



Gyroscopic Survey Report
for
KPK

Well Location	WELD
Well Name	DONALD M VYNCKIER #2
Rig Number	
Survey Date	11/14/2014
Latitude	40.0893340°N
Longitude	104.8513440°W
North Reference	True North
Grid Correction	None
Depth Reference	GL (4913.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 333.01Azim (deg)
Definitive Survey	DONALD M VYNCKIER #2 (05-123-08941)
Operator(s)	C KIRBY

Well Notes

API-05-123-08941

Well Name: DONALD M VYNCKIER #2
Survey: DONALD M VYNCKIER #2 (05-123-08941)
Survey Date: 11/14/2014

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
86.95	0.72	336.98	86.94	0.55	0.51	-0.21	0.55	336.98	0.83
124.19	0.64	329.65	124.18	0.99	0.90	-0.41	0.99	335.44	0.32
148.45	0.67	335.24	148.44	1.27	1.15	-0.54	1.27	334.80	0.30
173.98	0.66	332.50	173.97	1.57	1.42	-0.67	1.57	334.63	0.13
198.39	0.79	333.87	198.38	1.88	1.69	-0.81	1.88	334.40	0.54
222.12	0.93	330.19	222.11	2.23	2.01	-0.98	2.23	334.00	0.61
246.39	1.06	331.92	246.38	2.65	2.38	-1.18	2.65	333.54	0.56
273.38	1.19	334.02	273.36	3.18	2.85	-1.42	3.18	333.45	0.50
297.71	1.15	333.61	297.69	3.68	3.29	-1.64	3.68	333.50	0.17
322.00	1.17	332.84	321.97	4.17	3.73	-1.86	4.17	333.47	0.11
349.61	1.17	333.30	349.57	4.73	4.23	-2.12	4.73	333.42	0.04
373.96	1.13	334.26	373.92	5.22	4.67	-2.33	5.22	333.46	0.19
398.19	1.13	331.25	398.14	5.70	5.10	-2.55	5.70	333.40	0.25
421.86	1.14	333.54	421.81	6.17	5.51	-2.77	6.17	333.32	0.19
449.43	1.06	334.39	449.37	6.70	5.99	-3.00	6.70	333.37	0.27
473.63	0.90	331.69	473.57	7.11	6.36	-3.19	7.11	333.36	0.70
497.27	0.93	333.42	497.21	7.49	6.69	-3.36	7.49	333.32	0.16
521.46	0.84	329.70	521.39	7.86	7.02	-3.54	7.86	333.24	0.42
549.73	0.79	338.02	549.66	8.26	7.38	-3.72	8.26	333.26	0.47
573.87	0.79	336.63	573.80	8.60	7.69	-3.85	8.60	333.42	0.08
596.64	0.82	341.28	596.57	8.91	7.99	-3.96	8.91	333.62	0.31
624.30	1.05	349.18	624.22	9.35	8.42	-4.07	9.36	334.20	0.97
647.60	1.01	346.29	647.52	9.76	8.83	-4.16	9.76	334.78	0.29
671.51	1.20	345.88	671.43	10.21	9.28	-4.27	10.22	335.28	0.76
699.20	1.15	348.14	699.11	10.76	9.83	-4.40	10.77	335.89	0.23
722.33	1.10	347.56	722.23	11.20	10.28	-4.50	11.22	336.37	0.25
749.13	1.52	348.22	749.03	11.79	10.88	-4.62	11.82	336.97	1.58
772.52	1.62	347.24	772.41	12.41	11.50	-4.76	12.45	337.52	0.45
799.47	1.52	346.52	799.35	13.13	12.22	-4.93	13.18	338.04	0.38
823.11	1.63	347.67	822.98	13.76	12.86	-5.07	13.82	338.47	0.48
846.76	1.63	347.82	846.62	14.41	13.51	-5.22	14.49	338.90	0.03
873.74	1.51	347.61	873.59	15.13	14.24	-5.37	15.22	339.33	0.45
897.31	1.61	349.48	897.15	15.74	14.87	-5.50	15.85	339.70	0.48
924.75	1.56	348.67	924.58	16.47	15.61	-5.64	16.60	340.13	0.21
947.72	1.75	341.17	947.54	17.12	16.25	-5.82	17.26	340.30	1.27

