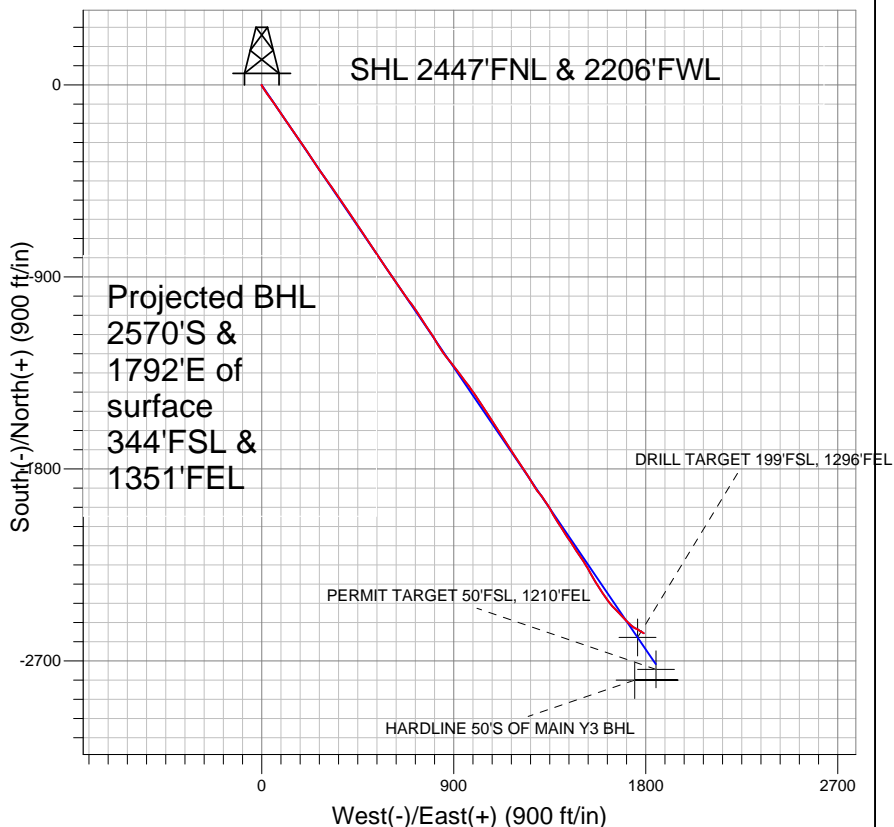


## Mineral Resources Inc



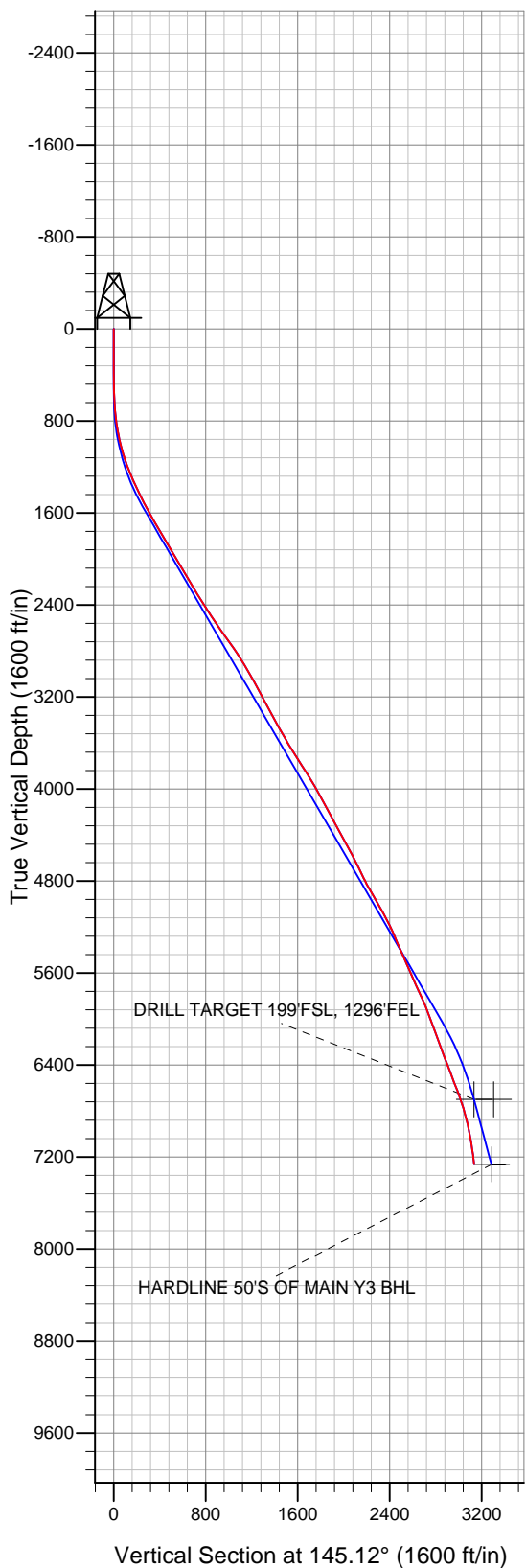
### LEGEND

- ◆ MAIN Y3 6-8-31, Wellbore #1, Plan #8 (8-18-10) V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
8025'MD & 7263'TVD @ 3133' VS  
7.3 deg Inc 119.6 deg AZ

Project: SEC.31-T5N-R65W  
Site: PAD Y SEC.31-T5N-R65W  
Well: MAIN Y3 6-8-31  
Plan: Wellbore #1





# **Directional**

## **Mineral Resources Inc**

**SEC.31-T5N-R65W**

**PAD Y SEC.31-T5N-R65W**

**MAIN Y3 6-8-31**

**Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**27 January, 2011**

Survey										
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	122.0	0.10	303.90	122.0	0.1	-0.1	-0.1	0.08	0.08	0.00
	183.0	0.10	301.00	183.0	0.1	-0.2	-0.2	0.01	0.00	-4.75
	244.0	0.30	232.50	244.0	0.0	-0.4	-0.2	0.46	0.33	-112.30
	306.0	0.20	258.60	306.0	-0.1	-0.6	-0.3	0.24	-0.16	42.10
	367.0	0.40	192.70	367.0	-0.3	-0.7	-0.2	0.60	0.33	-108.03
	440.0	0.01	313.80	440.0	-0.5	-0.8	0.0	0.56	-0.53	165.89
	516.0	0.70	141.00	516.0	-0.9	-0.5	0.4	0.93	0.91	-227.37
	608.0	2.80	158.60	607.9	-3.4	0.7	3.2	2.33	2.28	19.13
	701.0	5.10	146.40	700.7	-9.0	3.8	9.5	2.62	2.47	-13.12
	794.0	7.20	144.60	793.2	-17.2	9.4	19.5	2.27	2.26	-1.94

