

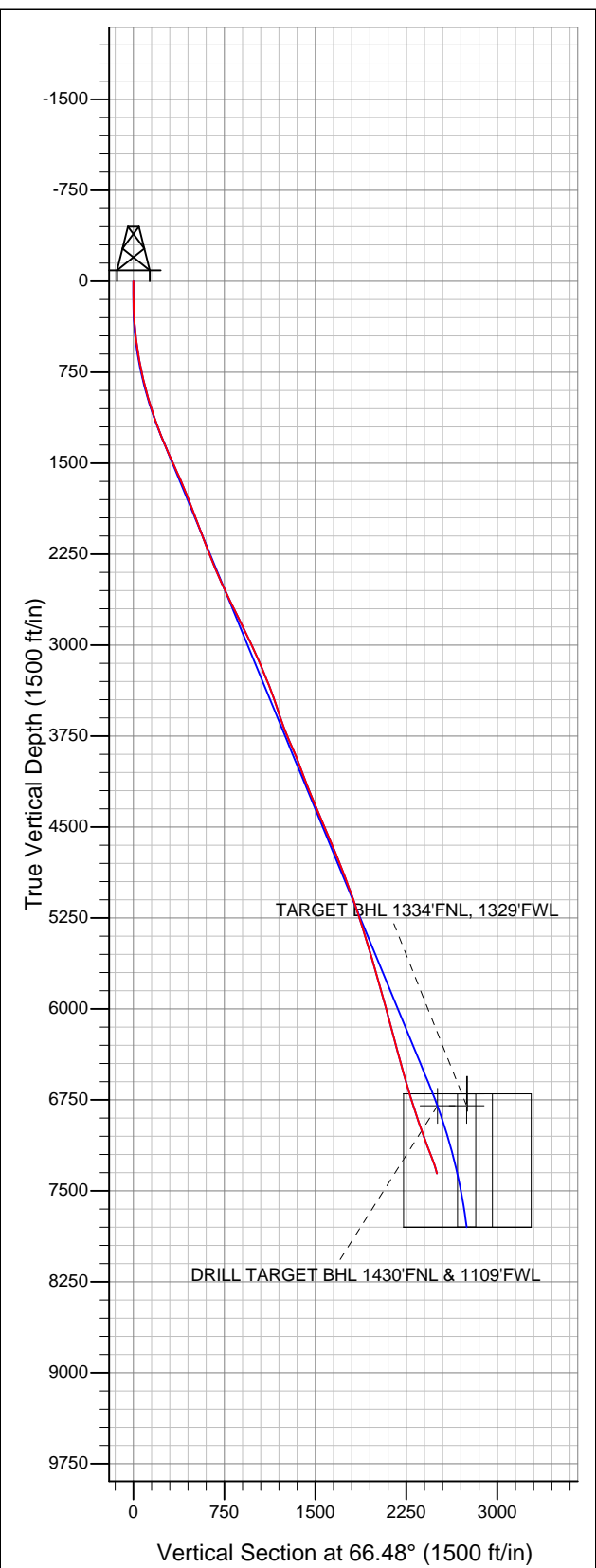
Well Name: POUDRE TRAIL 5 2-2-1

Surface Location: BESTWAY HOR PAD SEC.2-T5N-R66W
North American Datum 1983 US State Plane 1983 Colorado Northern Zone

