

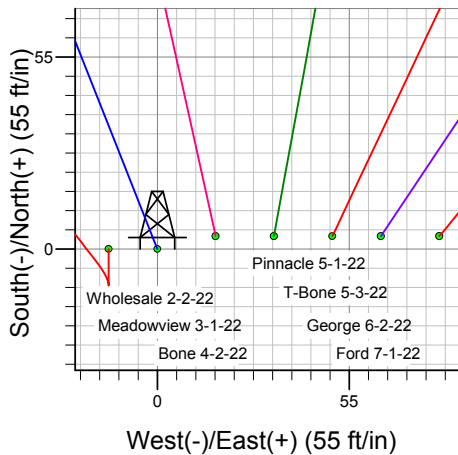
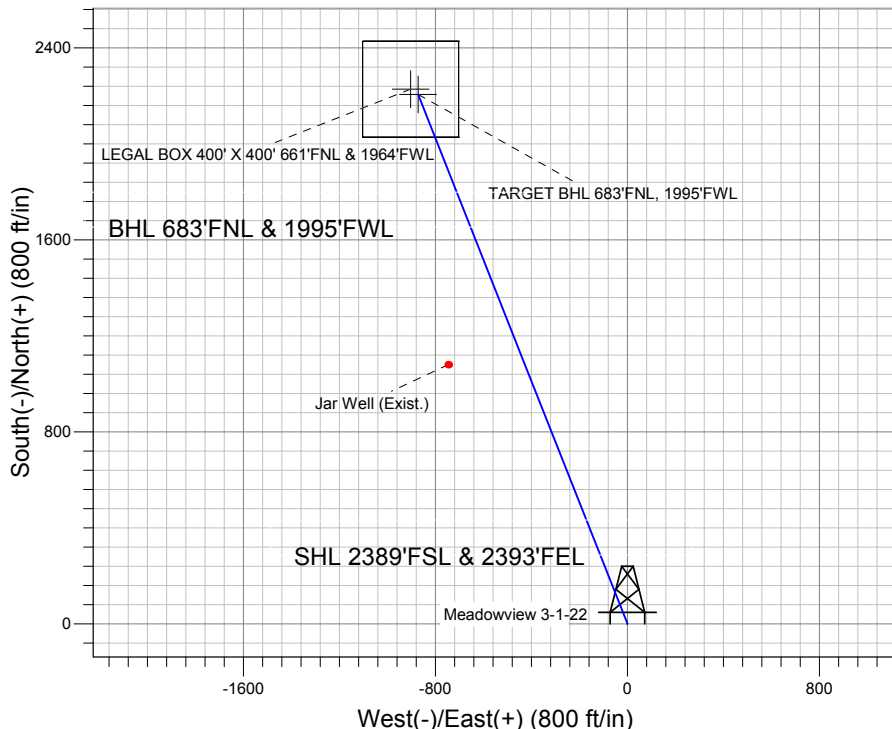
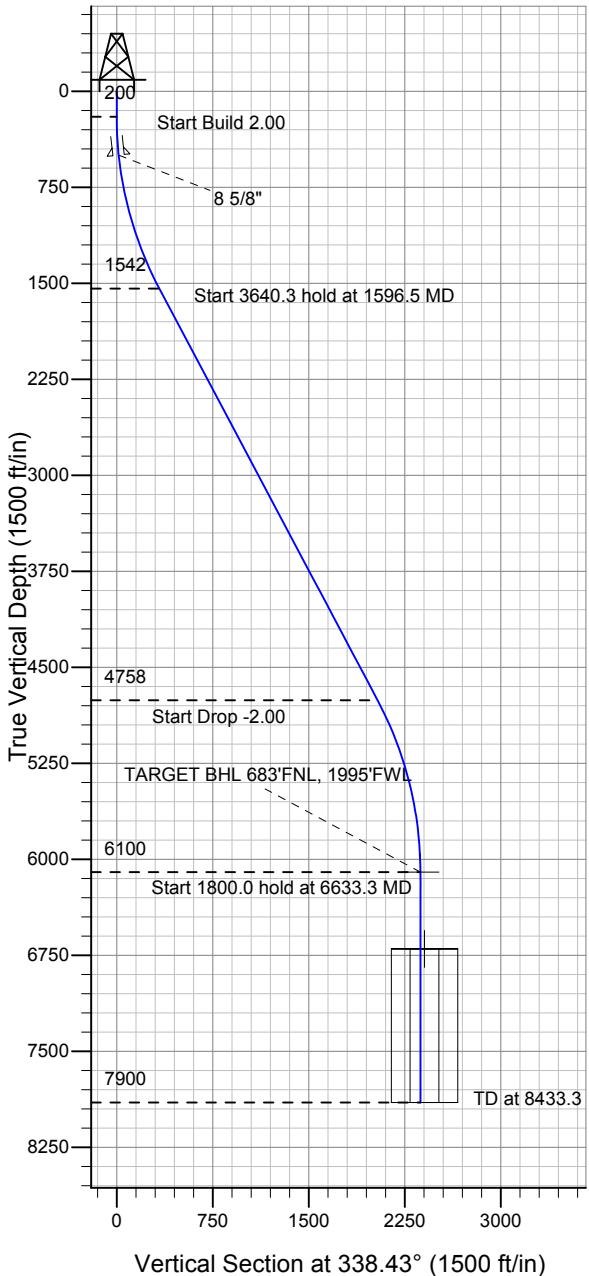
ENSIGN

