



Gyroscopic Survey Report
for
KPK

Well Location	WELD
Well Name	ANDERSON 13-32
Rig Number	
Survey Date	11/6/2014
Latitude	40.2643300°N
Longitude	104.9204200°W
North Reference	True North
Grid Correction	None
Depth Reference	GL (4937.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 270.52Azim (deg)
Definitive Survey	ANDERSON 13-32 (05-123-23789)
Operator(s)	C KIRBY

Well Notes

API-05-123-23789

Survey Report

Well Name: ANDERSON 13-32
Survey: ANDERSON 13-32 (05-123-23789)
Survey Date: 11/6/2014

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
87.05	0.27	185.17	87.05	0.02	-0.20	-0.02	0.20	185.17	0.31
124.94	0.40	197.83	124.94	0.06	-0.42	-0.07	0.42	189.10	0.40
148.86	0.39	194.21	148.86	0.11	-0.58	-0.11	0.59	191.05	0.11
174.54	0.26	184.78	174.54	0.13	-0.72	-0.14	0.73	190.93	0.55
196.42	0.40	195.70	196.41	0.16	-0.84	-0.16	0.86	190.99	0.69
222.75	0.70	204.13	222.74	0.24	-1.08	-0.25	1.11	193.27	1.18
248.84	0.61	210.03	248.83	0.38	-1.35	-0.39	1.40	196.15	0.42
274.42	0.12	184.73	274.41	0.45	-1.49	-0.46	1.56	197.16	1.98
296.45	0.53	210.97	296.45	0.50	-1.60	-0.51	1.68	197.82	1.92
322.56	0.79	217.54	322.56	0.67	-1.85	-0.69	1.97	200.37	1.03
348.57	0.24	212.81	348.56	0.81	-2.03	-0.82	2.20	202.05	2.11
374.29	0.72	220.01	374.28	0.94	-2.20	-0.96	2.40	203.48	1.89
397.63	0.42	218.33	397.62	1.08	-2.38	-1.10	2.63	204.87	1.30
424.73	0.96	221.03	424.71	1.29	-2.63	-1.31	2.94	206.54	1.99
447.33	0.50	213.13	447.32	1.46	-2.85	-1.49	3.22	207.58	2.08
474.59	0.64	217.49	474.58	1.62	-3.08	-1.65	3.49	208.20	0.57
497.22	0.29	213.40	497.21	1.73	-3.22	-1.76	3.67	208.60	1.55
523.64	0.59	214.49	523.62	1.84	-3.39	-1.87	3.88	208.89	1.11
546.90	0.74	214.77	546.88	1.99	-3.62	-2.03	4.14	209.26	0.66
573.98	0.44	214.14	573.95	2.15	-3.85	-2.18	4.42	209.60	1.11
597.24	0.33	202.63	597.22	2.22	-3.98	-2.26	4.58	209.58	0.57
622.78	0.56	219.58	622.76	2.33	-4.15	-2.37	4.78	209.73	1.01
646.31	0.92	235.08	646.28	2.56	-4.34	-2.60	5.06	210.87	1.74
671.84	0.53	271.63	671.82	2.84	-4.46	-2.88	5.31	212.90	2.29
698.11	0.74	257.77	698.09	3.13	-4.49	-3.17	5.50	215.24	0.98
724.68	0.77	253.48	724.65	3.47	-4.58	-3.51	5.77	217.50	0.24
746.26	0.78	256.03	746.23	3.75	-4.65	-3.79	6.01	219.19	0.16
772.21	0.57	271.35	772.18	4.05	-4.69	-4.09	6.23	221.09	1.07
798.94	0.87	253.79	798.90	4.38	-4.75	-4.42	6.49	222.97	1.40
822.29	0.70	267.17	822.25	4.69	-4.81	-4.74	6.75	224.59	1.08
849.87	0.85	260.07	849.83	5.06	-4.85	-5.11	7.04	226.48	0.63
872.47	1.06	254.68	872.42	5.43	-4.93	-5.47	7.37	227.97	1.00
895.69	0.73	272.63	895.64	5.78	-4.98	-5.83	7.67	229.46	1.84
922.58	0.96	261.44	922.53	6.17	-5.01	-6.22	7.99	231.16	1.07
949.52	0.97	264.11	949.47	6.62	-5.07	-6.67	8.37	232.79	0.17

