

Company: ANADARKO PETROLEUM  
 Well: FEHRN 1-28  
 API: 05-123-08835  
 Rig Name: PRODUCTION/CORE-TECH  
 State/County: COLORADO / WELD  
 Latitude: 40.106, Longitude: -104.787  
 Directions are relative to True North  
 VS-Azi: 0.000 Degrees



**FIELD COPY ONLY (NOT DEFINITIVE)**

Depth Reference : RKB = GROUND LEVEL

**DRILLOG MS GYRO SURVEY CALCULATIONS**

Filename: msgyro\_run01-01-de\_01.ut

Minimum Curvature Method

Report Date/Time: 6/3/2014 / 19:44

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	0.585	50.718	99.998	0.323	0.395	0.323	0.511	50.718	0.585
200.000	0.293	53.311	199.995	0.799	0.996	0.799	1.277	51.237	0.293
300.000	0.210	19.977	299.994	1.124	1.263	1.124	1.691	48.333	0.165
400.000	0.241	349.971	399.994	1.503	1.289	1.503	1.980	40.619	0.120
500.000	0.236	335.263	499.993	1.897	1.166	1.897	2.226	31.580	0.061
600.000	0.210	308.602	599.992	2.198	0.936	2.198	2.389	23.076	0.106
700.000	0.383	279.566	699.991	2.368	0.464	2.368	2.413	11.082	0.224
800.000	0.510	281.733	799.988	2.514	-0.302	2.514	2.532	353.156	0.129
900.000	0.607	287.870	899.983	2.767	-1.242	2.767	3.033	335.832	0.113
1000.000	0.744	285.540	999.976	3.104	-2.371	3.104	3.906	322.619	0.140
1100.000	0.721	291.612	1099.968	3.509	-3.582	3.509	5.014	314.414	0.081
1200.000	0.738	314.080	1199.960	4.189	-4.630	4.189	6.244	312.141	0.285
1300.000	0.774	327.141	1299.951	5.205	-5.459	5.205	7.542	313.634	0.176
1400.000	0.681	333.507	1399.943	6.304	-6.090	6.304	8.765	315.986	0.123
1500.000	0.754	352.300	1499.935	7.488	-6.443	7.488	9.878	319.286	0.245
1600.000	0.714	332.128	1599.927	8.691	-6.823	8.691	11.049	321.865	0.260
1700.000	0.642	325.262	1699.920	9.702	-7.433	9.702	12.222	322.541	0.109
1800.000	0.637	306.679	1799.914	10.494	-8.199	10.494	13.317	322.001	0.207
1900.000	0.665	286.188	1899.908	10.988	-9.202	10.988	14.332	320.056	0.233
2000.000	0.595	259.173	1999.902	11.052	-10.270	11.052	15.087	317.102	0.302
2100.000	0.714	228.328	2099.896	10.541	-11.245	10.541	15.413	313.148	0.366
2200.000	0.757	241.528	2199.888	9.812	-12.291	9.812	15.727	308.600	0.175
2300.000	0.658	222.493	2299.880	9.074	-13.260	9.074	16.067	304.384	0.254
2400.000	0.666	221.687	2399.874	8.216	-14.034	8.216	16.262	300.346	0.013
2500.000	0.616	197.980	2499.867	7.270	-14.587	7.270	16.298	296.493	0.268
2600.000	0.694	164.139	2599.861	6.176	-14.587	6.176	15.841	292.948	0.389
2700.000	0.765	165.086	2699.853	4.949	-14.250	4.949	15.085	289.152	0.071
2800.000	0.744	155.199	2799.845	3.715	-13.806	3.715	14.297	285.060	0.132
2900.000	0.734	168.521	2899.836	2.498	-13.406	2.498	13.637	280.555	0.172



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
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HORIZONTAL DISPLACEMENT IS  
30.379 FEET AT 245.758 DEGREES