



Company: Encana Oil & Gas
Rig: Production/CoreTech
Latitude: 40.111
Longitude: -105.006
API # 05-123-21850
Date: 11/26/14

Well: Rasmussen 32-28
Location: Weld County, Colorado
North Reference: True North
Depth Reference: RKB = Ground Level Elevation = 4
Surveyor: Brian Budd
VS: 0.000

MS Gyro Survey Calculations

Depth	Inc	AzG	N/-S	E/-W	TVD	DL	VS	CD	Cbrg
0.000	0.000	0.000	0.000	0.000	0.000	****	0.000	0.000	0.000
100.000	0.524	337.009	0.421	-0.179	99.999	0.524	0.421	0.457	337.009
200.000	0.743	339.721	1.450	-0.582	199.992	0.221	1.450	1.562	338.134
300.000	0.652	329.671	2.548	-1.094	299.985	0.152	2.548	2.773	336.776
400.000	0.880	329.759	3.703	-1.767	399.976	0.229	3.703	4.103	334.483
500.000	0.892	332.537	5.057	-2.513	499.964	0.045	5.057	5.647	333.573
600.000	0.798	312.072	6.214	-3.389	599.953	0.314	6.214	7.078	331.392
700.000	0.826	302.359	7.067	-4.515	699.943	0.140	7.067	8.386	327.424
800.000	1.048	314.933	8.099	-5.772	799.930	0.301	8.099	9.945	324.524
900.000	0.911	309.965	9.255	-7.028	899.916	0.161	9.255	11.621	322.787
1000.000	0.924	287.946	10.014	-8.405	999.903	0.351	10.014	13.074	319.993
1100.000	1.061	299.167	10.714	-9.980	1099.888	0.237	10.714	14.642	317.030
1200.000	1.052	294.028	11.539	-11.627	1199.871	0.095	11.539	16.381	314.781
1300.000	1.154	286.925	12.206	-13.429	1299.853	0.170	12.206	18.147	312.267
1400.000	1.181	294.741	12.930	-15.328	1399.832	0.161	12.930	20.053	310.149
1500.000	1.264	291.353	13.763	-17.291	1499.809	0.110	13.763	22.100	308.518
1600.000	1.162	288.815	14.491	-19.278	1599.787	0.115	14.491	24.117	306.932
1700.000	1.043	274.591	14.891	-21.145	1699.768	0.297	14.891	25.862	305.155
1800.000	1.470	267.688	14.912	-23.334	1799.744	0.452	14.912	27.692	302.581
1900.000	1.414	255.490	14.551	-25.810	1899.713	0.311	14.551	29.629	299.413
2000.000	1.546	255.820	13.912	-28.312	1999.679	0.132	13.912	31.546	296.168
2100.000	1.561	248.366	13.079	-30.886	2099.643	0.202	13.079	33.541	292.951
2200.000	1.317	245.577	12.102	-33.199	2199.611	0.253	12.102	35.336	290.028
2300.000	1.435	237.570	10.955	-35.302	2299.582	0.225	10.955	36.963	287.241
2400.000	2.070	235.355	9.257	-37.845	2399.535	0.639	9.257	38.960	283.745
2500.000	2.254	235.313	7.111	-40.948	2499.464	0.184	7.111	41.561	279.851
2600.000	2.387	236.737	4.849	-44.306	2599.382	0.145	4.849	44.571	276.246
2700.000	1.982	259.462	3.391	-47.748	2699.311	0.948	3.391	47.868	274.062
2800.000	1.962	275.233	3.230	-51.153	2799.252	0.541	3.230	51.255	273.614
2900.000	2.043	287.419	3.920	-54.558	2899.192	0.433	3.920	54.699	274.110
3000.000	2.018	296.528	5.240	-57.834	2999.129	0.323	5.240	58.071	275.177
3100.000	2.001	305.494	7.040	-60.830	3099.068	0.314	7.040	61.236	276.601
3200.000	1.936	316.698	9.283	-63.410	3199.009	0.389	9.283	64.086	278.329
3300.000	1.690	315.831	11.570	-65.596	3298.959	0.248	11.570	66.609	280.003
3400.000	1.456	320.457	13.607	-67.432	3398.921	0.266	13.607	68.792	281.409
3500.000	1.725	321.322	15.762	-69.182	3498.883	0.270	15.762	70.955	282.835
3600.000	1.704	316.349	18.014	-71.149	3598.838	0.150	18.014	73.394	284.208
3700.000	1.788	323.652	20.346	-73.100	3698.792	0.237	20.346	75.879	285.553