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MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
971.92	1.09	261.22	971.86	7.02	-5.12	-7.07	8.73	234.10	0.61
999.47	0.97	270.22	999.41	7.51	-5.16	-7.56	9.15	235.70	0.74
1022.72	1.01	270.36	1022.66	7.91	-5.15	-7.96	9.48	237.08	0.19
1049.58	0.88	278.89	1049.51	8.36	-5.12	-8.40	9.84	238.64	0.71
1072.65	0.91	267.62	1072.58	8.71	-5.10	-8.76	10.14	239.79	0.77
1099.57	1.15	261.45	1099.50	9.19	-5.15	-9.24	10.58	240.87	1.00
1122.68	0.93	265.28	1122.60	9.61	-5.20	-9.66	10.97	241.70	1.00
1145.71	0.86	271.46	1145.63	9.97	-5.21	-10.02	11.29	242.52	0.52
1172.63	1.00	262.77	1172.55	10.41	-5.24	-10.46	11.69	243.40	0.74
1195.65	0.96	265.76	1195.56	10.80	-5.28	-10.85	12.06	244.06	0.29
1223.02	1.01	266.36	1222.93	11.27	-5.31	-11.32	12.50	244.87	0.21
1249.76	0.95	267.28	1249.67	11.73	-5.33	-11.78	12.93	245.63	0.24
1272.74	0.89	264.84	1272.64	12.10	-5.36	-12.15	13.27	246.19	0.31
1299.48	1.04	265.50	1299.38	12.55	-5.40	-12.59	13.70	246.81	0.55
1322.42	1.19	258.71	1322.32	12.99	-5.46	-13.04	14.13	247.28	0.88
1349.80	0.93	271.70	1349.69	13.49	-5.51	-13.54	14.62	247.86	1.31
1371.78	1.03	264.78	1371.66	13.86	-5.52	-13.91	14.97	248.35	0.71
1398.99	1.13	263.89	1398.87	14.37	-5.57	-14.42	15.46	248.88	0.38
1420.94	1.06	269.02	1420.82	14.79	-5.60	-14.84	15.86	249.33	0.56
1448.12	1.11	265.10	1447.99	15.30	-5.63	-15.35	16.35	249.88	0.34
1470.87	1.13	266.25	1470.74	15.74	-5.66	-15.80	16.78	250.29	0.12
1497.24	1.11	266.07	1497.10	16.26	-5.69	-16.31	17.27	250.76	0.08
1524.44	1.08	268.69	1524.30	16.77	-5.72	-16.83	17.77	251.23	0.20
1547.02	1.11	270.80	1546.87	17.21	-5.72	-17.26	18.18	251.67	0.23
1572.90	1.19	266.75	1572.75	17.73	-5.73	-17.78	18.68	252.13	0.43
1599.94	1.21	266.16	1599.78	18.29	-5.77	-18.34	19.23	252.55	0.09
1621.95	1.26	267.29	1621.79	18.76	-5.79	-18.82	19.69	252.89	0.23
1649.10	1.29	267.42	1648.92	19.36	-5.82	-19.42	20.27	253.31	0.12
1671.09	1.28	268.96	1670.91	19.86	-5.84	-19.91	20.75	253.66	0.16
1697.44	1.28	270.22	1697.25	20.44	-5.84	-20.50	21.31	254.10	0.11
1724.63	1.32	269.13	1724.44	21.06	-5.84	-21.11	21.91	254.53	0.15
1746.58	1.29	271.10	1746.39	21.56	-5.84	-21.61	22.39	254.87	0.24
1773.54	1.34	267.39	1773.34	22.18	-5.85	-22.23	22.99	255.25	0.37
1799.96	1.30	267.05	1799.75	22.78	-5.88	-22.84	23.58	255.56	0.14
1822.54	1.25	274.24	1822.32	23.29	-5.88	-23.34	24.07	255.87	0.74
1849.63	1.32	272.02	1849.40	23.89	-5.84	-23.95	24.65	256.29	0.31



