

K.P. KAUFFMAN CO. INC

SURVEY REPORT

CHAMPLIN 86 AMOCO F #7

8/23/2015



The **Ultimate Partner** In Wellbore Placement

CUSTOMER K.P. KAUFFMAN CO. INC
PROJECT CHAMPLIN 86 AMOCO F #7
FIELD WATTENBERG

SDI JOB NO. 306068
SDI DISTRICT Casper
SDI KIT/UNIT

SITE INFORMATION

Site Name CHAMPLIN 86 AMOCO F #7
Lat/Long 40.078497° N, 105.01068° W
Northing
Easting

Section 4
Township 1 N
Range 68 W

MAP INFORMATION

North Reference True North
Grid Correction
System
Datum
Map Zone



WELL INFORMATION

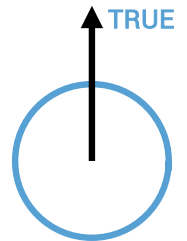
Lat/Long 40.078497° N, 105.01068° W
Northing
Easting
UWI 05-123-12624 UWBI 05-123-12624

DEPTH AND ELEVATION REFERENCE

Ground Level 5046 ft above Mean Sea Level
Reference Datum GROUND LEVEL
Reference Height 0 ft above G.L.
Reference Elevation 5046 ft

VERTICAL SECTION REFERENCE

+N/-S 0 ft
+E/-W 0 ft
Proposal Direction
Calculation Method Minimum Curvature



LOCAL GRAVITY REFERENCE INFORMATION

Local Gravity 999.032 mG [computed]

WELL NOTES

Keeper wireline gyro survey in 5.5 inch casing. All depths reference ground level.

OPERATORS

C JAKUES

SDI Operator Name (Printed)

SIGNATURE

DATE

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DISTANCE	CLOSURE DIRECTION
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
101.10	0.47	220.87	101.10	0.18	-0.32	-0.27	0.47	0.42	220.87
125.84	0.47	232.25	125.84	0.29	-0.46	-0.42	0.38	0.62	222.73
150.75	0.39	240.56	150.75	0.41	-0.56	-0.58	0.40	0.80	225.81
176.09	0.40	248.79	176.08	0.55	-0.63	-0.73	0.22	0.97	229.13
201.58	0.40	245.07	201.58	0.69	-0.70	-0.90	0.10	1.14	231.86
225.30	0.47	238.44	225.30	0.82	-0.79	-1.06	0.37	1.32	233.17
252.09	0.54	220.82	252.09	0.95	-0.94	-1.23	0.64	1.55	232.54
276.48	0.50	209.83	276.47	1.03	-1.12	-1.36	0.44	1.77	230.44
301.50	0.41	196.48	301.49	1.06	-1.31	-1.44	0.56	1.94	227.83
328.86	0.35	193.49	328.85	1.06	-1.48	-1.49	0.23	2.10	225.14
353.10	0.16	210.27	353.09	1.07	-1.58	-1.52	0.85	2.20	223.90
378.77	0.13	237.07	378.76	1.10	-1.63	-1.57	0.28	2.26	223.86
400.24	0.19	244.84	400.23	1.14	-1.66	-1.62	0.29	2.32	224.31
425.54	0.20	232.48	425.53	1.20	-1.70	-1.69	0.17	2.40	224.81
451.49	0.25	215.40	451.48	1.25	-1.78	-1.76	0.31	2.50	224.74
475.40	0.22	200.22	475.39	1.27	-1.86	-1.81	0.28	2.60	224.12
500.56	0.14	183.24	500.55	1.27	-1.94	-1.83	0.38	2.66	223.25
525.81	0.07	167.72	525.80	1.26	-1.99	-1.82	0.32	2.70	222.56
550.40	0.03	202.68	550.39	1.25	-2.01	-1.82	0.18	2.71	222.26
575.66	0.08	253.89	575.65	1.27	-2.02	-1.84	0.25	2.73	222.39
600.83	0.18	254.15	600.82	1.32	-2.03	-1.90	0.41	2.78	223.01
625.44	0.37	258.43	625.43	1.42	-2.06	-2.01	0.75	2.88	224.31
650.62	0.47	252.85	650.60	1.58	-2.11	-2.19	0.45	3.04	226.10
675.92	0.54	243.39	675.91	1.76	-2.19	-2.40	0.42	3.25	227.55
700.44	0.66	241.54	700.43	1.95	-2.31	-2.62	0.49	3.50	228.62
725.76	0.66	243.42	725.75	2.16	-2.45	-2.88	0.09	3.78	229.68
751.09	0.72	242.53	751.08	2.39	-2.58	-3.15	0.24	4.08	230.67
775.76	0.84	243.28	775.74	2.64	-2.74	-3.45	0.47	4.40	231.59
800.99	0.87	247.29	800.97	2.93	-2.89	-3.79	0.26	4.77	232.66
826.23	0.85	252.95	826.21	3.24	-3.02	-4.15	0.34	5.13	233.92
851.03	0.86	259.31	851.00	3.56	-3.11	-4.50	0.39	5.47	235.38

