



Gyroscopic Survey Report
for
KP KAUFMAN

Well Location	WELD, CO
Well Name	SUCKLA FARMS A #2
Rig Number	
Survey Date	11/24/2014
Latitude	40.1008070°N
Longitude	104.8934810°W
North Reference	True North
Grid Correction	None
Depth Reference	GL (5058.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 274.34Azim (deg)
Definitive Survey	SUCKLA FARMS A #2
Operator(s)	T CELLAN

Well Notes

API-05-123-08881

Survey Report

Well Name: SUCKLA FARMS A #2
Survey: SUCKLA FARMS A #2
Survey Date: 11/24/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
88.60	0.55	218.90	88.60	0.24	-0.33	-0.27	0.42	218.90	0.62
123.83	0.80	219.80	123.83	0.48	-0.65	-0.53	0.84	219.16	0.71
148.94	0.56	233.54	148.94	0.67	-0.86	-0.74	1.13	220.81	1.14
172.97	0.69	236.21	172.96	0.88	-1.01	-0.96	1.39	223.46	0.54
198.59	0.64	239.63	198.58	1.12	-1.17	-1.21	1.68	225.99	0.24
224.15	0.60	246.04	224.14	1.35	-1.29	-1.45	1.95	228.33	0.33
246.73	0.60	247.39	246.72	1.56	-1.39	-1.67	2.17	230.29	0.07
272.35	0.64	242.45	272.34	1.80	-1.50	-1.92	2.44	231.93	0.26
298.88	0.55	244.64	298.87	2.04	-1.63	-2.17	2.71	233.09	0.35
321.04	0.51	241.63	321.02	2.21	-1.72	-2.35	2.91	233.80	0.23
346.95	0.53	234.74	346.94	2.40	-1.84	-2.55	3.15	234.12	0.26
373.65	0.48	234.90	373.63	2.59	-1.98	-2.74	3.38	234.17	0.19
395.73	0.38	235.05	395.71	2.71	-2.08	-2.88	3.55	234.20	0.46
421.68	0.38	234.20	421.66	2.85	-2.18	-3.02	3.72	234.22	0.04
448.27	0.37	229.72	448.25	2.97	-2.28	-3.16	3.89	234.12	0.11
474.64	0.33	230.70	474.62	3.09	-2.39	-3.28	4.05	233.97	0.16
496.15	0.38	231.86	496.13	3.19	-2.47	-3.38	4.19	233.88	0.23
522.66	0.34	230.07	522.64	3.31	-2.57	-3.51	4.35	233.77	0.14
549.15	0.34	225.15	549.13	3.42	-2.68	-3.63	4.51	233.56	0.11
574.95	0.36	223.38	574.93	3.52	-2.79	-3.74	4.67	233.25	0.11
597.20	0.39	211.64	597.18	3.60	-2.91	-3.83	4.81	232.77	0.36
622.88	0.43	206.26	622.86	3.67	-3.07	-3.91	4.97	231.92	0.22
649.15	0.43	208.03	649.13	3.75	-3.24	-4.00	5.15	231.00	0.05
671.16	0.40	205.67	671.13	3.81	-3.38	-4.08	5.30	230.30	0.16
696.30	0.38	205.03	696.28	3.87	-3.54	-4.15	5.45	229.55	0.06
722.18	0.50	208.48	722.15	3.95	-3.71	-4.24	5.64	228.77	0.45
748.18	0.84	226.54	748.15	4.12	-3.94	-4.43	5.93	228.32	1.54
773.05	1.02	231.41	773.02	4.40	-4.21	-4.74	6.34	228.38	0.76
799.03	1.38	242.49	798.99	4.84	-4.50	-5.19	6.87	229.12	1.65
819.89	1.37	236.16	819.84	5.25	-4.75	-5.62	7.36	229.80	0.73
849.73	1.47	237.85	849.68	5.83	-5.15	-6.24	8.09	230.46	0.36
871.01	1.41	240.71	870.95	6.27	-5.42	-6.70	8.62	231.00	0.43
895.72	1.45	240.18	895.65	6.78	-5.73	-7.23	9.23	231.63	0.18
921.20	1.56	233.36	921.13	7.31	-6.09	-7.79	9.89	231.97	0.82
946.70	1.45	231.34	946.62	7.81	-6.50	-8.32	10.56	232.00	0.48