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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
971.24	1.58	348.09	971.05	17.79	16.91	-6.00	17.94	340.46	1.14
997.92	1.62	350.70	997.72	18.50	17.64	-6.14	18.68	340.81	0.31
1024.55	1.68	351.07	1024.34	19.23	18.40	-6.26	19.43	341.21	0.24
1047.42	1.59	350.16	1047.20	19.85	19.04	-6.37	20.08	341.51	0.42
1074.63	1.63	351.13	1074.40	20.58	19.79	-6.49	20.83	341.85	0.18
1097.34	1.55	351.10	1097.10	21.18	20.41	-6.59	21.45	342.12	0.35
1121.23	1.57	352.52	1120.98	21.80	21.06	-6.68	22.09	342.40	0.19
1149.11	1.74	354.73	1148.85	22.55	21.86	-6.77	22.88	342.80	0.66
1177.51	1.55	353.34	1177.24	23.31	22.67	-6.85	23.68	343.18	0.68
1199.20	1.37	351.43	1198.92	23.83	23.22	-6.93	24.23	343.39	0.88
1223.22	1.43	354.70	1222.94	24.38	23.80	-7.00	24.81	343.62	0.42
1246.54	1.27	357.49	1246.24	24.89	24.35	-7.03	25.35	343.89	0.75
1274.36	1.31	358.25	1274.06	25.46	24.97	-7.06	25.95	344.22	0.16
1297.66	1.32	357.52	1297.36	25.94	25.51	-7.08	26.47	344.50	0.10
1324.50	1.17	358.26	1324.19	26.47	26.09	-7.10	27.04	344.78	0.56
1348.06	1.24	0.23	1347.75	26.92	26.59	-7.10	27.52	345.04	0.34
1371.73	1.32	1.00	1371.41	27.39	27.12	-7.10	28.03	345.33	0.32
1397.89	1.21	1.35	1397.56	27.90	27.70	-7.09	28.59	345.65	0.41
1421.45	1.13	357.34	1421.11	28.33	28.18	-7.09	29.06	345.87	0.49
1448.88	1.20	359.78	1448.54	28.83	28.74	-7.11	29.60	346.11	0.32
1471.87	1.15	358.80	1471.52	29.25	29.21	-7.11	30.06	346.32	0.24
1499.26	1.14	359.30	1498.91	29.75	29.76	-7.12	30.60	346.54	0.05
1522.71	1.05	358.81	1522.35	30.15	30.21	-7.13	31.04	346.72	0.39
1546.28	0.89	354.67	1545.92	30.52	30.60	-7.15	31.43	346.85	0.76
1572.24	0.83	352.25	1571.88	30.88	30.99	-7.19	31.81	346.93	0.26
1599.00	0.90	347.37	1598.64	31.27	31.39	-7.27	32.22	346.97	0.38
1621.77	0.89	350.07	1621.41	31.61	31.74	-7.34	32.57	346.99	0.19
1649.04	0.82	345.47	1648.67	32.00	32.13	-7.42	32.98	347.00	0.35
1672.56	0.82	341.34	1672.19	32.33	32.46	-7.52	33.31	346.96	0.25
1699.82	0.76	338.27	1699.45	32.71	32.81	-7.65	33.69	346.88	0.25
1722.69	0.69	330.98	1722.31	32.99	33.07	-7.77	33.97	346.78	0.52
1749.17	0.60	329.50	1748.80	33.29	33.33	-7.92	34.26	346.64	0.34
1771.37	0.74	328.38	1770.99	33.55	33.55	-8.05	34.50	346.51	0.65
1798.54	0.78	332.86	1798.16	33.91	33.87	-8.23	34.85	346.34	0.26
1821.83	0.71	330.48	1821.45	34.22	34.13	-8.37	35.15	346.22	0.34
1848.22	0.67	325.72	1847.83	34.53	34.40	-8.54	35.45	346.06	0.26