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
876.29	0.86	259.70	876.26	3.90	-3.18	-4.88	0.03	5.82	236.91
901.66	0.87	260.51	901.63	4.25	-3.24	-5.25	0.07	6.17	238.30
926.25	0.86	265.07	926.22	4.59	-3.29	-5.62	0.29	6.51	239.65
951.64	0.89	259.59	951.60	4.95	-3.34	-6.00	0.35	6.87	240.89
976.93	0.87	268.36	976.89	5.31	-3.38	-6.39	0.54	7.23	242.09
1001.66	0.86	263.59	1001.62	5.66	-3.41	-6.76	0.29	7.57	243.23
1027.10	0.92	263.51	1027.05	6.03	-3.45	-7.15	0.23	7.94	244.22
1052.56	0.89	265.12	1052.51	6.41	-3.49	-7.55	0.15	8.32	245.17
1077.12	0.85	274.42	1077.07	6.77	-3.50	-7.92	0.60	8.66	246.20
1101.93	0.88	274.81	1101.88	7.14	-3.47	-8.30	0.11	8.99	247.33
1126.84	0.86	267.95	1126.78	7.50	-3.46	-8.67	0.42	9.34	248.28
1151.07	0.94	257.73	1151.01	7.86	-3.50	-9.05	0.73	9.70	248.83
1175.96	0.92	264.77	1175.89	8.23	-3.57	-9.45	0.46	10.10	249.32
1200.83	0.94	276.87	1200.77	8.62	-3.56	-9.85	0.79	10.47	250.13
1225.05	0.94	277.10	1224.98	9.01	-3.51	-10.24	0.02	10.83	251.08
1253.94	0.95	260.57	1253.87	9.46	-3.52	-10.72	0.94	11.28	251.81
1278.73	0.98	267.48	1278.65	9.85	-3.56	-11.13	0.48	11.69	252.24
1303.52	0.94	269.61	1303.44	10.25	-3.58	-11.55	0.21	12.09	252.79
1327.76	0.94	274.88	1327.68	10.64	-3.56	-11.94	0.36	12.46	253.40
1352.01	0.97	271.66	1351.92	11.04	-3.54	-12.35	0.25	12.85	254.02
1376.26	0.99	268.84	1376.17	11.44	-3.54	-12.76	0.21	13.24	254.52
1401.19	1.00	267.43	1401.09	11.85	-3.55	-13.20	0.10	13.66	254.94
1425.99	1.02	269.72	1425.89	12.27	-3.56	-13.63	0.19	14.09	255.36
1453.48	1.05	273.74	1453.38	12.75	-3.54	-14.13	0.29	14.56	255.91
1478.42	1.09	273.82	1478.31	13.21	-3.51	-14.59	0.16	15.01	256.46
1502.91	1.06	270.17	1502.80	13.66	-3.50	-15.05	0.31	15.45	256.92
1527.64	1.12	268.30	1527.52	14.11	-3.50	-15.52	0.27	15.91	257.28
1552.47	1.06	269.36	1552.35	14.57	-3.51	-15.99	0.26	16.38	257.61
1576.75	1.07	266.73	1576.62	15.00	-3.53	-16.44	0.21	16.82	257.89
1602.43	1.02	270.65	1602.30	15.45	-3.54	-16.91	0.34	17.28	258.18
1628.42	1.09	266.17	1628.29	15.91	-3.55	-17.39	0.42	17.75	258.45
1650.06	1.05	272.66	1649.93	16.30	-3.56	-17.79	0.59	18.15	258.69

