

**Vaughn Energy Services
Henderson, CO
866-835-8333**

MS Gyro Survey Calculations

Wells Ranch AA 26-14 / API 05-123-25628

Depth	Inc	AzG	N/-S	E/-W	TVD	DL	VS	CD
0.00	0.00	0.00	0.00	0.00	0.00	****	0.00	0.00
100.00	0.23	307.47	0.12	-0.16	100.00	0.23	0.12	0.20
200.00	0.29	291.80	0.34	-0.55	200.00	0.09	0.34	0.65
300.00	0.64	289.04	0.61	-1.31	300.00	0.36	0.61	1.45
400.00	0.56	278.13	0.87	-2.32	399.99	0.14	0.87	2.48
500.00	0.40	295.23	1.08	-3.12	499.99	0.21	1.08	3.31
600.00	0.26	312.12	1.38	-3.61	599.98	0.17	1.38	3.86
700.00	0.81	323.56	2.10	-4.19	699.98	0.56	2.10	4.69
800.00	0.55	333.74	3.11	-4.83	799.97	0.29	3.11	5.74
900.00	0.66	347.53	4.11	-5.17	899.97	0.18	4.11	6.60
1000.00	0.88	358.29	5.44	-5.31	999.96	0.26	5.44	7.60
1100.00	0.84	346.08	6.91	-5.51	1099.95	0.19	6.91	8.84
1200.00	0.71	332.08	8.18	-5.98	1199.94	0.23	8.18	10.13
1300.00	0.72	334.59	9.29	-6.54	1299.93	0.03	9.29	11.37
1400.00	0.78	329.82	10.45	-7.16	1399.92	0.08	10.45	12.67
1500.00	0.80	313.11	11.52	-8.01	1499.91	0.23	11.52	14.03
1600.00	0.76	287.40	12.20	-9.16	1599.90	0.35	12.20	15.25
1700.00	0.88	245.88	12.08	-10.50	1699.89	0.59	12.08	16.00
1800.00	0.87	251.40	11.52	-11.92	1799.88	0.09	11.52	16.58
1900.00	0.93	251.40	11.02	-13.40	1899.87	0.06	11.02	17.36
2000.00	0.79	252.61	10.56	-14.83	1999.86	0.13	10.56	18.21
2100.00	0.45	236.45	10.13	-15.82	2099.85	0.38	10.13	18.79
2200.00	0.48	216.13	9.58	-16.40	2199.85	0.17	9.58	18.99
2300.00	0.55	200.68	8.80	-16.81	2299.85	0.15	8.80	18.98
2400.00	1.10	166.78	7.41	-16.76	2399.83	0.72	7.41	18.33
2500.00	1.33	139.76	5.59	-15.79	2499.81	0.61	5.59	16.75
2600.00	1.37	129.30	3.95	-14.12	2599.79	0.25	3.95	14.66
2700.00	1.26	119.85	2.65	-12.25	2699.76	0.24	2.65	12.53
2800.00	1.17	107.69	1.79	-10.33	2799.74	0.27	1.79	10.48
2900.00	1.17	100.59	1.30	-8.35	2899.72	0.15	1.30	8.45
3000.00	1.38	91.48	1.08	-6.14	2999.69	0.29	1.08	6.23
3100.00	1.52	84.31	1.18	-3.61	3099.66	0.22	1.18	3.80
3200.00	1.42	73.00	1.67	-1.12	3199.63	0.31	1.67	2.01
3300.00	1.18	70.75	2.37	1.04	3299.60	0.24	2.37	2.59
3400.00	1.28	69.33	3.10	3.05	3399.58	0.10	3.10	4.35
3500.00	1.46	71.25	3.91	5.30	3499.55	0.18	3.91	6.59
3600.00	1.22	82.78	4.45	7.56	3599.52	0.36	4.45	8.77
3700.00	1.52	136.45	3.62	9.53	3699.50	1.27	3.62	10.20