Directional

Well Name: Meadowview 3-1-22

Surface Location: T-Bone 5-3-22 Pad Sec.22-T5N-R66W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4806.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1383708.12 3204802.95 40.384350 -104.764810
 Original Well Elev WELL @ 4819.0ft (Original Well Elev)

Mineral Resources Inc



T-Bone 5-3-22 Pad Sec.22-T5N-R66W
 Meadowview 3-1-22
 Plan #1 (5-16-11)
 14:37, June 02 2011



Azimuths to True North
 Magnetic North: 8.87°

Magnetic Field
 Strength: 53127.2snT
 Dip Angle: 67.04°
 Date: 6/2/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 683'FNL, 1995'FWL	6100.0	2206.4	-872.2	40.390406	-104.767941	Point
LEGAL BOX 400' X 400' 661'FNL & 1964'FWL	6700.0	2228.4	-903.2	40.390467	-104.768052	Rectangle (Sides: L400.0 W400.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	1596.5	27.93	338.43	1541.9	310.3	-122.7	2.00	338.43	333.7	
4	5236.8	27.93	338.43	4758.1	1896.0	-749.5	0.00	0.00	2038.8	
5	6633.3	0.00	0.00	6100.0	2206.4	-872.2	2.00	180.00	2372.5	TARGET BHL 683'FNL, 1995'FWL
6	8433.3	0.00	0.00	7900.0	2206.4	-872.2	0.00	0.00	2372.5	



Directional

Mineral Resources Inc

SEC.22-T5N-R66W

T-Bone 5-3-22 Pad Sec.22-T5N-R66W

Meadowview 3-1-22

Wellbore #1

Plan: Plan #1 (5-16-11)

Standard Planning Report

02 June, 2011

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,596.5	27.93	338.43	1,541.9	310.3	-122.7	2.00	2.00	0.00	338.43	
5,236.8	27.93	338.43	4,758.1	1,896.0	-749.5	0.00	0.00	0.00	0.00	
6,633.3	0.00	0.00	6,100.0	2,206.4	-872.2	2.00	-2.00	0.00	180.00	TARGET BHL 683°
8,433.3	0.00	0.00	7,900.0	2,206.4	-872.2	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Company:	Mineral Resources Inc	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Project:	SEC.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	North Reference:	True
Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-16-11)		