<b>Company:</b>	Mineral Resources Inc	<b>Local Co-ordinate Reference:</b>	Well MAIN Y3 6-8-31
<b>Project:</b>	SEC.31-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4673.0ft (Original Well Elev)
<b>Site:</b>	PAD Y SEC.31-T5N-R65W	<b>MD Reference:</b>	WELL @ 4673.0ft (Original Well Elev)
<b>Well:</b>	MAIN Y3 6-8-31	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
888.0	9.90	149.80	886.1	-29.0	16.9	33.4	2.98	2.87	5.53
982.0	13.50	142.90	978.2	-44.7	27.6	52.5	4.10	3.83	-7.34
1,074.0	15.90	143.10	1,067.1	-63.4	41.7	75.8	2.61	2.61	0.22
1,167.0	18.80	146.30	1,155.9	-86.0	57.6	103.5	3.28	3.12	3.44
1,260.0	22.30	145.00	1,243.0	-112.9	76.1	136.2	3.80	3.76	-1.40
1,353.0	24.80	146.50	1,328.2	-143.7	97.0	173.3	2.76	2.69	1.61
1,445.0	25.70	145.30	1,411.4	-176.2	119.0	212.5	1.13	0.98	-1.30
1,538.0	26.10	146.00	1,495.1	-209.7	141.9	253.2	0.54	0.43	0.75
1,631.0	29.40	143.90	1,577.4	-245.1	166.8	296.5	3.70	3.55	-2.26
1,723.0	29.60	145.30	1,657.5	-282.0	193.0	341.8	0.78	0.22	1.52
1,816.0	30.30	146.30	1,738.0	-320.4	219.1	388.2	0.92	0.75	1.08
1,909.0	30.80	147.20	1,818.1	-360.0	245.0	435.4	0.73	0.54	0.97
2,002.0	30.00	145.50	1,898.3	-399.2	271.1	482.5	1.26	-0.86	-1.83
2,095.0	30.50	143.90	1,978.7	-437.4	298.2	529.3	1.02	0.54	-1.72
2,188.0	31.30	145.50	2,058.5	-476.4	325.8	577.1	1.23	0.86	1.72
2,280.0	30.90	145.40	2,137.3	-515.5	352.7	624.6	0.44	-0.43	-0.11
2,373.0	30.20	145.20	2,217.4	-554.4	379.6	671.9	0.76	-0.75	-0.22
2,465.0	31.30	147.00	2,296.4	-593.4	405.8	718.9	1.56	1.20	1.96
2,558.0	32.90	145.70	2,375.2	-634.5	433.2	768.3	1.87	1.72	-1.40
2,651.0	31.90	145.50	2,453.7	-675.7	461.4	818.1	1.08	-1.08	-0.22
2,744.0	34.60	147.20	2,531.5	-718.1	489.6	869.1	3.07	2.90	1.83
2,837.0	35.10	146.50	2,607.8	-762.6	518.7	922.2	0.69	0.54	-0.75
2,930.0	35.60	146.10	2,683.7	-807.4	548.5	976.0	0.59	0.54	-0.43
3,022.0	34.90	145.40	2,758.8	-851.3	578.4	1,029.1	0.88	-0.76	-0.76
3,115.0	31.90	144.90	2,836.4	-893.3	607.7	1,080.3	3.24	-3.23	-0.54