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
1676.13	1.05	269.75	1675.99	16.76	-3.55	-18.27	0.21	18.61	259.01
1701.91	1.03	270.31	1701.76	17.21	-3.55	-18.74	0.10	19.07	259.28
1727.59	1.06	273.63	1727.43	17.67	-3.53	-19.21	0.26	19.53	259.58
1753.55	1.05	277.50	1753.39	18.14	-3.49	-19.68	0.28	19.99	259.96
1778.97	1.04	277.00	1778.81	18.60	-3.43	-20.14	0.06	20.43	260.34
1800.61	1.00	280.92	1800.45	18.98	-3.37	-20.52	0.36	20.80	260.68
1826.83	0.99	288.07	1826.66	19.44	-3.25	-20.96	0.48	21.21	261.17
1852.23	1.03	286.57	1852.06	19.88	-3.12	-21.39	0.19	21.61	261.70
1878.46	1.06	290.06	1878.28	20.36	-2.97	-21.84	0.27	22.04	262.25
1900.35	0.97	299.38	1900.17	20.74	-2.81	-22.19	0.86	22.37	262.78
1925.87	0.96	301.26	1925.69	21.15	-2.59	-22.56	0.13	22.71	263.44
1952.10	0.92	302.51	1951.92	21.57	-2.37	-22.93	0.17	23.05	264.11
1978.35	0.87	301.69	1978.16	21.96	-2.15	-23.28	0.22	23.38	264.73
2003.79	0.80	302.93	2003.60	22.31	-1.95	-23.59	0.28	23.67	265.27
2025.85	0.75	310.15	2025.65	22.59	-1.78	-23.83	0.50	23.89	265.74
2051.89	0.78	298.21	2051.69	22.91	-1.58	-24.11	0.63	24.17	266.25
2077.59	0.74	315.67	2077.39	23.23	-1.38	-24.39	0.92	24.43	266.76
2103.76	0.75	324.85	2103.56	23.50	-1.12	-24.60	0.46	24.63	267.40
2125.13	0.92	322.54	2124.92	23.75	-0.87	-24.79	0.82	24.80	268.00
2151.43	1.03	323.94	2151.23	24.10	-0.51	-25.06	0.44	25.06	268.84
2177.75	1.01	322.44	2177.54	24.47	-0.13	-25.34	0.13	25.34	269.70
2203.13	1.04	319.19	2202.92	24.83	0.22	-25.63	0.25	25.63	270.49
2225.23	0.90	315.31	2225.02	25.15	0.50	-25.88	0.69	25.88	271.10
2251.46	0.76	306.67	2251.24	25.49	0.75	-26.16	0.71	26.17	271.63
2277.12	0.79	307.06	2276.90	25.81	0.95	-26.44	0.11	26.46	272.07
2303.51	0.82	315.34	2303.28	26.14	1.20	-26.72	0.46	26.74	272.57
2329.80	0.86	316.98	2329.57	26.47	1.48	-26.98	0.17	27.02	273.13
2351.27	0.85	322.31	2351.03	26.73	1.72	-27.19	0.37	27.24	273.62
2377.56	0.90	319.17	2377.32	27.05	2.03	-27.45	0.28	27.52	274.23
2402.70	0.95	311.52	2402.46	27.40	2.32	-27.73	0.53	27.83	274.78
2428.41	1.06	306.20	2428.17	27.82	2.60	-28.08	0.54	28.20	275.29
2450.06	1.10	305.58	2449.82	28.20	2.84	-28.41	0.23	28.56	275.71

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
2475.05	1.15	304.34	2474.80	28.66	3.12	-28.82	0.21	28.99	276.18
2500.85	1.15	302.44	2500.60	29.15	3.41	-29.25	0.15	29.45	276.64
2526.65	1.16	306.01	2526.39	29.64	3.70	-29.68	0.28	29.91	277.10
2551.77	1.12	303.41	2551.51	30.11	3.98	-30.09	0.29	30.35	277.54
2577.50	1.03	299.67	2577.23	30.57	4.24	-30.50	0.44	30.79	277.91
2603.43	0.91	302.42	2603.16	30.99	4.46	-30.88	0.48	31.20	278.22
2628.85	0.88	299.43	2628.57	31.37	4.67	-31.22	0.23	31.56	278.50
2650.84	0.89	306.78	2650.56	31.69	4.85	-31.50	0.52	31.87	278.75
2677.25	0.81	308.25	2676.97	32.06	5.09	-31.81	0.31	32.21	279.09
2703.05	0.85	310.27	2702.76	32.39	5.32	-32.10	0.19	32.54	279.42
2725.23	0.80	311.75	2724.95	32.68	5.53	-32.34	0.24	32.81	279.71
2751.91	0.78	315.42	2751.62	33.00	5.79	-32.61	0.20	33.12	280.06
2777.98	0.81	317.04	2777.69	33.31	6.05	-32.86	0.14	33.41	280.43
2804.03	0.78	317.42	2803.73	33.62	6.32	-33.10	0.10	33.70	280.80
2825.99	0.85	315.40	2825.69	33.89	6.54	-33.32	0.33	33.96	281.11
2853.00	0.88	315.40	2852.70	34.24	6.83	-33.61	0.11	34.29	281.49
2875.14	0.86	318.78	2874.84	34.52	7.08	-33.84	0.25	34.57	281.82
2902.16	0.91	319.47	2901.85	34.87	7.40	-34.11	0.21	34.90	282.23
2928.95	0.90	318.98	2928.64	35.22	7.72	-34.39	0.05	35.24	282.65
2950.47	0.94	320.26	2950.16	35.50	7.98	-34.61	0.20	35.52	282.98
2976.49	0.97	320.38	2976.17	35.85	8.31	-34.89	0.13	35.86	283.40
3004.16	1.00	322.72	3003.84	36.23	8.69	-35.18	0.18	36.24	283.87
3025.42	0.98	321.25	3025.09	36.53	8.98	-35.41	0.15	36.53	284.23
3051.63	1.01	321.38	3051.30	36.89	9.33	-35.69	0.10	36.89	284.65
3077.22	1.01	325.12	3076.89	37.25	9.69	-35.96	0.26	37.25	285.08
3103.39	1.05	321.57	3103.05	37.61	10.07	-36.24	0.28	37.62	285.53
3125.46	1.12	321.37	3125.12	37.95	10.40	-36.50	0.31	37.95	285.90
3150.99	1.12	321.80	3150.64	38.35	10.79	-36.81	0.04	38.36	286.33
3177.39	1.14	322.61	3177.04	38.76	11.20	-37.13	0.10	38.78	286.78
3203.82	1.16	321.15	3203.47	39.18	11.62	-37.46	0.13	39.22	287.23
3225.21	1.17	321.78	3224.85	39.53	11.96	-37.73	0.07	39.58	287.58
3251.68	1.15	318.81	3251.32	39.97	12.37	-38.07	0.24	40.03	287.99