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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
1871.46	0.69	326.11	1871.07	34.81	34.63	-8.69	35.71	345.91	0.10
1898.69	0.68	322.03	1898.30	35.13	34.90	-8.89	36.01	345.71	0.18
1921.99	0.68	321.79	1921.60	35.40	35.12	-9.06	36.27	345.54	0.04
1948.27	0.72	332.25	1947.87	35.72	35.38	-9.23	36.57	345.38	0.52
1971.42	0.77	330.18	1971.02	36.02	35.65	-9.38	36.86	345.26	0.22
1998.43	0.74	332.53	1998.03	36.38	35.96	-9.55	37.21	345.13	0.15
2024.43	0.73	324.89	2024.03	36.71	36.25	-9.72	37.53	344.99	0.38
2047.37	0.70	320.57	2046.97	36.99	36.47	-9.89	37.79	344.83	0.28
2073.90	0.68	322.58	2073.49	37.30	36.72	-10.09	38.08	344.64	0.10
2099.77	0.79	322.22	2099.36	37.63	36.99	-10.29	38.39	344.45	0.42
2121.86	0.71	331.37	2121.45	37.92	37.23	-10.45	38.67	344.32	0.64
2148.33	0.71	331.26	2147.92	38.25	37.52	-10.61	38.99	344.21	0.01
2171.36	0.79	334.08	2170.95	38.55	37.79	-10.75	39.28	344.12	0.36
2197.77	0.85	329.99	2197.36	38.93	38.12	-10.93	39.65	344.00	0.32
2224.55	0.87	325.24	2224.14	39.32	38.46	-11.14	40.04	343.84	0.27
2247.53	0.77	327.96	2247.11	39.65	38.73	-11.32	40.35	343.70	0.44
2273.03	0.80	332.00	2272.61	40.00	39.03	-11.50	40.69	343.59	0.25
2299.74	0.75	329.28	2299.31	40.36	39.35	-11.68	41.05	343.47	0.24
2322.75	0.69	323.29	2322.32	40.65	39.59	-11.84	41.32	343.36	0.41
2348.80	0.72	327.47	2348.37	40.97	39.86	-12.02	41.63	343.22	0.22
2374.82	0.72	318.87	2374.39	41.29	40.12	-12.21	41.94	343.07	0.42
2397.76	0.74	312.64	2397.33	41.57	40.33	-12.42	42.19	342.89	0.36
2424.59	0.74	324.13	2424.16	41.90	40.58	-12.65	42.51	342.69	0.55
2447.93	0.83	307.74	2447.50	42.20	40.81	-12.87	42.79	342.50	1.03
2471.34	0.80	305.55	2470.90	42.50	41.01	-13.14	43.06	342.24	0.17
2498.47	0.93	299.25	2498.03	42.86	41.23	-13.48	43.38	341.89	0.59
2521.75	0.86	300.40	2521.31	43.16	41.41	-13.80	43.65	341.57	0.30
2548.36	0.91	302.27	2547.91	43.51	41.62	-14.15	43.96	341.22	0.19
2571.64	0.90	299.43	2571.18	43.82	41.81	-14.47	44.24	340.91	0.19
2598.73	0.94	301.10	2598.28	44.19	42.03	-14.84	44.57	340.55	0.16
2622.09	0.83	302.40	2621.64	44.50	42.22	-15.15	44.86	340.26	0.47
2648.55	1.07	301.30	2648.09	44.87	42.45	-15.52	45.20	339.91	0.92
2671.78	1.03	305.15	2671.31	45.24	42.68	-15.88	45.54	339.59	0.36
2698.74	1.15	307.24	2698.27	45.70	42.99	-16.29	45.97	339.24	0.46
2724.82	1.15	308.35	2724.35	46.17	43.31	-16.71	46.42	338.91	0.09
2747.80	1.25	310.71	2747.32	46.62	43.62	-17.08	46.84	338.62	0.47



