



FIELD COPY ONLY (NOT DEFINITIVE)

Depth Reference : KB= GROUND LEVEL

DRILLOG GYRO SURVEY CALCULATIONS

Filename: psc32-9a-de_01.ut

Minimum Curvature Method

Report Date/Time: 4/15/2014 / 16:22

Vaughn Energy Services

Pinedale, Wyoming

866-835-8333

Jay Hinman

PSC 32-9A

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	0.234	43.616	100.000	0.148	0.141	0.148	0.204	43.616	0.234
200.000	0.348	317.159	199.999	0.519	0.075	0.519	0.524	8.269	0.408
300.000	0.301	3.440	299.997	1.004	-0.115	1.004	1.011	353.442	0.259
400.000	0.147	97.447	399.997	1.250	0.028	1.250	1.251	1.278	0.345
500.000	0.442	309.740	499.996	1.480	-0.141	1.480	1.487	354.549	0.572
600.000	0.175	55.965	599.995	1.812	-0.311	1.812	1.839	350.253	0.519
700.000	0.471	307.860	699.994	2.150	-0.509	2.150	2.210	346.675	0.551
800.000	0.317	221.310	799.992	2.194	-1.017	2.194	2.419	335.143	0.552
900.000	0.530	293.934	899.990	2.174	-1.622	2.174	2.712	323.274	0.530
1000.000	0.494	297.121	999.986	2.558	-2.428	2.558	3.527	316.490	0.046
1100.000	0.149	317.340	1099.984	2.851	-2.901	2.851	4.067	314.502	0.358
1200.000	0.194	310.691	1199.984	3.057	-3.118	3.057	4.366	314.439	0.049
1300.000	0.344	197.086	1299.983	2.881	-3.335	2.881	4.406	310.823	0.458
1400.000	0.543	269.138	1399.981	2.586	-3.897	2.586	4.677	303.574	0.546
1500.000	0.496	275.808	1499.977	2.623	-4.802	2.623	5.471	298.648	0.076
1600.000	0.683	273.217	1599.971	2.700	-5.827	2.700	6.423	294.863	0.188
1700.000	0.650	196.641	1699.966	2.190	-6.585	2.190	6.939	288.399	0.826
1800.000	0.761	217.495	1799.959	1.120	-7.151	1.120	7.238	278.902	0.277
1900.000	0.879	215.069	1899.949	-0.034	-7.996	-0.034	7.996	269.754	0.124
2000.000	0.954	256.331	1999.937	-0.859	-9.246	-0.859	9.285	264.692	0.650
2100.000	0.988	242.367	2099.923	-1.455	-10.818	-1.455	10.915	262.338	0.238
2200.000	0.766	211.029	2199.911	-2.428	-11.926	-2.428	12.171	258.494	0.520
2300.000	0.851	238.259	2299.902	-3.391	-12.902	-3.391	13.340	255.274	0.390
2400.000	1.049	227.344	2399.888	-4.402	-14.207	-4.402	14.874	252.784	0.267
2500.000	0.690	209.587	2499.877	-5.546	-15.178	-5.546	16.159	249.927	0.445
2600.000	1.126	255.397	2599.865	-6.317	-16.426	-6.317	17.598	248.963	0.813
2700.000	1.230	287.066	2699.845	-6.250	-18.402	-6.250	19.434	251.240	0.650
2800.000	1.248	258.210	2799.822	-6.158	-20.494	-6.158	21.399	253.276	0.618
2900.000	0.940	212.427	2899.806	-7.073	-22.000	-7.073	23.109	252.178	0.897
3000.000	1.255	225.978	2999.788	-8.526	-23.228	-8.526	24.743	249.843	0.406
3100.000	1.148	222.437	3099.766	-10.026	-24.691	-10.026	26.649	247.899	0.130
3200.000	2.024	225.065	3199.726	-12.013	-26.617	-12.013	29.202	245.709	0.879
3300.000	1.939	211.220	3299.667	-14.707	-28.743	-14.707	32.287	242.903	0.485
3400.000	1.259	210.326	3399.628	-17.102	-30.175	-17.102	34.685	240.457	0.681