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DISTANCE	CLOSURE DIRECTION
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
3278.05	1.16	318.46	3277.68	40.41	12.77	-38.42	0.05	40.49	288.38
3303.75	1.19	318.01	3303.37	40.85	13.16	-38.77	0.12	40.95	288.74
3326.18	1.20	318.62	3325.80	41.24	13.51	-39.08	0.07	41.35	289.06
3352.75	1.23	316.17	3352.36	41.71	13.92	-39.47	0.24	41.85	289.43
3378.38	1.23	317.73	3377.98	42.18	14.32	-39.84	0.13	42.34	289.77
3400.60	1.23	316.96	3400.20	42.58	14.68	-40.17	0.08	42.76	290.07
3426.53	1.23	316.75	3426.13	43.05	15.08	-40.55	0.03	43.26	290.40
3453.19	1.28	317.71	3452.78	43.55	15.51	-40.94	0.21	43.78	290.75
3475.46	1.32	317.05	3475.05	43.97	15.88	-41.29	0.18	44.24	291.04
3501.46	1.32	318.54	3501.03	44.48	16.33	-41.69	0.13	44.77	291.39
3527.37	1.36	318.18	3526.94	44.98	16.78	-42.09	0.14	45.31	291.74
3553.45	1.38	316.77	3553.01	45.51	17.24	-42.51	0.16	45.88	292.07
3575.86	1.36	311.89	3575.42	45.97	17.61	-42.90	0.53	46.37	292.32
3602.73	1.41	315.06	3602.28	46.54	18.06	-43.37	0.35	46.98	292.61
3628.80	1.44	308.05	3628.34	47.12	18.49	-43.85	0.67	47.59	292.86
3650.65	1.43	315.00	3650.18	47.61	18.85	-44.26	0.80	48.11	293.07
3676.14	1.44	315.45	3675.67	48.16	19.31	-44.71	0.04	48.70	293.35
3702.23	1.45	312.45	3701.75	48.73	19.76	-45.18	0.29	49.32	293.62
3727.61	1.49	313.25	3727.12	49.31	20.20	-45.66	0.20	49.93	293.87
3753.14	1.44	308.78	3752.64	49.89	20.63	-46.15	0.50	50.55	294.09
3775.05	1.37	309.69	3774.55	50.38	20.97	-46.57	0.33	51.07	294.24
3800.64	1.30	306.83	3800.13	50.93	21.34	-47.04	0.36	51.65	294.40
3826.98	1.18	303.08	3826.46	51.46	21.67	-47.50	0.57	52.21	294.52
3853.32	1.19	297.86	3852.79	51.98	21.94	-47.97	0.41	52.75	294.58
3878.83	1.07	288.87	3878.31	52.48	22.14	-48.43	0.82	53.25	294.57
3900.97	1.08	287.98	3900.44	52.89	22.28	-48.83	0.08	53.67	294.52
3927.24	1.18	282.89	3926.70	53.41	22.41	-49.32	0.55	54.18	294.44
3952.93	1.32	277.93	3952.39	53.97	22.51	-49.88	0.69	54.72	294.29
3975.11	1.47	273.84	3974.56	54.51	22.57	-50.42	0.82	55.24	294.11
4000.01	1.51	266.35	3999.46	55.13	22.57	-51.06	0.80	55.83	293.84
4026.93	1.61	253.28	4026.36	55.79	22.44	-51.78	1.37	56.43	293.43
4052.39	1.39	260.11	4051.82	56.38	22.28	-52.43	1.10	56.97	293.02