Survey Report

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Survey Date: 11/24/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
971.20	1.43	237.38	971.11	8.28	-6.86	-8.82	11.17	232.12	0.62
996.28	1.50	239.80	996.18	8.80	-7.19	-9.37	11.81	232.48	0.36
1022.69	1.49	239.23	1022.59	9.36	-7.54	-9.96	12.49	232.86	0.06
1047.59	1.49	237.38	1047.48	9.88	-7.88	-10.51	13.14	233.13	0.20
1072.34	1.48	236.72	1072.22	10.40	-8.23	-11.05	13.78	233.31	0.09
1097.58	1.49	238.94	1097.45	10.92	-8.58	-11.60	14.43	233.52	0.23
1121.54	1.60	236.78	1121.39	11.44	-8.93	-12.15	15.08	233.70	0.49
1147.18	1.24	247.49	1147.03	11.97	-9.23	-12.71	15.70	234.01	1.74
1174.46	1.47	242.13	1174.30	12.53	-9.50	-13.29	16.34	234.43	0.98
1199.36	1.42	242.97	1199.20	13.07	-9.79	-13.85	16.96	234.73	0.21
1224.99	1.33	245.25	1224.81	13.60	-10.06	-14.40	17.57	235.05	0.42
1247.92	1.49	242.58	1247.74	14.08	-10.31	-14.91	18.13	235.33	0.76
1271.19	1.29	246.03	1271.00	14.57	-10.56	-15.42	18.68	235.59	0.92
1297.61	1.31	245.76	1297.41	15.10	-10.80	-15.96	19.27	235.91	0.06
1320.85	1.34	242.15	1320.65	15.56	-11.04	-16.45	19.81	236.13	0.39
1348.21	1.27	247.29	1348.01	16.10	-11.31	-17.01	20.42	236.39	0.51
1374.78	1.21	246.62	1374.57	16.61	-11.53	-17.54	20.99	236.67	0.24
1398.04	1.20	247.68	1397.82	17.05	-11.72	-17.99	21.47	236.91	0.10
1421.02	1.21	246.13	1420.79	17.48	-11.91	-18.43	21.94	237.13	0.15
1447.70	1.13	250.32	1447.47	17.96	-12.11	-18.94	22.48	237.40	0.44
1470.82	1.11	249.55	1470.59	18.38	-12.27	-19.36	22.92	237.64	0.12
1497.50	1.10	253.71	1497.27	18.85	-12.43	-19.85	23.42	237.94	0.30
1524.59	1.07	253.42	1524.35	19.33	-12.57	-20.34	23.91	238.27	0.12
1548.11	1.05	252.79	1547.86	19.73	-12.70	-20.76	24.33	238.54	0.08
1574.53	1.03	253.37	1574.28	20.18	-12.84	-21.21	24.80	238.82	0.12
1597.76	0.96	254.06	1597.50	20.56	-12.95	-21.60	25.19	239.05	0.27
1624.27	0.95	250.61	1624.01	20.97	-13.09	-22.02	25.62	239.28	0.22
1647.49	0.80	254.40	1647.23	21.30	-13.20	-22.36	25.96	239.46	0.72
1674.80	0.91	253.02	1674.54	21.68	-13.31	-22.75	26.36	239.67	0.41
1697.13	0.87	252.17	1696.86	22.00	-13.41	-23.08	26.69	239.84	0.17
1724.15	0.79	254.11	1723.88	22.36	-13.53	-23.45	27.08	240.03	0.32
1747.48	0.96	245.65	1747.20	22.69	-13.65	-23.79	27.43	240.15	0.93
1773.97	0.84	247.60	1773.69	23.06	-13.82	-24.17	27.84	240.25	0.47
1796.92	0.76	250.88	1796.64	23.35	-13.93	-24.47	28.16	240.35	0.39
1823.11	0.95	240.61	1822.82	23.69	-14.10	-24.82	28.55	240.41	0.92
1846.45	0.81	244.62	1846.17	23.99	-14.26	-25.14	28.91	240.44	0.66