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MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
1871.61	1.27	273.16	1871.38	24.39	-5.82	-24.44	25.13	256.61	0.25
1899.03	1.24	277.73	1898.80	24.99	-5.76	-25.04	25.70	257.04	0.38
1924.60	1.22	279.42	1924.36	25.53	-5.68	-25.58	26.21	257.48	0.17
1947.95	1.13	281.40	1947.71	26.00	-5.60	-26.06	26.65	257.88	0.42
1970.60	1.16	289.86	1970.34	26.44	-5.47	-26.49	27.05	258.33	0.76
1996.92	1.13	296.53	1996.66	26.92	-5.27	-26.97	27.48	258.95	0.52
2023.63	1.12	293.46	2023.37	27.40	-5.05	-27.45	27.91	259.58	0.23
2045.76	1.21	292.89	2045.49	27.82	-4.87	-27.86	28.28	260.09	0.41
2070.96	1.19	296.94	2070.69	28.30	-4.65	-28.34	28.72	260.69	0.35
2097.58	1.20	295.46	2097.30	28.80	-4.40	-28.84	29.17	261.32	0.13
2124.16	1.28	301.43	2123.88	29.31	-4.13	-29.35	29.63	262.00	0.57
2145.85	1.30	301.79	2145.56	29.73	-3.87	-29.76	30.01	262.59	0.08
2172.53	1.41	307.77	2172.23	30.25	-3.51	-30.28	30.48	263.39	0.67
2198.32	1.44	305.65	2198.02	30.76	-3.13	-30.79	30.95	264.20	0.24
2224.90	1.52	311.82	2224.58	31.30	-2.70	-31.33	31.44	265.08	0.66
2247.47	1.60	310.58	2247.15	31.77	-2.29	-31.79	31.87	265.87	0.39
2273.46	1.60	308.66	2273.13	32.33	-1.83	-32.35	32.40	266.76	0.21
2295.76	1.65	312.38	2295.42	32.81	-1.42	-32.83	32.86	267.53	0.52
2322.49	1.66	312.54	2322.14	33.39	-0.90	-33.40	33.41	268.46	0.04
2345.60	1.72	311.27	2345.24	33.90	-0.44	-33.91	33.91	269.25	0.31
2373.08	1.72	314.98	2372.70	34.51	0.12	-34.51	34.51	270.20	0.41
2399.94	1.79	309.74	2399.55	35.12	0.68	-35.12	35.12	271.10	0.65
2423.00	1.82	308.36	2422.60	35.69	1.13	-35.68	35.70	271.82	0.23
2446.08	1.83	310.84	2445.67	36.26	1.60	-36.25	36.28	272.53	0.35
2472.97	1.81	305.84	2472.55	36.93	2.13	-36.92	36.98	273.31	0.60
2499.70	1.77	309.16	2499.26	37.60	2.64	-37.58	37.67	274.02	0.42
2522.01	1.82	306.23	2521.56	38.16	3.07	-38.13	38.25	274.60	0.47
2549.57	1.77	308.08	2549.11	38.85	3.59	-38.82	38.99	275.28	0.27
2571.88	1.75	309.38	2571.40	39.39	4.02	-39.35	39.56	275.83	0.20
2599.37	1.72	306.53	2598.89	40.05	4.53	-40.01	40.27	276.46	0.34
2622.39	1.72	311.82	2621.89	40.59	4.96	-40.54	40.85	276.98	0.69
2648.06	1.75	304.88	2647.56	41.20	5.44	-41.15	41.51	277.54	0.82
2671.35	1.74	306.44	2670.83	41.78	5.86	-41.73	42.14	277.99	0.20
2698.02	1.71	303.78	2697.49	42.44	6.32	-42.38	42.85	278.48	0.33
2720.90	1.63	304.68	2720.36	42.99	6.69	-42.94	43.45	278.86	0.35
2747.27	1.63	307.26	2746.72	43.61	7.13	-43.54	44.12	279.31	0.28

