



Gyroscopic Survey Report
for
KP KAUFMAN

Well Location	WELD, CO
Well Name	CARL R DEEPE B#1
Rig Number	FMC 119
Survey Date	3/31/2014
Latitude	40.1292000°N
North Reference	True North
Grid Correction	None
Depth Reference	GL (0.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 286.43Azim (deg)
Definitive Survey	CARL R DEEPE B#1
Operator(s)	K. GAUSEN

Well Notes

Survey Report

Well Name: CARL R DEEPE B#1
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Survey Date: 3/31/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Closure Distance ft	Closure Direction deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.84	302.52	100.00	0.71	0.40	-0.62	0.84	0.74	302.52
200.00	0.36	328.59	199.99	1.65	1.06	-1.40	0.55	1.76	306.98
300.00	0.57	32.87	299.99	1.74	1.74	-1.30	0.52	2.17	323.24
400.00	0.36	54.10	399.98	1.40	2.34	-0.77	0.26	2.46	341.65
500.00	0.63	90.87	499.98	0.69	2.51	0.03	0.40	2.51	0.61
600.00	0.60	102.58	599.98	-0.37	2.39	1.09	0.13	2.62	24.45
700.00	0.59	113.29	699.97	-1.40	2.07	2.07	0.11	2.93	44.99
800.00	0.52	104.68	799.97	-2.36	1.75	2.98	0.11	3.46	59.55
900.00	0.23	129.31	899.96	-3.00	1.51	3.58	0.33	3.88	67.08
1000.00	0.24	93.74	999.96	-3.39	1.37	3.94	0.14	4.17	70.77
1100.00	0.20	129.56	1099.96	-3.75	1.25	4.28	0.14	4.46	73.77
1200.00	0.07	131.57	1199.96	-3.97	1.09	4.46	0.14	4.59	76.25
1300.00	0.19	226.23	1299.96	-3.94	0.94	4.39	0.21	4.49	77.94
1400.00	0.27	262.82	1399.96	-3.65	0.79	4.04	0.16	4.11	78.89
1500.00	0.27	264.86	1499.96	-3.21	0.74	3.57	0.01	3.65	78.25
1600.00	0.51	261.74	1599.96	-2.59	0.66	2.90	0.23	2.97	77.20
1700.00	0.44	282.48	1699.95	-1.81	0.68	2.08	0.18	2.19	71.99
1800.00	0.32	295.98	1799.95	-1.15	0.88	1.46	0.15	1.70	58.78
1900.00	0.52	297.10	1899.95	-0.43	1.21	0.80	0.20	1.45	33.57
2000.00	0.53	312.99	1999.94	0.43	1.73	0.06	0.15	1.73	2.10
2100.00	0.70	297.64	2099.94	1.44	2.33	-0.81	0.23	2.47	340.76
2200.00	1.00	294.61	2199.93	2.90	2.98	-2.15	0.31	3.67	324.20
2300.00	1.42	288.72	2299.91	5.00	3.74	-4.11	0.43	5.56	312.26
2400.00	1.44	304.23	2399.87	7.44	4.84	-6.33	0.39	7.97	307.44
2500.00	1.03	313.58	2499.85	9.43	6.17	-8.02	0.46	10.11	307.58
2600.00	0.79	305.87	2599.84	10.88	7.19	-9.22	0.27	11.69	307.94
2700.00	0.41	312.98	2699.83	11.84	7.83	-10.04	0.39	12.73	307.97
2800.00	0.23	294.99	2799.83	12.36	8.16	-10.48	0.20	13.29	307.91
2900.00	0.26	255.23	2899.83	12.76	8.19	-10.89	0.17	13.63	306.95
3000.00	0.42	272.86	2999.83	13.31	8.15	-11.48	0.19	14.08	305.38
3100.00	0.48	260.89	3099.83	14.05	8.10	-12.25	0.11	14.69	303.47
3200.00	0.83	255.50	3199.82	15.04	7.86	-13.36	0.35	15.50	300.46
3300.00	0.88	267.17	3299.81	16.38	7.64	-14.82	0.18	16.68	297.26
3400.00	1.39	266.71	3399.79	18.25	7.53	-16.80	0.51	18.41	294.14
3500.00	1.91	271.92	3499.75	21.00	7.52	-19.68	0.54	21.06	290.91

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MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	Closure Distance ft	Closure Direction deg
3600.00	2.09	295.08	3599.69	24.41	8.35	-22.99	0.82	24.46	289.95
3700.00	2.39	295.05	3699.61	28.28	10.00	-26.53	0.31	28.35	290.66
3800.00	2.22	292.31	3799.53	32.27	11.62	-30.21	0.21	32.37	291.04
3900.00	1.93	293.43	3899.46	35.86	13.03	-33.55	0.30	35.99	291.22
4000.00	1.77	284.40	3999.41	39.07	14.08	-36.59	0.33	39.20	291.05
4100.00	1.72	278.63	4099.37	42.10	14.69	-39.56	0.18	42.20	290.37
4200.00	1.49	271.76	4199.33	44.85	14.95	-42.35	0.29	44.91	289.45
4300.00	1.45	271.23	4299.29	47.33	15.02	-44.92	0.04	47.36	288.49
4400.00	1.30	269.23	4399.27	49.64	15.03	-47.32	0.16	49.65	287.62
4500.00	0.85	265.36	4499.25	51.42	14.95	-49.20	0.45	51.42	286.91
4578.00	0.87	265.04	4577.24	52.51	14.86	-50.37	0.02	52.51	286.43