Planned 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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.80	338.43	240.0	0.3	-0.1	0.3	2.00	2.00	0.00
280.0	1.60	338.43	280.0	1.0	-0.4	1.1	2.00	2.00	0.00
320.0	2.40	338.43	320.0	2.3	-0.9	2.5	2.00	2.00	0.00
360.0	3.20	338.43	359.9	4.2	-1.6	4.5	2.00	2.00	0.00
400.0	4.00	338.43	399.8	6.5	-2.6	7.0	2.00	2.00	0.00
440.0	4.80	338.43	439.7	9.3	-3.7	10.0	2.00	2.00	0.00
480.0	5.60	338.43	479.6	12.7	-5.0	13.7	2.00	2.00	0.00
500.6	6.01	338.43	500.0	14.6	-5.8	15.8	2.00	2.00	0.00
8 5/8"									
520.0	6.40	338.43	519.3	16.6	-6.6	17.9	2.00	2.00	0.00
560.0	7.20	338.43	559.1	21.0	-8.3	22.6	2.00	2.00	0.00
600.0	8.00	338.43	598.7	25.9	-10.2	27.9	2.00	2.00	0.00
640.0	8.80	338.43	638.3	31.4	-12.4	33.7	2.00	2.00	0.00
680.0	9.60	338.43	677.8	37.3	-14.7	40.1	2.00	2.00	0.00
720.0	10.40	338.43	717.1	43.8	-17.3	47.1	2.00	2.00	0.00
760.0	11.20	338.43	756.4	50.7	-20.1	54.6	2.00	2.00	0.00
800.0	12.00	338.43	795.6	58.2	-23.0	62.6	2.00	2.00	0.00
840.0	12.80	338.43	834.7	66.2	-26.2	71.2	2.00	2.00	0.00
880.0	13.60	338.43	873.6	74.7	-29.5	80.3	2.00	2.00	0.00
920.0	14.40	338.43	912.4	83.7	-33.1	90.0	2.00	2.00	0.00
960.0	15.20	338.43	951.1	93.2	-36.8	100.2	2.00	2.00	0.00
1,000.0	16.00	338.43	989.6	103.2	-40.8	111.0	2.00	2.00	0.00
1,040.0	16.80	338.43	1,028.0	113.7	-44.9	122.3	2.00	2.00	0.00
1,080.0	17.60	338.43	1,066.2	124.7	-49.3	134.1	2.00	2.00	0.00
1,120.0	18.40	338.43	1,104.3	136.2	-53.8	146.5	2.00	2.00	0.00
1,160.0	19.20	338.43	1,142.1	148.2	-58.6	159.3	2.00	2.00	0.00
1,200.0	20.00	338.43	1,179.8	160.7	-63.5	172.8	2.00	2.00	0.00
1,240.0	20.80	338.43	1,217.3	173.6	-68.6	186.7	2.00	2.00	0.00
1,280.0	21.60	338.43	1,254.6	187.1	-74.0	201.2	2.00	2.00	0.00
1,320.0	22.40	338.43	1,291.7	201.0	-79.5	216.2	2.00	2.00	0.00
1,360.0	23.20	338.43	1,328.6	215.4	-85.2	231.7	2.00	2.00	0.00
1,400.0	24.00	338.43	1,365.2	230.3	-91.0	247.7	2.00	2.00	0.00
1,440.0	24.80	338.43	1,401.6	245.7	-97.1	264.2	2.00	2.00	0.00
1,480.0	25.60	338.43	1,437.8	261.5	-103.4	281.2	2.00	2.00	0.00
1,520.0	26.40	338.43	1,473.8	277.8	-109.8	298.8	2.00	2.00	0.00
1,560.0	27.20	338.43	1,509.5	294.6	-116.5	316.8	2.00	2.00	0.00
1,596.5	27.93	338.43	1,541.9	310.3	-122.7	333.7	2.00	2.00	0.00
1,600.0	27.93	338.43	1,544.9	311.8	-123.3	335.3	0.00	0.00	0.00
1,640.0	27.93	338.43	1,580.3	329.3	-130.2	354.1	0.00	0.00	0.00
1,680.0	27.93	338.43	1,615.6	346.7	-137.0	372.8	0.00	0.00	0.00
1,720.0	27.93	338.43	1,651.0	364.1	-143.9	391.5	0.00	0.00	0.00
1,760.0	27.93	338.43	1,686.3	381.5	-150.8	410.3	0.00	0.00	0.00
1,800.0	27.93	338.43	1,721.6	399.0	-157.7	429.0	0.00	0.00	0.00
1,840.0	27.93	338.43	1,757.0	416.4	-164.6	447.7	0.00	0.00	0.00
1,880.0	27.93	338.43	1,792.3	433.8	-171.5	466.5	0.00	0.00	0.00
1,920.0	27.93	338.43	1,827.7	451.2	-178.4	485.2	0.00	0.00	0.00
1,960.0	27.93	338.43	1,863.0	468.7	-185.3	504.0	0.00	0.00	0.00
2,000.0	27.93	338.43	1,898.3	486.1	-192.2	522.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Company:	Mineral Resources Inc	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Project:	SEC.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	North Reference:	True
Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-16-11)		