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
3500.000	1.376	200.947	3499.601	-19.171	-31.159	-19.171	36.585	238.397	0.245
3600.000	1.251	199.368	3599.575	-21.322	-31.950	-21.322	38.412	236.282	0.130
3700.000	1.202	172.178	3699.553	-23.392	-32.169	-23.392	39.775	233.978	0.579
3800.000	1.258	176.026	3799.530	-25.526	-31.951	-25.526	40.895	231.378	0.100
3900.000	1.507	190.222	3899.501	-27.915	-32.108	-27.915	42.546	228.996	0.421
4000.000	1.586	189.522	3999.465	-30.574	-32.570	-30.574	44.672	226.811	0.082
4100.000	1.342	220.081	4099.433	-32.835	-33.553	-32.835	46.946	225.620	0.807
4200.000	1.216	224.350	4199.408	-34.489	-35.048	-34.489	49.172	225.461	0.158
4300.000	0.933	198.082	4299.391	-36.022	-36.042	-36.022	50.957	225.017	0.560
4400.000	1.085	243.316	4399.377	-37.221	-37.141	-37.221	52.582	224.939	0.789
4500.000	0.596	224.392	4499.366	-38.017	-38.351	-38.017	54.001	225.250	0.556
4600.000	0.168	143.950	4599.364	-38.507	-38.628	-38.507	54.543	225.090	0.591
4700.000	0.290	187.805	4699.364	-38.876	-38.576	-38.876	54.767	224.779	0.205
4800.000	0.593	285.737	4799.362	-38.986	-39.109	-38.986	55.222	225.090	0.695
4900.000	0.434	264.601	4899.358	-38.881	-39.984	-38.881	55.772	225.802	0.245
5000.000	0.607	238.698	4999.354	-39.192	-40.814	-39.192	56.584	226.161	0.288
5100.000	0.461	196.338	5099.350	-39.853	-41.379	-39.853	57.450	226.077	0.409
5200.000	0.582	250.480	5199.346	-40.408	-41.972	-40.408	58.262	226.087	0.487
5300.000	0.880	261.538	5299.338	-40.691	-43.211	-40.691	59.354	226.720	0.328
5400.000	0.775	260.647	5399.327	-40.914	-44.638	-40.914	60.552	227.492	0.106
5500.000	0.564	276.229	5499.321	-40.971	-45.794	-40.971	61.447	228.182	0.277
5600.000	0.250	28.118	5599.319	-40.724	-46.181	-40.724	61.572	228.593	0.697
5700.000	0.331	353.505	5699.318	-40.245	-46.110	-40.245	61.203	228.886	0.189
5800.000	0.384	153.759	5799.317	-40.259	-45.995	-40.259	61.125	228.804	0.704
5900.000	0.377	261.106	5899.316	-40.611	-46.171	-40.611	61.490	228.666	0.613
6000.000	0.440	209.482	5999.313	-40.996	-46.685	-40.996	62.130	228.712	0.360
6100.000	1.010	206.939	6099.305	-42.116	-47.274	-42.116	63.313	228.302	0.571
6200.000	0.639	200.404	6199.295	-43.425	-47.867	-43.425	64.630	227.786	0.383
6300.000	0.818	183.241	6299.287	-44.660	-48.102	-44.660	65.638	227.125	0.281
6400.000	0.582	218.579	6399.279	-45.770	-48.459	-45.770	66.657	226.634	0.481
6500.000	0.538	216.038	6499.275	-46.547	-49.052	-46.547	67.621	226.501	0.050
6600.000	0.361	253.061	6599.272	-47.018	-49.629	-47.018	68.365	226.548	0.331
6700.000	0.454	269.213	6699.269	-47.115	-50.326	-47.115	68.939	226.887	0.147
6800.000	0.118	199.012	6799.268	-47.218	-50.756	-47.218	69.323	227.068	0.429
6900.000	0.302	38.857	6899.268	-47.109	-50.624	-47.109	69.152	227.060	0.415
7000.000	0.646	107.144	6999.265	-47.070	-49.919	-47.070	68.611	226.683	0.604

HORIZONTAL DISPLACEMENT IS
68.611 FEET AT 226.683 DEGREES