Survey Report

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Survey:		SUCKLA FARMS A #2							
Survey Date:		11/24/2014							
MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
1873.58	0.93	241.53	1873.29	24.34	-14.45	-25.51	29.32	240.47	0.48
1896.69	0.88	240.45	1896.40	24.65	-14.62	-25.83	29.68	240.48	0.23
1923.04	0.79	246.43	1922.75	24.98	-14.80	-26.17	30.06	240.52	0.48
1945.50	0.80	242.71	1945.21	25.25	-14.93	-26.45	30.37	240.56	0.23
1972.62	0.66	244.12	1972.32	25.54	-15.08	-26.76	30.72	240.59	0.51
1998.82	0.67	248.35	1998.52	25.81	-15.21	-27.04	31.02	240.64	0.19
2021.27	0.69	245.62	2020.97	26.04	-15.31	-27.28	31.28	240.70	0.16
2047.63	0.46	248.44	2047.33	26.28	-15.42	-27.52	31.55	240.75	0.87
2074.65	0.54	245.51	2074.34	26.49	-15.51	-27.74	31.78	240.79	0.29
2098.14	0.54	243.84	2097.84	26.68	-15.60	-27.94	32.00	240.82	0.07
2123.44	0.24	245.15	2123.13	26.83	-15.68	-28.09	32.17	240.84	1.21
2146.28	0.27	230.83	2145.97	26.91	-15.73	-28.18	32.27	240.83	0.31
2172.09	0.24	260.82	2171.79	27.00	-15.78	-28.28	32.38	240.84	0.52
2195.03	0.18	206.52	2194.72	27.06	-15.82	-28.34	32.46	240.83	0.85
2222.64	0.12	236.92	2222.34	27.10	-15.87	-28.38	32.52	240.79	0.35
2245.21	0.06	221.74	2244.91	27.13	-15.89	-28.41	32.55	240.78	0.30
2271.92	0.11	228.32	2271.62	27.15	-15.92	-28.44	32.59	240.76	0.21
2299.03	0.14	32.89	2298.73	27.16	-15.91	-28.44	32.59	240.78	0.91
2321.83	0.07	69.35	2321.52	27.13	-15.88	-28.41	32.55	240.80	0.39
2348.49	0.03	200.70	2348.19	27.12	-15.88	-28.40	32.54	240.78	0.37
2371.27	0.06	322.60	2370.97	27.13	-15.88	-28.41	32.55	240.80	0.37
2398.17	0.19	358.28	2397.86	27.14	-15.82	-28.42	32.53	240.89	0.54
2424.41	0.30	346.08	2424.11	27.17	-15.72	-28.44	32.49	241.08	0.45
2447.14	0.40	336.73	2446.84	27.22	-15.59	-28.48	32.47	241.31	0.50
2474.04	0.49	336.24	2473.74	27.32	-15.40	-28.57	32.45	241.68	0.34
2496.00	0.56	341.82	2495.69	27.41	-15.21	-28.64	32.43	242.03	0.41
2522.61	0.61	346.79	2522.30	27.50	-14.95	-28.71	32.37	242.50	0.26
2549.85	0.64	345.15	2549.54	27.59	-14.66	-28.78	32.30	243.01	0.14
2572.42	0.48	341.07	2572.11	27.67	-14.45	-28.85	32.26	243.40	0.73
2599.51	0.78	347.74	2599.20	27.77	-14.16	-28.92	32.20	243.92	1.14
2621.15	0.73	339.99	2620.83	27.87	-13.89	-29.00	32.15	244.42	0.53
2648.23	0.83	347.43	2647.91	28.00	-13.53	-29.10	32.09	245.06	0.52
2671.42	0.89	344.78	2671.09	28.10	-13.19	-29.19	32.03	245.67	0.32
2698.32	0.95	350.10	2698.00	28.23	-12.77	-29.28	31.94	246.44	0.39
2724.69	0.97	351.52	2724.36	28.33	-12.33	-29.35	31.84	247.21	0.11
2746.86	1.08	355.17	2746.53	28.41	-11.94	-29.40	31.73	247.90	0.57