3,207.0	32.30	145.70	2,914.4	-933.5	635.5	1,129.2	0.63	0.43	0.87
3,300.0	30.80	145.40	2,993.6	-973.6	663.0	1,177.8	1.62	-1.61	-0.32
3,393.0	28.70	142.70	3,074.4	-1,011.0	690.1	1,224.0	2.68	-2.26	-2.90
3,486.0	27.20	145.30	3,156.5	-1,046.2	715.7	1,267.5	2.08	-1.61	2.80
3,579.0	27.90	147.90	3,239.0	-1,082.1	739.4	1,310.5	1.50	0.75	2.80
3,672.0	28.50	146.20	3,320.9	-1,119.0	763.3	1,354.4	1.08	0.65	-1.83
3,764.0	30.20	145.60	3,401.1	-1,156.3	788.6	1,399.5	1.88	1.85	-0.65
3,857.0	29.50	150.10	3,481.8	-1,195.5	813.2	1,445.7	2.52	-0.75	4.84
3,949.0	28.90	147.80	3,562.1	-1,233.9	836.3	1,490.5	1.38	-0.65	-2.50
4,042.0	31.90	141.90	3,642.3	-1,272.3	863.5	1,537.5	4.55	3.23	-6.34
4,135.0	32.90	141.70	3,720.8	-1,311.5	894.3	1,587.3	1.08	1.08	-0.22
4,227.0	32.60	143.10	3,798.2	-1,350.9	924.7	1,637.0	0.89	-0.33	1.52
4,320.0	31.90	142.60	3,876.9	-1,390.4	954.6	1,686.6	0.81	-0.75	-0.54
4,413.0	30.70	145.30	3,956.3	-1,429.5	983.1	1,734.8	1.98	-1.29	2.90
4,506.0	28.70	143.90	4,037.1	-1,467.0	1,009.7	1,780.9	2.28	-2.15	-1.51
4,599.0	28.00	147.80	4,119.0	-1,503.6	1,034.5	1,825.1	2.13	-0.75	4.19
4,692.0	29.00	148.20	4,200.7	-1,541.2	1,058.0	1,869.4	1.09	1.08	0.43
4,785.0	28.20	146.70	4,282.4	-1,578.7	1,082.0	1,913.9	1.16	-0.86	-1.61
4,877.0	28.50	147.40	4,363.3	-1,615.4	1,105.7	1,957.5	0.49	0.33	0.76
4,970.0	29.00	148.20	4,444.9	-1,653.2	1,129.6	2,002.2	0.68	0.54	0.86
5,063.0	28.50	145.30	4,526.4	-1,690.6	1,154.1	2,046.9	1.59	-0.54	-3.12
5,156.0	26.80	146.70	4,608.8	-1,726.4	1,178.2	2,090.0	1.96	-1.83	1.51
5,249.0	26.60	146.60	4,691.9	-1,761.3	1,201.2	2,131.8	0.22	-0.22	-0.11
5,341.0	25.80	145.90	4,774.4	-1,795.1	1,223.8	2,172.4	0.93	-0.87	-0.76
5,434.0	28.40	148.60	4,857.2	-1,830.7	1,246.6	2,214.7	3.09	2.80	2.90
5,527.0	31.70	149.10	4,937.7	-1,870.6	1,270.7	2,261.2	3.56	3.55	0.54
5,620.0	29.60	141.50	5,017.7	-1,909.5	1,297.6	2,308.5	4.73	-2.26	-8.17
5,713.0	27.80	145.20	5,099.3	-1,945.3	1,324.3	2,353.2	2.72	-1.94	3.98
5,805.0	26.90	148.80	5,181.0	-1,980.8	1,347.3	2,395.4	2.05	-0.98	3.91