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MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
2774.22	1.60	308.81	2773.66	44.21	7.60	-44.14	44.79	279.77	0.19
2796.75	1.61	308.27	2796.19	44.70	8.00	-44.63	45.34	280.16	0.07
2823.02	1.61	306.82	2822.44	45.29	8.44	-45.22	46.00	280.58	0.16
2849.82	1.62	309.80	2849.24	45.89	8.91	-45.81	46.67	281.01	0.32
2872.46	1.64	308.56	2871.87	46.39	9.32	-46.31	47.24	281.38	0.16
2898.54	1.60	308.61	2897.93	46.97	9.78	-46.89	47.90	281.78	0.13
2924.94	1.58	306.09	2924.32	47.56	10.22	-47.47	48.56	282.15	0.28
2946.42	1.55	309.78	2945.79	48.03	10.58	-47.93	49.09	282.45	0.49
2987.18	1.44	306.71	2986.54	48.86	11.24	-48.76	50.04	282.98	0.34
3024.13	1.38	308.24	3023.48	49.59	11.79	-49.49	50.87	283.41	0.18
3047.00	1.41	304.87	3046.34	50.04	12.13	-49.93	51.39	283.65	0.38
3073.69	1.29	301.78	3073.03	50.57	12.47	-50.46	51.98	283.88	0.55
3096.55	1.34	297.56	3095.88	51.03	12.73	-50.91	52.48	284.04	0.49
3123.92	1.24	296.46	3123.24	51.58	13.01	-51.46	53.08	284.19	0.40
3146.05	1.25	290.01	3145.37	52.02	13.20	-51.90	53.55	284.27	0.63
3174.12	1.12	287.85	3173.43	52.57	13.39	-52.45	54.13	284.32	0.49
3199.91	1.00	291.54	3199.21	53.02	13.55	-52.90	54.60	284.37	0.52
3222.72	0.94	287.37	3222.02	53.38	13.68	-53.26	54.99	284.40	0.42
3245.56	1.06	284.36	3244.86	53.77	13.79	-53.64	55.39	284.41	0.59
3272.12	0.97	279.27	3271.41	54.23	13.88	-54.11	55.86	284.39	0.47
3299.31	0.92	267.39	3298.60	54.68	13.91	-54.55	56.30	284.30	0.75
3322.24	1.00	252.62	3321.53	55.05	13.84	-54.93	56.64	284.14	1.12
3348.56	0.93	247.38	3347.85	55.46	13.69	-55.34	57.01	283.90	0.43
3371.42	0.92	238.56	3370.70	55.79	13.52	-55.67	57.29	283.65	0.62
3397.31	0.99	239.25	3396.58	56.16	13.30	-56.04	57.60	283.35	0.28
3424.49	1.02	230.71	3423.77	56.55	13.03	-56.43	57.91	283.00	0.56
3446.92	1.11	233.89	3446.19	56.87	12.77	-56.76	58.18	282.68	0.49
3473.07	1.12	234.50	3472.34	57.28	12.48	-57.17	58.52	282.31	0.07
3495.56	1.08	231.84	3494.82	57.63	12.22	-57.52	58.80	281.99	0.30
3521.81	1.17	229.62	3521.06	58.02	11.89	-57.92	59.13	281.60	0.38
3547.87	1.12	223.71	3547.12	58.40	11.53	-58.30	59.43	281.19	0.49
3574.78	1.11	223.91	3574.03	58.76	11.16	-58.66	59.71	280.77	0.04
3596.56	1.14	222.93	3595.80	59.05	10.85	-58.95	59.94	280.42	0.17
3623.45	1.15	224.92	3622.68	59.42	10.46	-59.32	60.24	280.00	0.15
3649.53	1.10	223.25	3648.76	59.77	10.09	-59.68	60.53	279.60	0.22
3671.94	1.19	221.87	3671.16	60.07	9.76	-59.98	60.77	279.24	0.42