Planned 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)
2,040.0	27.93	338.43	1,933.7	503.5	-199.0	541.4	0.00	0.00	0.00
2,080.0	27.93	338.43	1,969.0	520.9	-205.9	560.2	0.00	0.00	0.00
2,120.0	27.93	338.43	2,004.4	538.4	-212.8	578.9	0.00	0.00	0.00
2,160.0	27.93	338.43	2,039.7	555.8	-219.7	597.6	0.00	0.00	0.00
2,200.0	27.93	338.43	2,075.0	573.2	-226.6	616.4	0.00	0.00	0.00
2,240.0	27.93	338.43	2,110.4	590.6	-233.5	635.1	0.00	0.00	0.00
2,280.0	27.93	338.43	2,145.7	608.1	-240.4	653.8	0.00	0.00	0.00
2,320.0	27.93	338.43	2,181.1	625.5	-247.3	672.6	0.00	0.00	0.00
2,360.0	27.93	338.43	2,216.4	642.9	-254.1	691.3	0.00	0.00	0.00
2,400.0	27.93	338.43	2,251.8	660.3	-261.0	710.0	0.00	0.00	0.00
2,440.0	27.93	338.43	2,287.1	677.7	-267.9	728.8	0.00	0.00	0.00
2,480.0	27.93	338.43	2,322.4	695.2	-274.8	747.5	0.00	0.00	0.00
2,520.0	27.93	338.43	2,357.8	712.6	-281.7	766.3	0.00	0.00	0.00
2,560.0	27.93	338.43	2,393.1	730.0	-288.6	785.0	0.00	0.00	0.00
2,600.0	27.93	338.43	2,428.5	747.4	-295.5	803.7	0.00	0.00	0.00
2,640.0	27.93	338.43	2,463.8	764.9	-302.4	822.5	0.00	0.00	0.00
2,680.0	27.93	338.43	2,499.1	782.3	-309.2	841.2	0.00	0.00	0.00
2,720.0	27.93	338.43	2,534.5	799.7	-316.1	859.9	0.00	0.00	0.00
2,760.0	27.93	338.43	2,569.8	817.1	-323.0	878.7	0.00	0.00	0.00
2,800.0	27.93	338.43	2,605.2	834.6	-329.9	897.4	0.00	0.00	0.00
2,840.0	27.93	338.43	2,640.5	852.0	-336.8	916.1	0.00	0.00	0.00
2,880.0	27.93	338.43	2,675.8	869.4	-343.7	934.9	0.00	0.00	0.00
2,920.0	27.93	338.43	2,711.2	886.8	-350.6	953.6	0.00	0.00	0.00
2,960.0	27.93	338.43	2,746.5	904.3	-357.5	972.3	0.00	0.00	0.00
3,000.0	27.93	338.43	2,781.9	921.7	-364.3	991.1	0.00	0.00	0.00
3,040.0	27.93	338.43	2,817.2	939.1	-371.2	1,009.8	0.00	0.00	0.00
3,080.0	27.93	338.43	2,852.5	956.5	-378.1	1,028.6	0.00	0.00	0.00
3,120.0	27.93	338.43	2,887.9	974.0	-385.0	1,047.3	0.00	0.00	0.00
3,160.0	27.93	338.43	2,923.2	991.4	-391.9	1,066.0	0.00	0.00	0.00