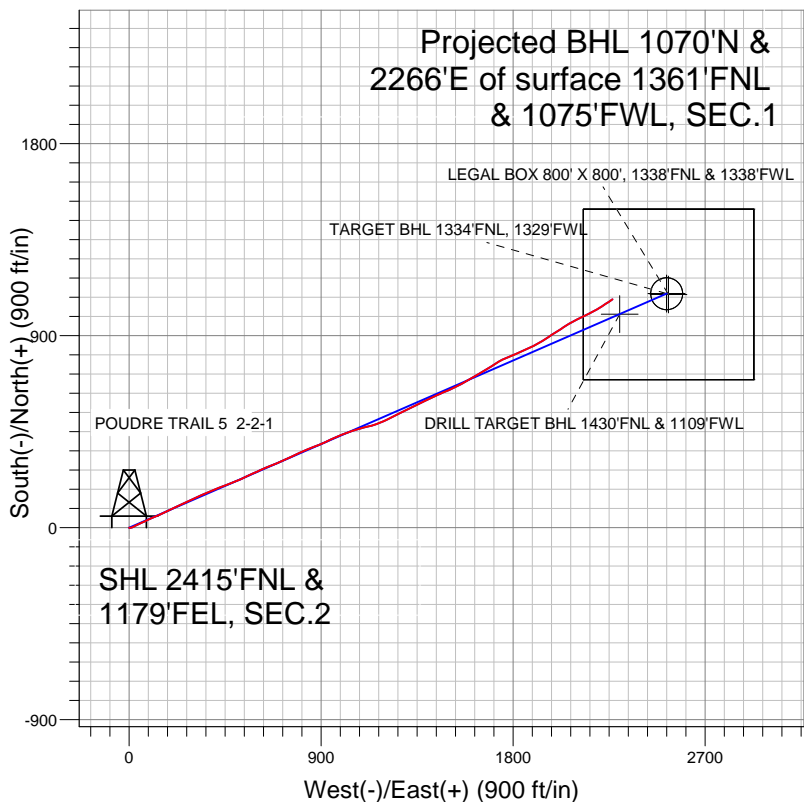
Ground Elevation: 4700.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1400674.58	3211772.45	40.430760	-104.739270	

EST RKB RIG 14 RKB @ 4715.0ft (EST RKB RIG 14)



Mineral Resources Inc



LEGEND

- ◆ POUDRE TRAIL 5 2-2-1, Wellbore #1, PLAN 2 (APR 23 2012) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7810'MD & 7356'TVD @ 2504'VS
17.70 deg Inc 57.10 deg AZ

Project: SEC.2-T5N-R66W
Site: BESTWAY HOR PAD SEC.2-T5N-R66W
Well: POUDRE TRAIL 5 2-2-1
Plan: Wellbore #1