Survey Report

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MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
3698.81	1.24	221.61	3698.03	60.44	9.34	-60.36	61.08	278.79	0.20
3721.65	1.18	219.36	3720.86	60.76	8.97	-60.68	61.34	278.41	0.36
3749.81	1.12	221.09	3749.01	61.12	8.54	-61.04	61.63	277.96	0.26
3773.66	1.27	223.48	3772.86	61.45	8.17	-61.38	61.92	277.58	0.69
3796.54	1.21	220.87	3795.74	61.78	7.80	-61.71	62.20	277.21	0.36
3824.69	1.18	222.31	3823.89	62.16	7.36	-62.10	62.53	276.76	0.16
3847.64	1.30	222.98	3846.83	62.49	7.00	-62.43	62.82	276.40	0.51
3871.14	1.26	222.67	3870.32	62.85	6.62	-62.79	63.14	276.01	0.14
3898.62	1.25	218.71	3897.79	63.24	6.16	-63.18	63.48	275.57	0.32
3922.14	1.22	219.29	3921.31	63.55	5.76	-63.50	63.76	275.19	0.14
3946.03	1.16	216.78	3945.19	63.86	5.37	-63.81	64.04	274.81	0.33
3973.22	1.10	207.83	3972.38	64.14	4.92	-64.10	64.29	274.39	0.69
3997.05	1.12	194.18	3996.20	64.30	4.49	-64.26	64.42	274.00	1.11
4020.08	1.10	176.80	4019.23	64.34	4.05	-64.30	64.43	273.61	1.46
4048.06	1.01	168.83	4047.21	64.27	3.54	-64.24	64.34	273.16	0.62
4071.27	1.06	171.89	4070.41	64.20	3.13	-64.17	64.25	272.79	0.32
4098.58	0.99	166.66	4097.71	64.10	2.65	-64.08	64.14	272.37	0.42
4121.60	1.02	169.40	4120.73	64.02	2.26	-64.00	64.04	272.02	0.26
4148.86	0.83	161.05	4147.99	63.90	1.83	-63.89	63.92	271.64	0.86
4171.40	0.68	164.40	4170.53	63.81	1.55	-63.80	63.82	271.39	0.71
4198.48	0.48	183.69	4197.60	63.77	1.28	-63.76	63.78	271.15	1.01
4221.71	0.45	201.73	4220.83	63.81	1.09	-63.80	63.81	270.98	0.64
4249.50	0.53	218.67	4248.62	63.93	0.89	-63.93	63.93	270.80	0.60
4271.98	0.34	237.68	4271.10	64.05	0.77	-64.05	64.05	270.69	1.06
4299.72	0.54	238.16	4298.85	64.23	0.66	-64.23	64.23	270.59	0.73
4322.73	0.54	265.82	4321.85	64.43	0.60	-64.43	64.43	270.53	1.13
4349.58	0.69	258.75	4348.70	64.72	0.55	-64.72	64.72	270.49	0.62
4372.78	0.66	259.97	4371.90	64.99	0.50	-64.99	64.99	270.44	0.15
4399.89	0.64	258.51	4399.01	65.29	0.45	-65.29	65.29	270.39	0.09
4423.14	0.71	259.02	4422.25	65.56	0.39	-65.56	65.56	270.34	0.27
4445.65	0.78	265.65	4444.76	65.85	0.35	-65.85	65.85	270.31	0.49
4473.47	0.92	267.37	4472.58	66.26	0.33	-66.26	66.26	270.29	0.53
4496.70	1.00	261.22	4495.80	66.65	0.29	-66.65	66.65	270.25	0.57
4523.68	0.79	260.33	4522.78	67.06	0.22	-67.06	67.06	270.19	0.79
4547.02	0.99	266.23	4546.12	67.42	0.18	-67.42	67.42	270.16	0.93
4574.72	1.07	264.73	4573.82	67.92	0.14	-67.92	67.92	270.12	0.29