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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
2774.30	1.30	306.29	2773.81	47.15	43.98	-17.54	47.35	338.26	0.41
2797.19	1.38	310.60	2796.70	47.64	44.32	-17.96	47.82	337.94	0.58
2823.46	1.32	309.04	2822.96	48.21	44.71	-18.43	48.36	337.59	0.28
2846.44	1.19	308.31	2845.94	48.67	45.03	-18.83	48.81	337.31	0.55
2872.45	1.29	307.86	2871.94	49.18	45.38	-19.27	49.30	336.99	0.38
2898.50	1.42	310.80	2897.98	49.74	45.77	-19.75	49.84	336.66	0.54
2921.35	1.38	309.40	2920.83	50.26	46.12	-20.17	50.34	336.38	0.22
2947.97	1.36	310.30	2947.44	50.84	46.53	-20.66	50.91	336.06	0.11
2974.38	1.33	309.74	2973.84	51.41	46.93	-21.14	51.47	335.75	0.13
2996.29	1.24	309.06	2995.74	51.86	47.24	-21.52	51.91	335.51	0.42
3022.87	1.15	311.05	3022.32	52.37	47.60	-21.94	52.41	335.25	0.37
3049.42	1.15	303.48	3048.87	52.85	47.92	-22.36	52.88	334.98	0.57
3072.19	1.07	307.12	3071.62	53.24	48.17	-22.72	53.26	334.75	0.48
3098.06	1.05	309.28	3097.50	53.67	48.47	-23.10	53.69	334.52	0.17
3124.54	1.02	307.68	3123.97	54.11	48.77	-23.47	54.12	334.30	0.15
3146.55	1.10	302.14	3145.98	54.47	49.00	-23.80	54.48	334.09	0.61
3173.19	1.22	303.63	3172.61	54.93	49.29	-24.26	54.94	333.80	0.44
3199.83	1.09	304.48	3199.25	55.40	49.59	-24.70	55.40	333.52	0.49
3222.76	0.94	307.06	3222.17	55.76	49.83	-25.03	55.76	333.33	0.66
3249.37	1.03	314.30	3248.77	56.18	50.13	-25.38	56.18	333.15	0.56
3271.86	0.89	310.12	3271.27	56.54	50.38	-25.65	56.54	333.01	0.66
3298.55	0.96	311.25	3297.95	56.94	50.66	-25.98	56.94	332.85	0.27
3321.56	0.91	313.33	3320.95	57.29	50.92	-26.26	57.29	332.72	0.26
3347.63	0.73	308.97	3347.03	57.64	51.16	-26.54	57.64	332.58	0.74
3373.58	0.87	307.93	3372.97	57.96	51.39	-26.82	57.97	332.43	0.52
3399.91	0.81	308.49	3399.30	58.31	51.62	-27.13	58.32	332.28	0.23
3421.91	0.69	303.21	3421.30	58.57	51.79	-27.36	58.57	332.16	0.62
3448.33	0.62	308.46	3447.72	58.84	51.97	-27.60	58.85	332.03	0.33
3474.63	0.61	300.36	3474.01	59.09	52.13	-27.84	59.10	331.90	0.33
3497.29	0.69	305.19	3496.67	59.31	52.27	-28.05	59.32	331.78	0.40
3522.36	0.54	319.44	3521.74	59.56	52.45	-28.25	59.57	331.69	0.84
3548.62	0.47	316.24	3548.00	59.78	52.62	-28.41	59.80	331.64	0.29
3574.72	0.44	318.00	3574.10	59.98	52.77	-28.55	60.00	331.59	0.14
3596.59	0.48	327.21	3595.97	60.15	52.91	-28.65	60.17	331.56	0.40
3622.88	0.47	324.27	3622.26	60.37	53.09	-28.78	60.39	331.54	0.11
3649.05	0.29	332.11	3648.43	60.54	53.24	-28.87	60.56	331.53	0.69