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MD	Inc	Azim	TVD	VS	+N/-S	+E/-W	Closure Distance	Closure Direction	DLS
ft	deg	deg	ft	ft	ft	ft	ft	deg	%/100ft
2773.38	1.11	2.48	2773.05	28.46	-11.43	-29.41	31.55	248.75	0.54
2799.02	1.20	8.19	2798.68	28.45	-10.92	-29.36	31.32	249.60	0.57
2822.09	1.20	13.38	2821.75	28.39	-10.44	-29.27	31.07	250.36	0.47
2848.71	1.22	18.12	2848.35	28.28	-9.90	-29.11	30.75	251.22	0.39
2874.17	1.25	14.32	2873.82	28.17	-9.37	-28.96	30.44	252.07	0.34
2896.58	1.24	17.21	2896.22	28.07	-8.90	-28.83	30.17	252.83	0.28
2922.05	1.08	17.60	2921.68	27.95	-8.41	-28.67	29.88	253.65	0.64
2948.77	1.19	21.26	2948.40	27.82	-7.91	-28.50	29.58	254.48	0.49
2970.90	1.19	28.70	2970.52	27.65	-7.50	-28.30	29.28	255.17	0.70
2996.58	1.13	24.89	2996.19	27.46	-7.03	-28.07	28.94	255.93	0.40
3023.14	1.19	32.67	3022.75	27.23	-6.56	-27.81	28.57	256.72	0.64
3049.45	1.42	41.11	3049.05	26.91	-6.09	-27.45	28.11	257.49	1.13
3070.92	1.54	43.97	3070.52	26.56	-5.68	-27.07	27.66	258.15	0.66
3097.22	1.38	41.16	3096.81	26.15	-5.19	-26.62	27.12	258.97	0.67
3123.64	1.61	41.44	3123.22	25.73	-4.67	-26.16	26.58	259.88	0.88
3149.40	1.60	45.29	3148.97	25.28	-4.14	-25.67	26.00	260.83	0.42
3171.12	1.57	40.45	3170.68	24.91	-3.71	-25.26	25.53	261.65	0.63
3197.77	1.57	41.83	3197.32	24.47	-3.15	-24.78	24.98	262.74	0.14
3223.50	1.39	41.58	3223.04	24.07	-2.66	-24.34	24.48	263.77	0.72
3249.73	1.11	41.80	3249.26	23.72	-2.23	-23.96	24.06	264.68	1.07
3271.14	1.11	31.41	3270.67	23.50	-1.90	-23.71	23.79	265.42	0.94
3297.38	1.12	27.99	3296.90	23.28	-1.46	-23.46	23.50	266.45	0.25
3323.73	0.92	31.39	3323.26	23.08	-1.05	-23.23	23.25	267.41	0.76
3349.44	0.90	30.64	3348.95	22.90	-0.70	-23.01	23.03	268.26	0.10
3371.48	0.86	30.25	3370.99	22.75	-0.41	-22.84	22.85	268.98	0.21
3397.93	0.71	19.24	3397.44	22.62	-0.08	-22.69	22.69	269.80	0.79
3423.37	0.66	20.28	3422.89	22.54	0.21	-22.59	22.59	270.52	0.21
3449.56	0.57	22.43	3449.07	22.46	0.47	-22.48	22.49	271.19	0.35
3470.81	0.60	15.89	3470.32	22.40	0.67	-22.41	22.42	271.72	0.34
3497.38	0.43	4.02	3496.89	22.37	0.91	-22.37	22.39	272.32	0.73
3523.80	0.41	348.29	3523.31	22.40	1.10	-22.38	22.41	272.81	0.44
3549.07	0.39	333.63	3548.57	22.47	1.26	-22.44	22.47	273.22	0.41
3571.28	0.52	329.06	3570.79	22.57	1.42	-22.52	22.57	273.60	0.61
3597.44	0.41	315.82	3596.95	22.71	1.59	-22.65	22.71	274.01	0.59
3624.35	0.38	319.45	3623.86	22.84	1.73	-22.78	22.84	274.33	0.16
3649.97	0.51	321.36	3649.48	22.98	1.88	-22.90	22.98	274.69	0.53