<b>Company:</b>	Mineral Resources Inc	<b>Local Co-ordinate Reference:</b>	Well MAIN Y3 6-8-31
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<b>Well:</b>	MAIN Y3 6-8-31	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

## Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,898.0	23.30	151.80	5,265.2	-2,015.0	1,366.9	2,434.7	4.10	-3.87	3.23
5,991.0	24.00	145.90	5,350.4	-2,046.8	1,386.2	2,471.8	2.65	0.75	-6.34
6,083.0	23.20	148.70	5,434.7	-2,077.8	1,406.1	2,508.6	1.50	-0.87	3.04
6,176.0	23.30	146.90	5,520.2	-2,108.9	1,425.7	2,545.3	0.77	0.11	-1.94
6,269.0	24.50	145.30	5,605.2	-2,140.1	1,446.7	2,583.0	1.47	1.29	-1.72
6,362.0	23.70	147.50	5,690.1	-2,171.8	1,467.7	2,620.9	1.29	-0.86	2.37
6,454.0	24.90	146.80	5,773.9	-2,203.6	1,488.2	2,658.8	1.34	1.30	-0.76
6,547.0	23.60	146.00	5,858.7	-2,235.4	1,509.4	2,697.0	1.44	-1.40	-0.86
6,639.0	20.60	151.60	5,944.0	-2,264.9	1,527.4	2,731.5	3.98	-3.26	6.09
6,732.0	20.10	151.60	6,031.2	-2,293.3	1,542.8	2,763.6	0.54	-0.54	0.00
6,825.0	20.20	147.80	6,118.5	-2,321.0	1,558.9	2,795.5	1.41	0.11	-4.09
6,918.0	20.30	147.60	6,205.7	-2,348.2	1,576.1	2,827.7	0.13	0.11	-0.22
7,011.0	20.40	145.90	6,292.9	-2,375.2	1,593.8	2,860.0	0.64	0.11	-1.83
7,103.0	21.90	146.00	6,378.7	-2,402.7	1,612.4	2,893.2	1.63	1.63	0.11
7,196.0	21.20	141.30	6,465.2	-2,430.3	1,632.6	2,927.3	2.00	-0.75	-5.05
7,289.0	20.50	136.40	6,552.2	-2,455.2	1,654.4	2,960.2	2.02	-0.75	-5.27
7,383.0	20.70	134.60	6,640.1	-2,478.8	1,677.6	2,992.8	0.71	0.21	-1.91
7,475.0	19.60	137.60	6,726.5	-2,501.6	1,699.6	3,024.1	1.64	-1.20	3.26
7,482.3	19.31	137.36	6,733.4	-2,503.4	1,701.2	3,026.5	4.08	-3.93	-3.31
<b>DRILL TARGET 199'FSL, 1296'FEL</b>									
7,532.6	17.35	135.48	6,781.1	-2,514.8	1,712.1	3,042.1	4.08	-3.91	-3.73
<b>PERMIT TARGET 50'FSL, 1210'FEL</b>									
7,570.0	15.90	133.80	6,817.0	-2,522.4	1,719.7	3,052.6	4.08	-3.87	-4.50
7,663.0	13.00	128.60	6,907.0	-2,537.7	1,737.1	3,075.2	3.41	-3.12	-5.59
7,756.0	11.50	116.10	6,997.9	-2,548.3	1,753.6	3,093.3	3.27	-1.61	-13.44
7,850.0	10.70	121.30	7,090.2	-2,557.0	1,769.4	3,109.5	1.36	-0.85	5.53
7,943.0	8.30	122.50	7,181.9	-2,565.1	1,782.5	3,123.6	2.59	-2.58	1.29
7,973.0	7.30	119.60	7,211.6	-2,567.2	1,786.0	3,127.3	3.58	-3.33	-9.67
8,025.0	7.30	119.60	7,263.2	-2,570.4	1,791.7	3,133.3	0.00	0.00	0.00
<b>HARDLINE 50'S OF MAIN Y3 BHL</b>									

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_