Mineral Resources Inc

SEC.2-T5N-R66W

BESTWAY HOR PAD SEC.2-T5N-R66W

POUDRE TRAIL 5 2-2-1

Wellbore #1

Design: Wellbore #1

Standard Survey Report

31 May, 2012

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well POUDRE TRAIL 5 2-2-1
Project:	SEC.2-T5N-R66W	TVD Reference:	RKB @ 4715.0ft (EST RKB RIG 14)
Site:	BESTWAY HOR PAD SEC.2-T5N-R66W	MD Reference:	RKB @ 4715.0ft (EST RKB RIG 14)
Well:	POUDRE TRAIL 5 2-2-1	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
1,176.0	19.30	65.20	1,154.7	72.8	169.1	184.1	1.35	1.29	-1.29
1,269.0	21.60	63.90	1,241.8	86.8	198.4	216.6	2.52	2.47	-1.40
1,362.0	23.80	63.90	1,327.6	102.6	230.7	252.4	2.37	2.37	0.00
1,455.0	23.70	65.50	1,412.8	118.6	264.5	289.9	0.70	-0.11	1.72
1,549.0	23.70	65.90	1,498.8	134.1	299.0	327.7	0.17	0.00	0.43
1,642.0	24.30	65.30	1,583.8	149.8	333.4	365.5	0.70	0.65	-0.65
1,735.0	23.00	67.60	1,669.0	164.7	367.6	402.8	1.71	-1.40	2.47
1,827.0	22.20	66.60	1,753.9	178.4	400.2	438.1	0.96	-0.87	-1.09
1,920.0	20.80	69.60	1,840.5	191.2	431.8	472.2	1.91	-1.51	3.23
2,014.0	20.30	69.40	1,928.5	202.7	462.7	505.1	0.54	-0.53	-0.21
2,107.0	19.90	67.80	2,015.8	214.4	492.4	537.1	0.73	-0.43	-1.72
2,200.0	21.40	66.90	2,102.8	227.0	522.7	569.9	1.65	1.61	-0.97
2,294.0	21.00	64.80	2,190.5	240.9	553.7	603.8	0.91	-0.43	-2.23
2,386.0	22.20	64.10	2,276.0	255.5	584.3	637.7	1.33	1.30	-0.76
2,479.0	23.00	66.20	2,361.9	270.5	616.7	673.4	1.22	0.86	2.26
2,572.0	24.40	67.10	2,447.0	285.3	651.0	710.8	1.55	1.51	0.97
2,665.0	24.40	68.30	2,531.7	299.9	686.5	749.2	0.53	0.00	1.29
2,757.0	24.90	65.90	2,615.3	314.9	721.9	787.6	1.22	0.54	-2.61
2,849.0	26.90	65.00	2,698.1	331.6	758.4	827.7	2.22	2.17	-0.98
2,942.0	27.00	65.00	2,781.0	349.4	796.6	869.9	0.11	0.11	0.00
3,035.0	25.00	67.30	2,864.6	365.9	833.9	910.6	2.41	-2.15	2.47
3,128.0	26.20	69.00	2,948.4	380.8	871.2	950.8	1.51	1.29	1.83
3,221.0	25.10	66.40	3,032.3	396.1	908.4	991.0	1.69	-1.18	-2.80
3,313.0	23.20	64.10	3,116.2	411.8	942.6	1,028.7	2.30	-2.07	-2.50
3,406.0	22.50	69.00	3,201.9	426.2	975.7	1,064.7	2.18	-0.75	5.27
3,498.0	22.20	67.60	3,287.0	439.1	1,008.2	1,099.7	0.66	-0.33	-1.52
3,591.0	21.20	70.30	3,373.4	451.5	1,040.3	1,134.1	1.52	-1.08	2.90
3,684.0	19.30	74.10	3,460.7	461.4	1,070.9	1,166.1	2.48	-2.04	4.09
3,776.0	18.30	77.10	3,547.8	468.8	1,099.6	1,195.3	1.51	-1.09	3.26
3,868.0	19.70	75.10	3,634.8	476.0	1,128.7	1,224.9	1.68	1.52	-2.17
3,962.0	22.40	69.00	3,722.5	486.5	1,160.7	1,258.4	3.70	2.87	-6.49
4,055.0	23.00	67.60	3,808.3	499.7	1,194.1	1,294.3	0.87	0.65	-1.51
4,147.0	23.30	62.70	3,892.9	514.9	1,226.9	1,330.4	2.12	0.33	-5.33
4,240.0	21.10	61.10	3,979.0	531.5	1,257.9	1,365.5	2.45	-2.37	-1.72
4,333.0	20.70	64.50	4,065.9	546.6	1,287.4	1,398.5	1.37	-0.43	3.66
4,426.0	21.30	66.00	4,152.7	560.6	1,317.6	1,431.9	0.87	0.65	1.61
4,519.0	21.50	64.80	4,239.3	574.7	1,348.5	1,465.8	0.52	0.22	-1.29
4,612.0	22.20	62.20	4,325.6	590.2	1,379.4	1,500.3	1.28	0.75	-2.80
4,704.0	24.20	64.30	4,410.2	606.4	1,411.8	1,536.5	2.35	2.17	2.28
4,796.0	24.60	65.70	4,494.0	622.5	1,446.2	1,574.5	0.76	0.43	1.52
4,889.0	22.60	66.90	4,579.2	637.5	1,480.3	1,611.7	2.21	-2.15	1.29
4,982.0	22.00	67.30	4,665.2	651.2	1,512.8	1,647.0	0.67	-0.65	0.43
5,075.0	22.10	61.50	4,751.4	666.3	1,544.3	1,681.9	2.34	0.11	-6.24
5,167.0	20.80	60.10	4,837.0	682.7	1,573.7	1,715.4	1.52	-1.41	-1.52
5,260.0	20.80	60.10	4,924.0	699.1	1,602.3	1,748.2	0.00	0.00	0.00
5,352.0	21.40	59.70	5,009.8	715.8	1,630.9	1,781.1	0.67	0.65	-0.43
5,445.0	19.40	58.70	5,097.0	732.3	1,658.8	1,813.2	2.18	-2.15	-1.08
5,538.0	18.60	60.60	5,184.9	747.7	1,684.9	1,843.3	1.09	-0.86	2.04
5,631.0	18.10	56.00	5,273.2	763.0	1,709.8	1,872.3	1.65	-0.54	-4.95
5,724.0	17.60	57.80	5,361.7	778.6	1,733.7	1,900.4	0.80	-0.54	1.94
5,817.0	16.80	65.50	5,450.6	791.7	1,757.8	1,927.7	2.59	-0.86	8.28
5,910.0	15.80	66.90	5,539.8	802.2	1,781.7	1,953.8	1.16	-1.08	1.51
6,003.0	16.30	69.70	5,629.2	811.7	1,805.6	1,979.5	0.99	0.54	3.01
6,096.0	16.40	67.30	5,718.4	821.3	1,829.9	2,005.6	0.73	0.11	-2.58