3800.000	1.953	317.611	22.861	-75.174	3798.739	0.257	22.861	78.573	286.915
3900.000	2.043	322.918	25.541	-77.397	3898.678	0.206	25.541	81.502	288.263
4000.000	1.989	309.343	28.064	-79.814	3998.617	0.479	28.064	84.604	289.372
4100.000	1.972	295.525	29.906	-82.709	4098.557	0.477	29.906	87.950	289.879
4200.000	1.724	278.840	30.878	-85.749	4198.506	0.590	30.878	91.139	289.804
4300.000	1.585	248.290	30.598	-88.520	4298.466	0.882	30.598	93.659	289.068
4400.000	2.256	229.696	28.813	-91.306	4398.410	0.908	28.813	95.745	287.514
4500.000	2.238	223.903	26.133	-94.162	4498.334	0.228	26.133	97.721	285.511
4600.000	1.921	228.882	23.623	-96.779	4598.268	0.365	23.623	99.620	283.717
4700.000	1.232	223.793	21.745	-98.786	4698.229	0.703	21.745	101.151	282.414
4800.000	0.875	204.227	20.273	-99.843	4798.212	0.502	20.273	101.880	281.478
4900.000	1.173	154.537	18.653	-99.716	4898.198	0.902	18.653	101.446	280.595
5000.000	0.718	161.462	17.134	-99.077	4998.184	0.468	17.134	100.547	279.812
5100.000	0.816	214.202	15.951	-99.278	5098.177	0.687	15.951	100.551	279.128
5200.000	0.920	233.663	14.886	-100.325	5198.165	0.311	14.886	101.423	278.440
5300.000	1.140	239.444	13.904	-101.828	5298.149	0.243	13.904	102.773	277.775
5400.000	0.912	242.200	13.027	-103.389	5398.133	0.234	13.027	104.206	277.182
5500.000	0.997	271.818	12.684	-104.962	5498.120	0.495	12.684	105.726	276.890
5600.000	1.018	269.165	12.699	-106.720	5598.104	0.051	12.699	107.473	276.786
5700.000	0.703	284.411	12.838	-108.203	5698.093	0.387	12.838	108.962	276.767
5800.000	0.609	229.565	12.647	-109.201	5798.087	0.610	12.647	109.931	276.606
5900.000	0.874	208.521	11.632	-109.970	5898.079	0.376	11.632	110.583	276.038
6000.000	1.774	221.511	9.803	-111.360	5998.052	0.944	9.803	111.790	275.031
6100.000	1.928	231.504	7.596	-113.702	6098.000	0.357	7.596	113.956	273.822
6200.000	1.373	222.823	5.670	-115.833	6197.958	0.607	5.670	115.972	272.803
6300.000	1.465	234.348	4.046	-117.687	6297.927	0.299	4.046	117.756	271.969
6400.000	0.823	254.806	3.113	-119.419	6397.907	0.751	3.113	119.460	271.493
6500.000	1.157	240.150	2.422	-120.988	6497.892	0.416	2.422	121.012	271.147
6600.000	0.974	255.392	1.705	-122.686	6597.875	0.336	1.705	122.698	270.796
6700.000	0.991	238.771	1.043	-124.248	6697.861	0.285	1.043	124.252	270.481
6800.000	0.806	245.353	0.301	-125.627	6797.848	0.211	0.301	125.627	270.137
6900.000	1.145	232.074	-0.607	-127.055	6897.834	0.405	-0.607	127.057	269.726
7000.000	0.919	235.322	-1.678	-128.503	6997.818	0.234	-1.678	128.514	269.252
7100.000	1.013	232.789	-2.668	-129.865	7097.803	0.103	-2.668	129.893	268.823
7200.000	0.944	192.424	-4.007	-130.746	7197.790	0.678	-4.007	130.808	268.245
7300.000	0.948	82.037	-4.697	-130.105	7297.783	1.553	-4.697	130.189	267.933
7400.000	1.025	39.649	-3.893	-128.715	7397.769	0.717	-3.893	128.774	268.267
7500.000	0.578	38.073	-2.808	-127.833	7497.759	0.447	-2.808	127.864	268.742
7600.000	0.840	34.307	-1.805	-127.109	7597.751	0.266	-1.805	127.122	269.186
7700.000	0.708	56.965	-0.863	-126.178	7697.742	0.330	-0.863	126.181	269.608
7800.000	0.747	79.110	-0.403	-125.020	7797.734	0.282	-0.403	125.021	269.815
7900.000	0.545	24.433	0.153	-124.183	7897.729	0.620	0.153	124.183	270.070
7950.000	0.713	15.755	0.669	-124.000	7947.726	0.386	0.669	124.002	270.309

958 Feet