3,200.0	27.93	338.43	2,958.6	1,008.8	-398.8	1,084.8	0.00	0.00	0.00
3,240.0	27.93	338.43	2,993.9	1,026.2	-405.7	1,103.5	0.00	0.00	0.00
3,280.0	27.93	338.43	3,029.2	1,043.7	-412.6	1,122.2	0.00	0.00	0.00
3,320.0	27.93	338.43	3,064.6	1,061.1	-419.4	1,141.0	0.00	0.00	0.00
3,360.0	27.93	338.43	3,099.9	1,078.5	-426.3	1,159.7	0.00	0.00	0.00
3,400.0	27.93	338.43	3,135.3	1,095.9	-433.2	1,178.4	0.00	0.00	0.00
3,440.0	27.93	338.43	3,170.6	1,113.3	-440.1	1,197.2	0.00	0.00	0.00
3,480.0	27.93	338.43	3,206.0	1,130.8	-447.0	1,215.9	0.00	0.00	0.00
3,520.0	27.93	338.43	3,241.3	1,148.2	-453.9	1,234.7	0.00	0.00	0.00
3,560.0	27.93	338.43	3,276.6	1,165.6	-460.8	1,253.4	0.00	0.00	0.00
3,600.0	27.93	338.43	3,312.0	1,183.0	-467.7	1,272.1	0.00	0.00	0.00
3,640.0	27.93	338.43	3,347.3	1,200.5	-474.5	1,290.9	0.00	0.00	0.00
3,680.0	27.93	338.43	3,382.7	1,217.9	-481.4	1,309.6	0.00	0.00	0.00
3,720.0	27.93	338.43	3,418.0	1,235.3	-488.3	1,328.3	0.00	0.00	0.00
3,760.0	27.93	338.43	3,453.3	1,252.7	-495.2	1,347.1	0.00	0.00	0.00
3,800.0	27.93	338.43	3,488.7	1,270.2	-502.1	1,365.8	0.00	0.00	0.00
3,840.0	27.93	338.43	3,524.0	1,287.6	-509.0	1,384.5	0.00	0.00	0.00
3,880.0	27.93	338.43	3,559.4	1,305.0	-515.9	1,403.3	0.00	0.00	0.00
3,920.0	27.93	338.43	3,594.7	1,322.4	-522.8	1,422.0	0.00	0.00	0.00
3,960.0	27.93	338.43	3,630.0	1,339.9	-529.6	1,440.7	0.00	0.00	0.00
4,000.0	27.93	338.43	3,665.4	1,357.3	-536.5	1,459.5	0.00	0.00	0.00
4,040.0	27.93	338.43	3,700.7	1,374.7	-543.4	1,478.2	0.00	0.00	0.00
4,080.0	27.93	338.43	3,736.1	1,392.1	-550.3	1,497.0	0.00	0.00	0.00
4,120.0	27.93	338.43	3,771.4	1,409.6	-557.2	1,515.7	0.00	0.00	0.00
4,160.0	27.93	338.43	3,806.7	1,427.0	-564.1	1,534.4	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Company:	Mineral Resources Inc	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Project:	SEC.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	North Reference:	True
Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-16-11)		