3800.00	2.01	150.66	1.13	11.30	3799.45	0.65	1.13	11.36
3900.00	2.47	145.93	-2.18	13.37	3899.37	0.50	-2.18	13.55
4000.00	2.59	145.61	-5.83	15.85	3999.28	0.12	-5.83	16.89
4100.00	2.18	146.46	-9.29	18.18	4099.19	0.41	-9.29	20.42
4200.00	1.94	144.22	-12.25	20.23	4199.12	0.26	-12.25	23.65
4300.00	1.63	141.41	-14.73	22.10	4299.08	0.33	-14.73	26.56
4400.00	1.32	129.39	-16.57	23.88	4399.04	0.43	-16.57	29.07
4500.00	1.02	120.26	-17.75	25.54	4499.02	0.36	-17.75	31.10
4600.00	1.16	118.68	-18.69	27.20	4599.00	0.15	-18.69	33.00
4700.00	1.04	106.03	-19.42	28.96	4698.99	0.27	-19.42	34.87
4800.00	0.78	122.20	-20.04	30.41	4798.97	0.36	-20.04	36.41
4900.00	1.23	158.27	-21.40	31.38	4898.96	0.75	-21.40	37.98
5000.00	1.61	192.37	-23.76	31.47	4998.93	0.91	-23.76	39.44
5100.00	1.55	200.86	-26.39	30.69	5098.89	0.24	-26.39	40.48
5200.00	1.18	220.53	-28.44	29.54	5198.86	0.59	-28.44	41.01
5300.00	1.04	253.81	-29.48	28.00	5298.85	0.65	-29.48	40.66
5400.00	1.52	273.05	-29.66	25.80	5398.82	0.64	-29.66	39.31
5500.00	1.69	280.88	-29.31	23.02	5498.78	0.28	-29.31	37.27
5600.00	2.08	290.65	-28.40	19.87	5598.73	0.50	-28.40	34.66
5700.00	2.47	298.81	-26.72	16.29	5698.65	0.51	-26.72	31.29
5800.00	3.43	305.69	-23.93	11.97	5798.52	1.01	-23.93	26.76
5900.00	4.47	306.88	-19.85	6.43	5898.28	1.05	-19.85	20.87
6000.00	6.04	309.68	-14.15	-0.74	5997.85	1.59	-14.15	14.17
6100.00	8.86	310.34	-5.80	-10.67	6097.00	2.82	-5.80	12.14
6200.00	7.26	317.56	3.85	-20.80	6196.01	1.89	3.85	21.15
6300.00	5.11	333.02	12.48	-27.09	6295.43	2.70	12.48	29.82
6400.00	4.63	356.56	20.48	-29.35	6395.08	2.04	20.48	35.79
6500.00	4.58	6.40	28.48	-29.15	6494.76	0.79	28.48	40.75
6600.00	3.96	9.68	35.84	-28.12	6594.48	0.67	35.84	45.56
6700.00	2.98	12.58	41.78	-26.97	6694.29	0.99	41.78	49.73
6800.00	2.59	12.33	46.53	-25.93	6794.18	0.39	46.53	53.26
6900.00	2.32	10.35	50.73	-25.08	6894.08	0.28	50.73	56.59

Cbrg

0.00
307.47
301.51
295.05
290.42
289.14
290.98
296.64
302.77
308.48
315.65
321.43
323.81
324.85
325.60
325.19
323.10
319.01
314.04
309.44
305.45
302.63
300.29
297.61
293.85
289.48
285.62
282.20
279.85
278.82
279.95
288.03
326.23
23.66
44.55
53.62
59.53
69.20

84.28
99.26
110.20
117.05
121.20
123.68
124.76
124.80
124.49
123.85
123.39
124.29
127.05
130.69
133.92
136.48
138.99
141.86
145.01
148.63
153.43
162.06
183.00
241.46
280.48
294.74
304.91
314.34
321.89
327.15
330.87
333.69