Well Name: ANDERSON 13-32
 Survey: ANDERSON 13-32 (05-123-23789)
 Survey Date: 11/6/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
4597.25	0.98	260.43	4596.34	68.32	0.09	-68.32	68.32	270.08	0.51
4624.98	0.84	266.06	4624.07	68.75	0.04	-68.75	68.75	270.03	0.58
4647.48	0.77	274.06	4646.57	69.07	0.04	-69.07	69.07	270.03	0.59
4670.83	0.85	272.35	4669.92	69.40	0.06	-69.40	69.40	270.05	0.36
4698.56	0.84	277.94	4697.65	69.81	0.09	-69.81	69.81	270.08	0.30
4723.67	0.77	271.57	4722.75	70.16	0.12	-70.16	70.16	270.10	0.46
4747.04	0.66	280.99	4746.12	70.45	0.15	-70.45	70.45	270.12	0.69
4773.92	0.82	279.29	4772.99	70.79	0.21	-70.79	70.79	270.17	0.60
4796.76	0.91	276.21	4795.83	71.13	0.26	-71.13	71.13	270.21	0.45
4823.26	0.94	266.30	4822.33	71.56	0.27	-71.56	71.56	270.22	0.61
4846.27	0.82	271.43	4845.34	71.91	0.26	-71.91	71.91	270.21	0.60
4873.49	0.81	281.94	4872.56	72.30	0.31	-72.30	72.30	270.24	0.55
4895.61	0.85	280.14	4894.67	72.61	0.37	-72.61	72.62	270.29	0.20
4922.19	0.89	269.39	4921.24	73.02	0.40	-73.02	73.02	270.31	0.64
4948.77	0.78	276.71	4947.82	73.40	0.42	-73.40	73.40	270.33	0.57
4971.60	0.72	282.64	4970.65	73.70	0.47	-73.70	73.70	270.36	0.43
4998.78	0.74	277.23	4997.83	74.04	0.53	-74.04	74.04	270.41	0.26
5020.88	0.76	281.79	5019.93	74.33	0.58	-74.33	74.33	270.44	0.29
5048.04	0.84	273.50	5047.09	74.70	0.63	-74.70	74.70	270.48	0.50
5074.00	0.74	275.48	5073.05	75.06	0.65	-75.06	75.06	270.50	0.39
5096.85	0.80	283.44	5095.89	75.36	0.70	-75.36	75.36	270.53	0.53
5124.04	0.78	277.41	5123.08	75.73	0.77	-75.73	75.73	270.58	0.31
5146.25	0.80	272.50	5145.29	76.04	0.80	-76.03	76.04	270.60	0.31
5173.47	0.71	280.52	5172.51	76.39	0.84	-76.39	76.39	270.63	0.51
5195.52	0.82	277.52	5194.55	76.68	0.88	-76.68	76.68	270.66	0.52
5222.84	0.83	272.72	5221.87	77.07	0.92	-77.07	77.07	270.68	0.26
5244.95	0.69	260.90	5243.97	77.37	0.90	-77.36	77.37	270.67	0.93
5271.39	0.68	264.74	5270.42	77.68	0.86	-77.68	77.68	270.64	0.18
5298.66	0.72	265.23	5297.68	78.01	0.84	-78.01	78.01	270.61	0.13
5324.97	0.71	250.44	5324.00	78.33	0.77	-78.32	78.33	270.56	0.70
5347.97	0.62	242.72	5346.99	78.57	0.66	-78.57	78.57	270.48	0.55
5373.80	0.64	242.44	5372.82	78.82	0.53	-78.82	78.82	270.39	0.08
5396.47	0.77	240.49	5395.49	79.07	0.40	-79.06	79.07	270.29	0.56
5423.34	0.84	235.48	5422.36	79.38	0.20	-79.38	79.38	270.14	0.37
5449.35	0.78	227.74	5448.36	79.67	-0.03	-79.67	79.67	269.98	0.47
5471.92	0.85	220.14	5470.93	79.89	-0.26	-79.89	79.89	269.81	0.56