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
4077.72	1.44	264.42	4077.13	56.96	22.20	-53.05	0.45	57.50	292.71
4101.30	1.58	265.25	4100.70	57.54	22.14	-53.66	0.61	58.05	292.42
4127.70	1.61	261.78	4127.10	58.22	22.06	-54.39	0.39	58.70	292.07
4150.86	1.49	260.01	4150.24	58.80	21.96	-55.01	0.57	59.23	291.76
4176.14	1.51	266.94	4175.52	59.41	21.88	-55.67	0.72	59.82	291.46
4202.44	1.59	262.01	4201.81	60.08	21.82	-56.38	0.59	60.45	291.15
4228.50	1.41	264.19	4227.86	60.71	21.73	-57.06	0.73	61.06	290.85
4250.41	1.53	266.79	4249.77	61.25	21.69	-57.62	0.63	61.57	290.63
4275.93	1.40	263.67	4275.27	61.86	21.63	-58.27	0.60	62.16	290.37
4302.18	1.48	267.19	4301.52	62.49	21.58	-58.93	0.45	62.76	290.11
4328.49	1.40	266.67	4327.81	63.12	21.55	-59.59	0.32	63.37	289.88
4354.12	1.43	267.38	4353.44	63.72	21.51	-60.22	0.15	63.95	289.66
4376.17	1.34	267.64	4375.48	64.23	21.49	-60.76	0.41	64.45	289.48
4402.58	1.32	268.32	4401.88	64.82	21.47	-61.37	0.12	65.02	289.28
4428.23	1.35	269.58	4427.53	65.39	21.46	-61.96	0.16	65.57	289.10
4450.37	1.31	269.73	4449.66	65.88	21.46	-62.48	0.18	66.06	288.95
4476.91	1.37	267.76	4476.19	66.48	21.44	-63.10	0.28	66.64	288.77
4502.77	1.37	271.12	4502.05	67.07	21.44	-63.71	0.31	67.22	288.60
4525.00	1.34	270.15	4524.28	67.58	21.44	-64.24	0.17	67.72	288.46
4551.51	1.30	270.66	4550.77	68.17	21.45	-64.85	0.14	68.30	288.30
4576.99	1.31	268.77	4576.25	68.73	21.44	-65.43	0.18	68.85	288.15
4603.59	1.35	267.04	4602.84	69.32	21.42	-66.04	0.21	69.43	287.97
4625.23	1.31	263.49	4624.48	69.80	21.38	-66.55	0.43	69.90	287.81
4651.89	1.33	265.72	4651.13	70.38	21.32	-67.16	0.21	70.46	287.61
4678.57	1.35	262.47	4677.80	70.96	21.26	-67.78	0.30	71.03	287.41
4700.29	1.37	260.59	4699.51	71.43	21.18	-68.29	0.22	71.50	287.23
4727.04	1.40	267.65	4726.26	72.04	21.12	-68.93	0.64	72.09	287.03
4753.24	1.38	266.09	4752.45	72.64	21.08	-69.56	0.15	72.69	286.86
4775.76	1.20	265.84	4774.96	73.12	21.04	-70.07	0.80	73.16	286.72
4802.73	1.25	268.53	4801.93	73.67	21.02	-70.65	0.27	73.71	286.57
4828.68	1.22	269.43	4827.88	74.21	21.01	-71.21	0.12	74.24	286.44
4850.55	1.01	266.52	4849.74	74.62	20.99	-71.63	0.99	74.64	286.33