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3671.60	0.29	318.55	3670.97	60.65	53.33	-28.94	60.67	331.52	0.31
3697.13	0.32	312.61	3696.50	60.78	53.43	-29.03	60.80	331.48	0.18
3722.61	0.37	316.74	3721.99	60.93	53.53	-29.14	60.95	331.44	0.22
3748.00	0.38	309.24	3747.38	61.08	53.65	-29.26	61.11	331.39	0.19
3773.51	0.38	290.95	3772.88	61.22	53.73	-29.40	61.25	331.31	0.47
3799.57	0.36	282.92	3798.94	61.34	53.78	-29.56	61.37	331.20	0.21
3822.04	0.30	271.82	3821.41	61.41	53.80	-29.69	61.45	331.10	0.39
3847.29	0.37	260.78	3846.67	61.47	53.79	-29.84	61.51	330.98	0.36
3873.51	0.35	256.26	3872.88	61.51	53.75	-30.00	61.56	330.83	0.13
3898.94	0.44	252.41	3898.31	61.55	53.71	-30.17	61.60	330.68	0.38
3923.75	0.42	240.20	3923.13	61.56	53.63	-30.34	61.62	330.50	0.38
3949.77	0.45	251.42	3949.14	61.57	53.55	-30.52	61.64	330.32	0.35
3972.09	0.45	258.46	3971.46	61.61	53.51	-30.69	61.68	330.17	0.25
3997.98	0.46	247.12	3997.35	61.64	53.45	-30.88	61.73	329.98	0.35
4023.51	0.49	246.43	4022.88	61.65	53.36	-31.07	61.75	329.79	0.11
4049.39	0.50	248.75	4048.76	61.67	53.28	-31.28	61.78	329.58	0.10
4075.00	0.53	244.57	4074.36	61.69	53.19	-31.49	61.81	329.37	0.20
4096.93	0.54	242.36	4096.30	61.69	53.09	-31.68	61.83	329.18	0.10
4121.93	0.61	244.32	4121.29	61.69	52.98	-31.90	61.84	328.95	0.30
4147.47	0.53	248.86	4146.83	61.70	52.88	-32.14	61.88	328.71	0.37
4172.41	0.55	257.69	4171.77	61.75	52.81	-32.36	61.94	328.50	0.34
4197.90	0.62	271.42	4197.26	61.84	52.79	-32.62	62.05	328.29	0.62
4222.83	0.54	297.15	4222.19	62.00	52.85	-32.86	62.23	328.13	1.08
4248.34	0.56	306.81	4247.70	62.21	52.98	-33.06	62.45	328.03	0.37
4273.82	0.57	330.08	4273.18	62.45	53.16	-33.23	62.69	327.99	0.89
4299.28	0.79	338.93	4298.64	62.75	53.43	-33.35	62.99	328.03	0.98
4324.14	0.78	344.89	4323.50	63.09	53.76	-33.46	63.32	328.10	0.34
4349.57	0.81	348.36	4348.92	63.43	54.10	-33.54	63.65	328.20	0.23
4371.40	0.80	350.82	4370.75	63.72	54.40	-33.60	63.94	328.30	0.17
4396.80	0.88	351.02	4396.15	64.07	54.76	-33.65	64.28	328.43	0.32
4421.62	0.73	0.16	4420.96	64.39	55.11	-33.68	64.59	328.57	0.77
4447.05	0.74	22.28	4446.40	64.65	55.43	-33.62	64.83	328.76	1.11
4472.63	0.97	31.56	4471.97	64.87	55.76	-33.44	65.02	329.05	1.04
4498.32	1.03	33.26	4497.65	65.10	56.14	-33.20	65.23	329.40	0.28
4522.32	0.89	46.71	4521.65	65.26	56.45	-32.95	65.36	329.73	1.10
4549.69	1.03	49.82	4549.02	65.37	56.76	-32.61	65.45	330.12	0.54



Well Name: DONALD M VYNCKIER #2
Survey: DONALD M VYNCKIER #2 (05-123-08941)
Survey Date: 11/14/2014

MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	Closure Distance ft	Closure Direction deg	DLS °/100ft
4573.60	1.07	49.10	4572.92	65.47	57.04	-32.27	65.54	330.50	0.16
4598.04	1.07	52.69	4597.36	65.57	57.33	-31.92	65.61	330.89	0.27
4621.98	1.01	48.37	4621.29	65.66	57.60	-31.58	65.69	331.27	0.41
4647.13	0.90	47.33	4646.44	65.77	57.89	-31.27	65.79	331.62	0.46
4673.38	0.82	57.04	4672.69	65.85	58.13	-30.96	65.86	331.96	0.64
4698.22	0.90	60.23	4697.53	65.88	58.32	-30.64	65.88	332.28	0.41
4724.62	1.01	61.95	4723.92	65.89	58.53	-30.26	65.89	332.66	0.42
4747.76	0.98	58.07	4747.06	65.91	58.73	-29.91	65.91	333.01	0.33