Survey Report

Well Name: ANDERSON 13-32
Survey: ANDERSON 13-32 (05-123-23789)
Survey Date: 11/6/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
5498.64	0.96	216.90	5497.64	80.15	-0.59	-80.15	80.16	269.58	0.48
5524.74	1.15	205.31	5523.74	80.39	-1.00	-80.40	80.40	269.29	1.08
5547.13	1.12	198.22	5546.13	80.55	-1.41	-80.56	80.57	269.00	0.64
5573.83	1.20	197.29	5572.82	80.71	-1.93	-80.73	80.75	268.63	0.32
5599.88	1.23	193.89	5598.87	80.85	-2.46	-80.87	80.91	268.26	0.29
5622.28	1.22	190.52	5621.27	80.95	-2.93	-80.98	81.03	267.93	0.32
5648.37	1.03	186.90	5647.35	81.02	-3.43	-81.05	81.13	267.58	0.76
5670.34	0.99	190.96	5669.31	81.08	-3.81	-81.11	81.20	267.31	0.39
5699.26	0.83	188.85	5698.22	81.15	-4.26	-81.19	81.31	266.99	0.57
5722.24	0.66	198.77	5721.20	81.22	-4.55	-81.26	81.39	266.79	0.90
5745.91	0.53	209.39	5744.87	81.31	-4.78	-81.36	81.50	266.64	0.74
5773.33	0.45	216.76	5772.29	81.44	-4.98	-81.49	81.64	266.51	0.36
5797.07	0.61	235.53	5796.03	81.60	-5.12	-81.65	81.81	266.41	0.99
5820.73	0.45	251.14	5819.69	81.79	-5.22	-81.84	82.01	266.35	0.91
5848.14	0.55	269.87	5847.10	82.02	-5.26	-82.07	82.24	266.33	0.69
5871.76	0.58	263.13	5870.72	82.25	-5.27	-82.30	82.47	266.33	0.32
5899.24	0.63	281.91	5898.20	82.54	-5.26	-82.59	82.76	266.36	0.74
5922.85	0.73	273.64	5921.81	82.82	-5.22	-82.87	83.03	266.39	0.59
5945.68	0.60	284.39	5944.64	83.08	-5.18	-83.13	83.29	266.43	0.78
5973.81	0.73	289.63	5972.77	83.39	-5.09	-83.44	83.60	266.51	0.52
5997.53	0.85	285.03	5996.48	83.71	-4.99	-83.76	83.90	266.59	0.56
6024.42	0.79	292.04	6023.37	84.07	-4.87	-84.12	84.26	266.69	0.44
6047.97	0.79	289.13	6046.92	84.38	-4.75	-84.42	84.56	266.78	0.17
6074.24	0.74	295.44	6073.18	84.70	-4.62	-84.75	84.87	266.88	0.37
6097.23	0.93	293.90	6096.17	85.01	-4.48	-85.05	85.17	266.98	0.80
6120.77	0.80	280.08	6119.70	85.35	-4.38	-85.39	85.50	267.07	1.02
6147.83	0.80	289.51	6146.76	85.71	-4.28	-85.75	85.86	267.14	0.49
6171.01	0.84	288.65	6169.94	86.03	-4.17	-86.07	86.17	267.22	0.16
6198.04	0.77	283.18	6196.98	86.39	-4.07	-86.43	86.53	267.31	0.37
6221.25	0.89	288.27	6220.18	86.72	-3.98	-86.76	86.85	267.38	0.57
6248.83	0.86	289.79	6247.75	87.12	-3.84	-87.15	87.24	267.48	0.12
6271.20	0.85	285.81	6270.13	87.43	-3.74	-87.47	87.55	267.55	0.27
6298.87	0.89	284.69	6297.79	87.84	-3.63	-87.88	87.95	267.64	0.13
6321.23	0.93	284.23	6320.15	88.19	-3.54	-88.22	88.29	267.70	0.20
6348.82	0.90	286.90	6347.73	88.61	-3.42	-88.64	88.71	267.79	0.19
6371.86	0.88	288.39	6370.77	88.95	-3.31	-88.99	89.05	267.87	0.13