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS %/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
4875.97	1.08	268.81	4875.16	75.06	20.97	-72.10	0.30	75.08	286.22
4902.44	1.03	270.63	4901.62	75.53	20.97	-72.58	0.22	75.55	286.12
4928.60	1.00	280.21	4927.77	75.99	21.01	-73.04	0.66	76.01	286.05
4953.96	0.88	271.24	4953.13	76.40	21.06	-73.46	0.77	76.41	286.00
4975.23	0.97	273.27	4974.40	76.73	21.07	-73.80	0.46	76.75	285.94
5002.28	0.92	267.09	5001.44	77.16	21.07	-74.24	0.42	77.18	285.85
5027.81	0.89	274.05	5026.97	77.55	21.08	-74.64	0.44	77.56	285.77
5054.17	0.84	271.68	5053.33	77.94	21.10	-75.04	0.23	77.95	285.70
5076.21	0.88	272.33	5075.36	78.26	21.11	-75.37	0.20	78.27	285.65
5101.80	0.82	268.44	5100.95	78.63	21.11	-75.75	0.35	78.64	285.57
5128.24	1.00	271.81	5127.39	79.04	21.11	-76.17	0.71	79.04	285.49
5150.31	0.87	271.61	5149.46	79.39	21.13	-76.53	0.57	79.39	285.43
5175.95	0.84	272.04	5175.09	79.76	21.14	-76.91	0.13	79.76	285.37
5202.20	0.83	265.98	5201.34	80.13	21.13	-77.29	0.34	80.13	285.29
5227.18	0.81	271.36	5226.32	80.47	21.12	-77.65	0.32	80.47	285.22
5253.46	0.89	274.50	5252.60	80.85	21.14	-78.04	0.34	80.85	285.16
5275.54	0.82	265.55	5274.67	81.17	21.14	-78.37	0.68	81.17	285.10
5301.27	0.84	268.94	5300.40	81.53	21.13	-78.74	0.20	81.53	285.02
5327.72	0.88	273.02	5326.84	81.91	21.13	-79.14	0.28	81.91	284.95
5354.08	0.92	269.96	5353.20	82.32	21.14	-79.56	0.24	82.32	284.88
5375.51	0.89	266.14	5374.63	82.64	21.13	-79.90	0.32	82.64	284.82
5401.77	0.73	277.42	5400.89	83.00	21.14	-80.27	0.85	83.00	284.76
5427.02	0.77	269.52	5426.13	83.33	21.16	-80.60	0.44	83.33	284.71
5452.64	0.73	261.52	5451.76	83.64	21.13	-80.93	0.45	83.64	284.64
5478.29	0.79	267.22	5477.40	83.96	21.10	-81.27	0.39	83.96	284.56
5503.38	0.78	264.55	5502.49	84.29	21.08	-81.61	0.15	84.29	284.48
5529.09	0.78	264.84	5528.20	84.62	21.05	-81.96	0.03	84.62	284.40
5550.65	0.75	260.29	5549.75	84.88	21.01	-82.25	0.31	84.89	284.33
5575.77	0.79	262.71	5574.87	85.19	20.96	-82.58	0.21	85.20	284.24
5601.63	0.80	266.90	5600.73	85.53	20.93	-82.94	0.23	85.54	284.16
5627.39	0.79	259.78	5626.49	85.86	20.88	-83.29	0.38	85.87	284.08
5652.60	0.58	269.60	5651.70	86.15	20.85	-83.59	0.96	86.15	284.01

MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
5678.40	0.60	261.16	5677.50	86.40	20.83	-83.86	0.35	86.41	283.95
5704.51	0.62	256.62	5703.60	86.65	20.78	-84.13	0.20	86.66	283.87
5725.01	0.59	258.84	5724.11	86.84	20.73	-84.34	0.18	86.85	283.81
5751.12	0.61	261.68	5750.21	87.09	20.68	-84.61	0.14	87.10	283.74
5776.67	0.63	261.39	5775.76	87.34	20.64	-84.88	0.06	87.36	283.67
5802.13	0.60	263.04	5801.21	87.59	20.61	-85.15	0.14	87.61	283.60
5827.81	0.65	255.90	5826.89	87.84	20.56	-85.43	0.36	87.87	283.53
5853.97	0.49	264.69	5853.06	88.08	20.51	-85.68	0.69	88.10	283.46
5875.97	0.54	265.70	5875.06	88.26	20.49	-85.88	0.22	88.29	283.42
5901.47	0.55	270.18	5900.56	88.49	20.48	-86.12	0.17	88.52	283.38
5927.83	0.53	256.70	5926.91	88.72	20.46	-86.36	0.48	88.75	283.33
5954.12	0.56	267.14	5953.21	88.95	20.42	-86.61	0.40	88.98	283.27
5979.15	0.58	268.40	5978.23	89.19	20.41	-86.86	0.08	89.22	283.23
6000.52	0.58	264.83	5999.60	89.39	20.40	-87.07	0.17	89.43	283.19
6025.65	0.66	266.12	6024.73	89.65	20.38	-87.34	0.33	89.69	283.13
6051.13	0.47	261.17	6050.21	89.88	20.35	-87.59	0.78	89.92	283.08
6076.63	0.49	260.12	6075.70	90.08	20.32	-87.80	0.09	90.12	283.03
6101.57	0.46	267.50	6100.65	90.27	20.30	-88.00	0.27	90.31	282.99
6127.11	0.45	268.50	6126.18	90.46	20.29	-88.20	0.04	90.51	282.95
6152.79	0.42	278.57	6151.86	90.65	20.30	-88.40	0.32	90.70	282.93
6177.76	0.38	272.61	6176.84	90.82	20.32	-88.57	0.22	90.87	282.92
6203.42	0.42	266.27	6202.50	91.00	20.32	-88.75	0.22	91.05	282.89
6225.10	0.35	268.83	6224.17	91.14	20.31	-88.90	0.33	91.19	282.87
6254.11	0.21	267.09	6253.18	91.27	20.31	-89.04	0.50	91.32	282.85
6275.80	0.21	297.86	6274.87	91.35	20.32	-89.11	0.51	91.40	282.85
6301.51	0.21	272.48	6300.58	91.44	20.35	-89.20	0.36	91.49	282.85
6326.42	0.17	286.59	6325.49	91.52	20.36	-89.28	0.25	91.57	282.84
6352.03	0.07	293.53	6351.10	91.58	20.38	-89.33	0.39	91.63	282.85
6377.74	0.18	240.08	6376.81	91.62	20.36	-89.38	0.56	91.67	282.83
6402.76	0.24	288.41	6401.83	91.70	20.36	-89.47	0.72	91.75	282.82
6428.39	0.12	311.25	6427.46	91.78	20.39	-89.54	0.55	91.83	282.83
6452.75	0.06	252.54	6451.82	91.81	20.41	-89.57	0.40	91.86	282.83