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3671.63	0.53	300.50	3671.14	23.13	2.00	-23.05	23.14	274.97	0.88
3697.59	0.49	307.74	3697.10	23.34	2.13	-23.24	23.34	275.25	0.30
3722.70	0.47	302.31	3722.21	23.52	2.26	-23.41	23.52	275.50	0.20
3748.43	0.36	302.86	3747.93	23.68	2.36	-23.57	23.69	275.71	0.46
3774.39	0.65	301.23	3773.89	23.88	2.48	-23.77	23.89	275.95	1.14
3799.22	0.72	303.38	3798.72	24.15	2.64	-24.02	24.16	276.26	0.31
3821.18	0.53	310.01	3820.68	24.35	2.78	-24.21	24.37	276.54	0.94
3846.12	0.47	311.69	3845.62	24.53	2.92	-24.37	24.55	276.83	0.22
3871.92	0.64	303.06	3871.41	24.74	3.07	-24.57	24.77	277.12	0.70
3897.83	0.96	300.69	3897.33	25.06	3.26	-24.88	25.09	277.46	1.27
3922.75	0.71	295.50	3922.24	25.39	3.43	-25.20	25.44	277.76	1.05
3949.15	0.58	311.28	3948.64	25.65	3.59	-25.45	25.70	278.03	0.84
3970.97	0.59	297.84	3970.46	25.84	3.72	-25.63	25.90	278.25	0.63
3996.06	0.56	314.29	3995.54	26.05	3.86	-25.84	26.12	278.50	0.67
4022.04	0.66	296.08	4021.52	26.29	4.02	-26.06	26.37	278.76	0.84
4048.00	0.56	295.44	4047.49	26.55	4.14	-26.31	26.64	278.94	0.40
4073.22	0.66	291.52	4072.70	26.80	4.25	-26.56	26.90	279.08	0.44
4099.17	0.66	287.66	4098.65	27.09	4.35	-26.84	27.19	279.20	0.17
4121.00	0.60	275.14	4120.48	27.33	4.39	-27.07	27.43	279.22	0.69
4146.20	0.49	271.31	4145.67	27.57	4.41	-27.31	27.67	279.17	0.45
4171.99	0.65	264.20	4171.47	27.82	4.40	-27.57	27.92	279.06	0.70
4198.64	0.64	262.31	4198.12	28.12	4.36	-27.87	28.21	278.89	0.10
4224.29	0.79	255.53	4223.76	28.43	4.30	-28.18	28.51	278.67	0.68
4246.18	0.73	251.29	4245.65	28.70	4.21	-28.46	28.77	278.42	0.39
4272.05	0.80	253.71	4271.52	29.02	4.11	-28.79	29.08	278.13	0.29
4297.92	0.85	245.29	4297.38	29.35	3.98	-29.14	29.41	277.78	0.50
4323.02	0.89	239.82	4322.49	29.68	3.81	-29.47	29.72	277.36	0.38
4348.87	0.70	248.02	4348.33	29.98	3.65	-29.79	30.02	276.98	0.87
4374.70	0.62	259.83	4374.16	30.26	3.56	-30.08	30.29	276.75	0.61
4399.78	0.63	261.04	4399.23	30.52	3.52	-30.34	30.55	276.61	0.06
4421.49	0.65	270.63	4420.95	30.76	3.50	-30.59	30.78	276.53	0.51
4447.40	0.67	276.25	4446.86	31.06	3.52	-30.88	31.08	276.50	0.26
4472.17	0.51	271.88	4471.62	31.32	3.54	-31.14	31.34	276.48	0.67
4498.03	0.42	279.32	4497.48	31.53	3.56	-31.35	31.55	276.47	0.43
4523.88	0.52	261.92	4523.33	31.73	3.55	-31.56	31.76	276.43	0.68
4548.63	0.47	254.86	4548.08	31.94	3.51	-31.77	31.96	276.31	0.33



Well Name: SUCKLA FARMS A #2
Survey: SUCKLA FARMS A #2
Survey Date: 11/24/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
4574.53	0.54	234.17	4573.97	32.13	3.41	-31.97	32.15	276.09	0.76
4594.99	0.77	230.83	4594.43	32.31	3.27	-32.15	32.32	275.81	1.10
4624.46	0.34	208.47	4623.90	32.49	3.07	-32.35	32.49	275.42	1.59
4649.01	0.51	194.23	4648.46	32.53	2.90	-32.41	32.54	275.11	0.79
4673.75	0.01	146.04	4673.19	32.55	2.79	-32.43	32.55	274.92	2.01
4697.33	0.43	224.72	4696.78	32.61	2.73	-32.49	32.61	274.80	1.83
4721.79	0.49	259.90	4721.23	32.77	2.64	-32.66	32.77	274.62	1.15
4749.90	0.38	127.66	4749.34	32.81	2.56	-32.71	32.81	274.48	2.83
4774.91	0.19	152.33	4774.35	32.71	2.48	-32.62	32.71	274.34	0.89