78	-9.44	-54.14	0.35	54.96	260.11
6000	1.12	287.86	5999.55	56.41	-8.8	-55.83	0.19	56.52	261.04
6100	1.2	285.58	6099.53	58.28	-8.22	-57.76	0.09	58.34	261.9
6200	1.17	272.24	6199.51	60.27	-7.9	-59.79	0.28	60.31	262.47
6300	1.27	269.65	6299.49	62.39	-7.87	-61.92	0.12	62.42	262.76
6400	1.2	269.48	6399.46	64.54	-7.88	-64.08	0.07	64.57	262.99
6500	1.06	270.15	6499.44	66.5	-7.89	-66.05	0.15	66.52	263.19
6600	1.15	273.04	6599.42	68.41	-7.83	-67.98	0.11	68.43	263.43
6700	1.15	274.19	6699.4	70.4	-7.71	-69.98	0.02	70.4	263.72
6800	1.24	274.54	6799.38	72.45	-7.55	-72.06	0.09	72.45	264.02
6900	1.15	276.12	6899.36	74.49	-7.36	-74.13	0.1	74.49	264.33
7000	0.99	268.79	6999.34	76.33	-7.27	-75.98	0.21	76.33	264.54
7100	1.1	271.12	7099.33	78.14	-7.27	-77.81	0.12	78.14	264.66