

Company: ANADARKO PETROLEUM  
 Well: DRY CREEK 1  
 API: 05-001-08982  
 Rig Name: PRODUCTION/VES  
 State/County: COLORADO /ADAMS  
 Latitude: 39.947, Longitude: -104.974  
 Directions are relative to True North  
 VS-Azi: 0.000 Degrees



**FIELD COPY ONLY (NOT DEFINITIVE)**

Depth Reference : RKB = GROUND LEVEL

**DRILLOG HA GYRO SURVEY CALCULATIONS**

Filename: run1-de\_01.ut  
 Minimum Curvature Method  
 Report Date/Time: 4/4/2014 / 14:56

VAUGHN ENERGY SERVICES  
 HENDERSON, COLORADO  
 303-853-4976  
 NICK KULA

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	****
100.000	0.243	255.927	100.000	-0.052	-0.206	-0.052	0.212	255.927	0.243
200.000	0.203	252.275	199.999	-0.157	-0.581	-0.157	0.601	254.851	0.042
300.000	0.245	248.308	299.998	-0.290	-0.948	-0.290	0.991	252.983	0.044
400.000	0.158	290.136	399.998	-0.322	-1.276	-0.322	1.316	255.855	0.165
500.000	0.296	20.429	499.997	-0.032	-1.316	-0.032	1.316	268.593	0.336
600.000	0.344	25.844	599.995	0.479	-1.095	0.479	1.195	293.646	0.057
700.000	0.427	13.040	699.993	1.112	-0.880	1.112	1.418	321.637	0.119
800.000	0.433	13.475	799.990	1.842	-0.708	1.842	1.973	338.968	0.007
900.000	0.521	14.237	899.987	2.650	-0.508	2.650	2.698	349.142	0.089
1000.000	0.474	5.912	999.983	3.502	-0.354	3.502	3.520	354.233	0.086
1100.000	0.445	2.490	1099.980	4.302	-0.294	4.302	4.312	356.087	0.040
1200.000	0.430	343.684	1199.977	5.049	-0.383	5.049	5.064	355.665	0.144
1300.000	0.235	320.929	1299.975	5.568	-0.617	5.568	5.603	353.674	0.232
1400.000	0.293	292.356	1399.974	5.825	-0.983	5.825	5.907	350.419	0.142
1500.000	0.428	299.286	1499.972	6.105	-1.546	6.105	6.298	345.793	0.141
1600.000	0.495	280.953	1599.969	6.370	-2.295	6.370	6.771	340.184	0.161
1700.000	0.531	280.122	1699.965	6.533	-3.176	6.533	7.264	334.076	0.037
1800.000	0.431	284.071	1799.962	6.706	-3.997	6.706	7.807	329.206	0.106
1900.000	0.647	276.404	1899.957	6.861	-4.922	6.861	8.444	324.341	0.227
2000.000	0.616	279.551	1999.951	7.013	-6.013	7.013	9.238	319.388	0.047
2100.000	0.644	273.946	2099.945	7.140	-7.104	7.140	10.072	315.147	0.068
2200.000	0.655	276.269	2199.939	7.242	-8.233	7.242	10.964	311.336	0.028
2300.000	0.643	283.187	2299.932	7.432	-9.347	7.432	11.941	308.489	0.079
2400.000	0.695	266.784	2399.926	7.526	-10.499	7.526	12.918	305.634	0.198
2500.000	0.637	261.862	2499.919	7.413	-11.655	7.413	13.813	302.458	0.081
2600.000	0.816	240.628	2599.911	6.985	-12.827	6.985	14.605	298.573	0.320
2700.000	1.126	227.207	2699.897	5.968	-14.168	5.968	15.374	292.844	0.383
2800.000	1.392	217.432	2799.872	4.336	-15.627	4.336	16.218	285.509	0.341
2900.000	1.683	220.076	2899.836	2.248	-17.311	2.248	17.457	277.399	0.300

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Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
8000.000	1.958	73.243	7998.879	24.389	-63.032	24.389	67.586	291.153	0.453
8100.000	1.774	71.543	8098.826	25.371	-59.929	25.371	65.078	292.946	0.192
8200.000	1.321	87.726	8198.789	25.907	-57.309	25.907	62.892	294.326	0.625
8300.000	1.319	77.059	8298.763	26.210	-55.035	26.210	60.957	295.466	0.245
8400.000	1.177	93.112	8398.740	26.412	-52.887	26.412	59.116	296.538	0.376

HORIZONTAL DISPLACEMENT IS  
59.116 FEET AT 296.538 DEGREES