

039 - 24645

**Scientific Drilling**

Gyroscopic Survey Report
for
Black Hills

Well Location	Simms Com #7
Well Name	Simms Com #7
Rig Name	Blue Jet Wireline
Survey Date	04/23/13
Latitude	36°49'15.980"N
North Reference	True North
Grid Correction	None
Depth Reference	KB (12.00 ft)
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 268.00Azim (deg)
Definitive Survey	OutRun
Operator(s)	B. Willhight

Well Notes

Survey from RKB to 3475' in 4.5" Casing

OIL CONS. DIV DIST. 3
APR 23 2014



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Well Name:		Simms Corn #7					
Survey:		OutRun					
Survey Date:		04/23/13					
MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid
50.00	0.11	27.10	50.00	-0.02	0.04	0.02	0.22
100.00	0.22	26.52	100.00	-0.09	0.17	0.09	0.21
150.00	0.34	166.47	150.00	-0.17	0.11	0.16	1.05
200.00	0.42	164.51	200.00	-0.24	-0.21	0.25	0.15
250.00	0.52	168.14	250.00	-0.32	-0.61	0.34	0.22
300.00	0.51	182.05	299.99	-0.34	-1.05	0.38	0.25
350.00	0.45	180.13	349.99	-0.32	-1.47	0.37	0.13
400.00	0.45	163.38	399.99	-0.36	-1.86	0.43	0.26
450.00	0.65	167.90	449.99	-0.46	-2.32	0.54	0.41
500.00	0.72	173.83	499.99	-0.53	-2.91	0.64	0.20
550.00	0.74	158.38	549.98	-0.66	-3.52	0.79	0.40
600.00	0.92	184.54	599.98	-0.73	-4.22	0.88	0.82
650.00	0.90	184.76	649.97	-0.64	-5.02	0.81	0.03
700.00	1.21	185.75	699.96	-0.52	-5.93	0.73	0.61
750.00	1.26	190.43	749.95	-0.33	-7.00	0.57	0.22
800.00	1.19	187.38	799.94	-0.13	-8.05	0.41	0.19
850.00	1.32	185.82	849.93	0.04	-9.14	0.28	0.27
900.00	1.24	191.69	899.91	0.24	-10.24	0.12	0.30
950.00	1.29	189.23	949.90	0.48	-11.32	-0.08	0.14
1000.00	1.28	196.03	999.89	0.76	-12.42	-0.33	0.30
1050.00	1.16	196.06	1049.88	1.09	-13.44	-0.62	0.25
1100.00	0.97	199.48	1099.87	1.41	-14.33	-0.90	0.39
1150.00	0.84	215.34	1149.86	1.78	-15.03	-1.26	0.56
1200.00	0.48	213.46	1199.86	2.13	-15.50	-1.59	0.72
1250.00	0.34	214.81	1249.86	2.34	-15.80	-1.79	0.28
1300.00	0.05	174.38	1299.86	2.43	-15.94	-1.87	0.61
1350.00	0.16	179.15	1349.86	2.43	-16.04	-1.87	0.22
1400.00	0.14	158.79	1399.86	2.41	-16.17	-1.84	0.12
1450.00	0.27	96.22	1449.86	2.27	-16.24	-1.71	0.48
1500.00	0.21	112.75	1499.86	2.07	-16.28	-1.50	0.18
1550.00	0.21	106.19	1549.86	1.90	-16.34	-1.33	0.05
1600.00	0.31	112.71	1599.86	1.69	-16.42	-1.12	0.20
1650.00	0.17	106.78	1649.86	1.50	-16.50	-0.92	0.29
1700.00	0.12	65.83	1699.86	1.38	-16.49	-0.81	0.22
1750.00	0.12	265.82	1749.86	1.39	-16.48	-0.81	0.48
1800.00	0.35	280.89	1799.86	1.59	-16.45	-1.01	0.48
1850.00	0.32	301.21	1849.85	1.85	-16.35	-1.28	0.25
1900.00	0.42	282.15	1899.85	2.15	-16.24	-1.58	0.31



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Survey Date:	04/23/13						
MD ft	Inc deg	Azim deg	TVD ft	VS ft	+N/-S ft	+E/-W ft	DLS 7100ft
1950.00	0.58	299.23	1949.85	2.54	-16.08	-1.98	0.43
2000.00	0.51	298.61	1999.85	2.94	-15.85	-2.39	0.13
2050.00	0.45	272.70	2049.85	3.33	-15.74	-2.78	0.45
2100.00	0.45	238.36	2099.85	3.70	-15.83	-3.15	0.54
2150.00	0.57	232.01	2149.84	4.08	-16.09	-3.51	0.26
2200.00	0.81	237.12	2199.84	4.58	-16.43	-4.01	0.50
2250.00	1.06	240.27	2249.83	5.30	-16.86	-4.71	0.51
2300.00	1.24	249.46	2299.82	6.22	-17.28	-5.62	0.51
2350.00	1.39	258.32	2349.81	7.33	-17.59	-6.72	0.50
2400.00	1.55	268.97	2399.79	8.61	-17.72	-7.99	0.63
2450.00	1.66	266.39	2449.77	10.01	-17.78	-9.39	0.26
2500.00	1.66	268.07	2499.75	11.46	-17.85	-10.84	0.10
2550.00	1.59	266.35	2549.73	12.88	-17.92	-12.26	0.17
2600.00	1.50	267.80	2599.72	14.23	-17.99	-13.61	0.20
2650.00	1.52	277.87	2649.70	15.54	-17.92	-14.92	0.53
2700.00	1.50	280.28	2699.68	16.83	-17.72	-16.22	0.13
2750.00	1.47	284.26	2749.66	18.09	-17.44	-17.49	0.22
2800.00	1.57	287.41	2799.65	19.35	-17.08	-18.77	0.26
2850.00	1.74	290.79	2849.62	20.70	-16.60	-20.13	0.40
2900.00	1.72	299.34	2899.60	22.04	-15.96	-21.50	0.52
2950.00	1.86	302.08	2949.58	23.35	-15.17	-22.84	0.33
3000.00	1.86	315.53	2999.55	24.57	-14.16	-24.09	0.87
3050.00	1.95	321.42	3049.52	25.62	-12.91	-25.19	0.44
3100.00	1.96	321.55	3099.50	26.64	-11.58	-26.25	0.01
3150.00	2.07	318.79	3149.46	27.72	-10.23	-27.38	0.30
3200.00	2.16	317.08	3199.43	28.91	-8.86	-28.61	0.21
3250.00	2.39	313.38	3249.39	30.25	-7.46	-30.01	0.55
3300.00	2.59	311.85	3299.34	31.80	-5.99	-31.61	0.43
3350.00	2.42	308.05	3349.30	33.42	-4.58	-33.28	0.47
3400.00	2.60	303.90	3399.25	35.15	-3.30	-35.06	0.50
3450.00	2.62	306.85	3449.20	36.96	-1.98	-36.91	0.27
3475.00	2.58	304.17	3474.17	37.86	-1.32	-37.83	0.51