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well POUDRE TRAIL 5 2-2-1
Project:	SEC.2-T5N-R66W	TVD Reference:	RKB @ 4715.0ft (EST RKB RIG 14)
Site:	BESTWAY HOR PAD SEC.2-T5N-R66W	MD Reference:	RKB @ 4715.0ft (EST RKB RIG 14)
Well:	POUDRE TRAIL 5 2-2-1	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	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)
6,188.0	16.40	66.60	5,806.7	831.5	1,853.8	2,031.6	0.21	0.00	-0.76
6,282.0	15.70	61.80	5,897.0	842.7	1,877.2	2,057.6	1.60	-0.74	-5.11
6,374.0	14.90	62.70	5,985.8	854.0	1,898.7	2,081.8	0.91	-0.87	0.98
6,467.0	14.50	60.60	6,075.7	865.2	1,919.5	2,105.3	0.72	-0.43	-2.26
6,560.0	14.40	59.00	6,165.8	876.9	1,939.5	2,128.3	0.44	-0.11	-1.72
6,653.0	15.60	56.00	6,255.6	889.9	1,959.8	2,152.1	1.54	1.29	-3.23
6,746.0	15.80	57.60	6,345.2	903.6	1,980.9	2,176.9	0.51	0.22	1.72
6,839.0	15.70	58.00	6,434.7	917.1	2,002.2	2,201.9	0.16	-0.11	0.43
6,933.0	15.90	58.00	6,525.1	930.7	2,023.9	2,227.2	0.21	0.21	0.00
7,025.0	16.40	56.70	6,613.5	944.5	2,045.5	2,252.4	0.67	0.54	-1.41
7,118.0	16.60	59.60	6,702.7	958.4	2,067.9	2,278.6	0.91	0.22	3.12
7,211.0	17.30	61.70	6,791.6	971.7	2,091.5	2,305.5	1.00	0.75	2.26
7,256.0	17.93	62.46	6,834.5	978.0	2,103.6	2,319.1	1.50	1.41	1.69
TARGET CIRCLE 1334'FNL & 1329'FWL									
7,259.1	17.98	62.51	6,837.4	978.5	2,104.4	2,320.1	1.50	1.41	1.63
LEGAL BOX 800' X 800', 1338'FNL & 1338'FWL									
7,279.9	18.27	62.84	6,857.2	981.5	2,110.2	2,326.5	1.50	1.41	1.60
DRILL TARGET BHL 1430'FNL & 1109'FWL									
7,303.0	18.60	63.20	6,879.1	984.8	2,116.7	2,333.8	1.50	1.42	1.55
7,362.4	19.17	64.56	6,935.4	993.2	2,134.0	2,353.0	1.22	0.96	2.29
TARGET BHL 1334'FNL, 1329'FWL									
7,396.0	19.50	65.30	6,967.0	997.9	2,144.0	2,364.1	1.22	0.98	2.19
7,489.0	20.40	63.40	7,054.5	1,011.7	2,172.6	2,395.9	1.19	0.97	-2.04
7,582.0	22.10	58.30	7,141.1	1,028.1	2,202.0	2,429.4	2.70	1.83	-5.48
7,675.0	19.90	55.50	7,228.0	1,046.3	2,229.9	2,462.2	2.60	-2.37	-3.01
7,768.0	17.70	57.10	7,316.0	1,062.9	2,254.8	2,491.7	2.43	-2.37	1.72
7,810.0	17.70	57.10	7,356.0	1,069.9	2,265.6	2,504.3	0.00	0.00	0.00

Checked By: _____ Approved By: _____ Date: _____