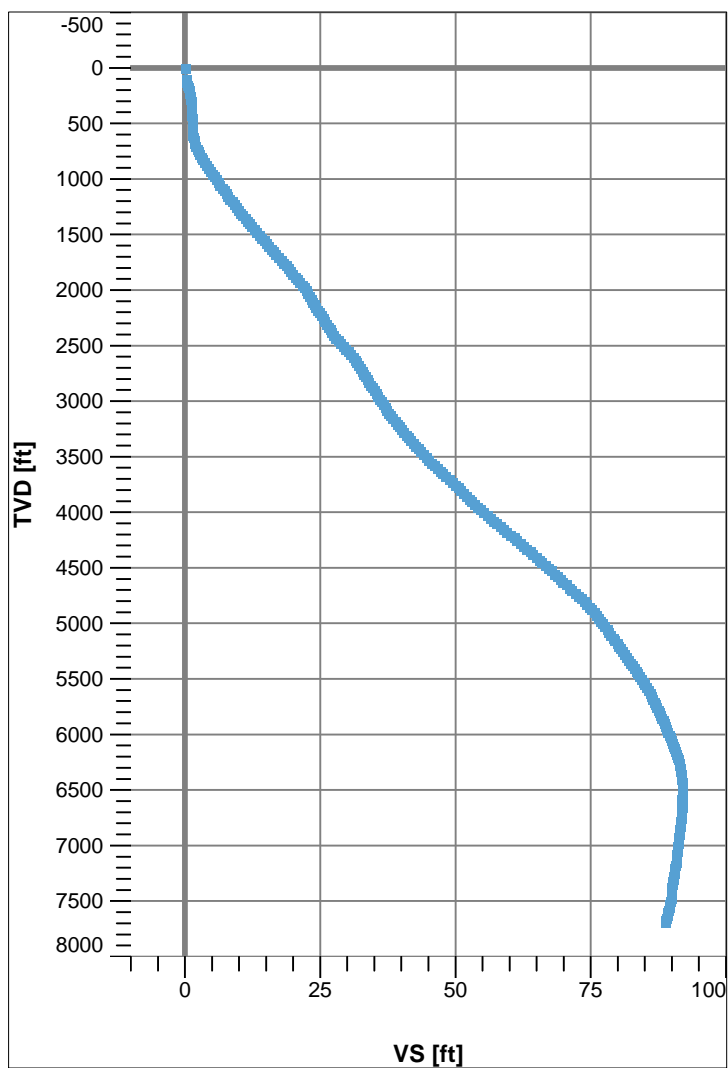
MD ft	INC deg	AZIM deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS °/100ft	CLOSURE DISTANCE ft	CLOSURE DIRECTION deg
6478.40	0.02	82.50	6477.47	91.82	20.40	-89.57	0.33	91.87	282.83
6500.06	0.10	23.48	6499.13	91.81	20.42	-89.56	0.41	91.86	282.84
6528.41	0.03	86.50	6527.48	91.80	20.44	-89.54	0.31	91.85	282.86
6553.27	0.10	106.14	6552.34	91.77	20.44	-89.52	0.27	91.82	282.86
6578.24	0.08	119.46	6577.31	91.73	20.42	-89.48	0.10	91.78	282.86
6602.56	0.15	322.35	6601.63	91.74	20.44	-89.48	0.94	91.79	282.87
6627.45	0.09	312.22	6626.52	91.78	20.48	-89.52	0.26	91.83	282.88
6652.47	0.13	60.32	6651.54	91.78	20.50	-89.51	0.70	91.83	282.90
6676.72	0.15	123.31	6675.79	91.73	20.50	-89.46	0.60	91.78	282.91
6701.76	0.12	56.61	6700.83	91.68	20.50	-89.41	0.59	91.73	282.91
6726.73	0.19	39.84	6725.80	91.64	20.54	-89.36	0.31	91.69	282.95
6751.16	0.23	88.65	6750.23	91.58	20.57	-89.29	0.73	91.63	282.98
6776.18	0.17	107.49	6775.25	91.49	20.56	-89.20	0.36	91.54	282.98
6801.32	0.05	78.43	6800.39	91.45	20.55	-89.15	0.50	91.49	282.98
6825.79	0.24	27.99	6824.86	91.42	20.60	-89.12	0.87	91.47	283.02
6850.83	0.20	37.93	6849.90	91.39	20.68	-89.06	0.23	91.43	283.07
6876.02	0.17	76.34	6875.09	91.34	20.73	-89.00	0.50	91.38	283.11
6900.42	0.27	114.49	6899.49	91.26	20.71	-88.91	0.72	91.30	283.11
6925.62	0.28	33.71	6924.69	91.18	20.74	-88.83	1.41	91.22	283.14
6950.73	0.20	45.96	6949.80	91.14	20.82	-88.76	0.38	91.17	283.20
6975.29	0.22	65.49	6974.36	91.08	20.87	-88.69	0.30	91.11	283.24
7000.23	0.15	36.26	6999.30	91.03	20.91	-88.63	0.46	91.06	283.28
7027.08	0.23	37.58	7026.15	91.00	20.98	-88.57	0.33	91.03	283.33
7052.93	0.25	53.41	7052.00	90.94	21.06	-88.50	0.27	90.97	283.39
7078.77	0.24	80.72	7077.84	90.86	21.10	-88.40	0.45	90.88	283.43
7100.30	0.12	25.43	7099.37	90.81	21.13	-88.34	0.91	90.84	283.45
7126.11	0.28	33.20	7125.17	90.79	21.20	-88.30	0.63	90.81	283.50
7150.79	0.30	79.72	7149.86	90.71	21.27	-88.20	0.93	90.73	283.56
7175.78	0.31	70.80	7174.85	90.59	21.30	-88.07	0.19	90.61	283.59
7201.29	0.22	65.96	7200.36	90.50	21.34	-87.96	0.34	90.52	283.64
7226.13	0.35	56.26	7225.20	90.41	21.40	-87.86	0.53	90.43	283.69
7251.42	0.29	74.91	7250.49	90.30	21.46	-87.73	0.46	90.32	283.75