Survey Report

Well Name:		ANDERSON 13-32							
Survey:		ANDERSON 13-32 (05-123-23789)							
Survey Date:		11/6/2014							
MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS %/100ft
6398.57	0.94	287.38	6397.48	89.36	-3.18	-89.39	89.45	267.96	0.24
6420.85	0.96	281.87	6419.76	89.72	-3.09	-89.75	89.80	268.03	0.42
6447.64	0.91	281.33	6446.54	90.15	-3.00	-90.18	90.23	268.10	0.19
6470.66	0.89	286.76	6469.56	90.50	-2.91	-90.53	90.58	268.16	0.38
6498.19	0.98	281.88	6497.09	90.94	-2.80	-90.96	91.01	268.24	0.43
6524.83	0.79	278.60	6523.72	91.34	-2.73	-91.37	91.41	268.29	0.72
6547.82	0.96	280.92	6546.71	91.69	-2.67	-91.72	91.76	268.33	0.75
6573.85	0.92	271.72	6572.74	92.11	-2.62	-92.14	92.18	268.37	0.61
6596.79	0.72	285.85	6595.68	92.43	-2.57	-92.46	92.50	268.41	1.22
6623.51	0.93	290.13	6622.39	92.80	-2.45	-92.83	92.86	268.49	0.81
6646.31	0.87	272.76	6645.19	93.15	-2.38	-93.17	93.20	268.54	1.22
6673.28	0.83	269.56	6672.15	93.55	-2.37	-93.57	93.60	268.55	0.22
6699.63	0.88	282.38	6698.50	93.93	-2.33	-93.96	93.99	268.58	0.74
6722.26	0.89	274.93	6721.12	94.28	-2.28	-94.30	94.33	268.62	0.51
6748.66	0.93	276.52	6747.52	94.70	-2.24	-94.72	94.75	268.65	0.16
6771.16	0.88	297.37	6770.03	95.03	-2.14	-95.05	95.08	268.71	1.47
6798.47	0.89	273.33	6797.33	95.43	-2.03	-95.45	95.47	268.78	1.35
6821.91	0.81	287.67	6820.77	95.77	-1.97	-95.79	95.81	268.82	0.96
6849.89	0.72	279.38	6848.75	96.13	-1.88	-96.15	96.17	268.88	0.50
6872.50	0.54	275.71	6871.36	96.38	-1.85	-96.40	96.41	268.90	0.84
6895.87	0.60	286.54	6894.72	96.60	-1.80	-96.62	96.64	268.93	0.53
6923.80	0.28	309.99	6922.66	96.80	-1.72	-96.81	96.83	268.98	1.29
6946.43	0.03	115.22	6945.28	96.83	-1.68	-96.85	96.87	269.00	1.36
6972.00	0.18	359.38	6970.86	96.83	-1.64	-96.85	96.86	269.03	0.76
6999.92	0.09	89.34	6998.77	96.81	-1.60	-96.83	96.84	269.05	0.72
7023.22	0.26	78.39	7022.07	96.74	-1.59	-96.76	96.77	269.06	0.74
7045.80	0.25	108.86	7044.65	96.64	-1.60	-96.66	96.67	269.05	0.59
7073.70	0.51	127.74	7072.55	96.49	-1.69	-96.51	96.52	269.00	1.02
7096.21	0.57	85.72	7095.06	96.30	-1.74	-96.31	96.33	268.96	1.73
7123.14	0.60	124.98	7121.98	96.05	-1.81	-96.07	96.08	268.92	1.46
7145.61	0.90	97.59	7144.45	95.77	-1.90	-95.80	95.81	268.86	2.07
7173.36	1.07	90.65	7172.20	95.30	-1.94	-95.32	95.34	268.84	0.72
7195.79	0.74	70.66	7194.63	94.95	-1.89	-94.97	94.99	268.86	2.01
7223.47	0.43	18.89	7222.31	94.75	-1.73	-94.77	94.79	268.95	2.10
7246.54	0.40	345.96	7245.38	94.75	-1.57	-94.76	94.78	269.05	1.02
7273.20	0.73	337.32	7272.03	94.84	-1.33	-94.85	94.86	269.20	1.28



Well Name: ANDERSON 13-32
Survey: ANDERSON 13-32 (05-123-23789)
Survey Date: 11/6/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
7296.06	0.55	337.06	7294.90	94.94	-1.09	-94.95	94.96	269.34	0.77
7323.10	0.70	314.40	7321.93	95.11	-0.86	-95.12	95.12	269.48	1.05
7349.06	0.64	309.83	7347.89	95.33	-0.66	-95.34	95.34	269.61	0.31
7372.14	0.56	338.35	7370.97	95.47	-0.47	-95.48	95.48	269.72	1.32
7399.53	0.68	304.88	7398.35	95.66	-0.25	-95.66	95.66	269.85	1.37
7421.67	0.67	331.69	7420.50	95.83	-0.06	-95.83	95.83	269.96	1.42
7447.45	0.65	341.67	7446.28	95.95	0.21	-95.95	95.95	270.12	0.45
7472.87	1.13	329.38	7471.70	96.13	0.56	-96.12	96.13	270.33	1.99
7495.10	0.57	355.67	7493.92	96.25	0.86	-96.24	96.25	270.51	2.99
7496.37	0.56	317.99	7495.19	96.25	0.87	-96.25	96.25	270.52	28.86