MD	INC	AZIM	TVD	VS	+N/-S	+E/-W	DLS	CLOSURE DISTANCE	CLOSURE DIRECTION
ft	deg	deg	ft	ft	ft	ft	°/100ft	ft	deg
7276.43	0.30	51.45	7275.50	90.21	21.52	-87.62	0.49	90.22	283.80
7301.29	0.35	64.22	7300.36	90.11	21.60	-87.50	0.36	90.12	283.86
7325.25	0.27	65.17	7324.31	90.01	21.65	-87.38	0.36	90.02	283.92
7351.03	0.13	58.75	7350.10	89.95	21.69	-87.30	0.55	89.96	283.95
7375.71	0.11	59.41	7374.77	89.91	21.72	-87.26	0.07	89.92	283.98
7400.89	0.12	55.42	7399.95	89.88	21.74	-87.22	0.05	89.88	284.00
7426.14	0.22	23.34	7425.21	89.85	21.80	-87.17	0.53	89.86	284.04
7451.88	0.34	27.85	7450.95	89.83	21.92	-87.12	0.47	89.83	284.12
7475.64	0.43	54.67	7474.70	89.75	22.03	-87.01	0.84	89.76	284.21
7500.14	0.35	69.69	7499.21	89.63	22.11	-86.87	0.54	89.64	284.28
7525.95	0.27	83.88	7525.01	89.51	22.14	-86.73	0.42	89.52	284.32
7550.94	0.37	71.10	7550.00	89.39	22.18	-86.60	0.49	89.39	284.36
7576.22	0.30	64.94	7575.28	89.27	22.23	-86.46	0.33	89.27	284.42
7601.18	0.41	50.86	7600.24	89.17	22.31	-86.33	0.57	89.17	284.49
7625.97	0.37	70.47	7625.03	89.05	22.40	-86.19	0.56	89.05	284.57
7651.22	0.42	56.39	7650.28	88.92	22.48	-86.03	0.43	88.92	284.64
7676.29	0.54	56.06	7675.35	88.78	22.59	-85.86	0.46	88.78	284.74
7689.67	0.35	65.73	7688.73	88.71	22.65	-85.77	1.48	88.71	284.79



Name : Keeper Gyro Wireline Survey: Inrun
Generated : 8/25/2015 10:02:11 Mountain Daylight Time

VS View



Plan View