Planned 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)
4,200.0	27.93	338.43	3,842.1	1,444.4	-571.0	1,553.2	0.00	0.00	0.00
4,240.0	27.93	338.43	3,877.4	1,461.8	-577.9	1,571.9	0.00	0.00	0.00
4,280.0	27.93	338.43	3,912.8	1,479.2	-584.7	1,590.6	0.00	0.00	0.00
4,320.0	27.93	338.43	3,948.1	1,496.7	-591.6	1,609.4	0.00	0.00	0.00
4,360.0	27.93	338.43	3,983.4	1,514.1	-598.5	1,628.1	0.00	0.00	0.00
4,400.0	27.93	338.43	4,018.8	1,531.5	-605.4	1,646.8	0.00	0.00	0.00
4,440.0	27.93	338.43	4,054.1	1,548.9	-612.3	1,665.6	0.00	0.00	0.00
4,480.0	27.93	338.43	4,089.5	1,566.4	-619.2	1,684.3	0.00	0.00	0.00
4,520.0	27.93	338.43	4,124.8	1,583.8	-626.1	1,703.0	0.00	0.00	0.00
4,560.0	27.93	338.43	4,160.2	1,601.2	-633.0	1,721.8	0.00	0.00	0.00
4,600.0	27.93	338.43	4,195.5	1,618.6	-639.9	1,740.5	0.00	0.00	0.00
4,640.0	27.93	338.43	4,230.8	1,636.1	-646.7	1,759.3	0.00	0.00	0.00
4,680.0	27.93	338.43	4,266.2	1,653.5	-653.6	1,778.0	0.00	0.00	0.00
4,720.0	27.93	338.43	4,301.5	1,670.9	-660.5	1,796.7	0.00	0.00	0.00
4,760.0	27.93	338.43	4,336.9	1,688.3	-667.4	1,815.5	0.00	0.00	0.00
4,800.0	27.93	338.43	4,372.2	1,705.8	-674.3	1,834.2	0.00	0.00	0.00
4,840.0	27.93	338.43	4,407.5	1,723.2	-681.2	1,852.9	0.00	0.00	0.00
4,880.0	27.93	338.43	4,442.9	1,740.6	-688.1	1,871.7	0.00	0.00	0.00
4,920.0	27.93	338.43	4,478.2	1,758.0	-695.0	1,890.4	0.00	0.00	0.00
4,960.0	27.93	338.43	4,513.6	1,775.5	-701.8	1,909.1	0.00	0.00	0.00
5,000.0	27.93	338.43	4,548.9	1,792.9	-708.7	1,927.9	0.00	0.00	0.00
5,040.0	27.93	338.43	4,584.2	1,810.3	-715.6	1,946.6	0.00	0.00	0.00
5,080.0	27.93	338.43	4,619.6	1,827.7	-722.5	1,965.4	0.00	0.00	0.00
5,120.0	27.93	338.43	4,654.9	1,845.2	-729.4	1,984.1	0.00	0.00	0.00
5,160.0	27.93	338.43	4,690.3	1,862.6	-736.3	2,002.8	0.00	0.00	0.00
5,200.0	27.93	338.43	4,725.6	1,880.0	-743.2	2,021.6	0.00	0.00	0.00
5,236.8	27.93	338.43	4,758.1	1,896.0	-749.5	2,038.8	0.00	0.00	0.00
5,240.0	27.87	338.43	4,760.9	1,897.4	-750.1	2,040.3	2.00	-2.00	0.00
5,280.0	27.07	338.43	4,796.4	1,914.6	-756.8	2,058.7	2.00	-2.00	0.00
5,320.0	26.27	338.43	4,832.2	1,931.3	-763.4	2,076.7	2.00	-2.00	0.00
5,360.0	25.47	338.43	4,868.2	1,947.5	-769.9	2,094.1	2.00	-2.00	0.00
5,400.0	24.67	338.43	4,904.4	1,963.3	-776.1	2,111.1	2.00	-2.00	0.00
5,440.0	23.87	338.43	4,940.9	1,978.6	-782.1	2,127.5	2.00	-2.00	0.00
5,480.0	23.07	338.43	4,977.6	1,993.4	-788.0	2,143.5	2.00	-2.00	0.00
5,520.0	22.27	338.43	5,014.5	2,007.7	-793.6	2,158.9	2.00	-2.00	0.00
5,560.0	21.47	338.43	5,051.6	2,021.6	-799.1	2,173.8	2.00	-2.00	0.00
5,600.0	20.67	338.43	5,088.9	2,034.9	-804.4	2,188.2	2.00	-2.00	0.00
5,640.0	19.87	338.43	5,126.4	2,047.8	-809.5	2,202.0	2.00	-2.00	0.00
5,680.0	19.07	338.43	5,164.2	2,060.2	-814.4	2,215.3	2.00	-2.00	0.00
5,720.0	18.27	338.43	5,202.1	2,072.1	-819.1	2,228.1	2.00	-2.00	0.00
5,760.0	17.47	338.43	5,240.1	2,083.5	-823.6	2,240.4	2.00	-2.00	0.00
5,800.0	16.67	338.43	5,278.4	2,094.4	-827.9	2,252.2	2.00	-2.00	0.00
5,840.0	15.87	338.43	5,316.8	2,104.9	-832.1	2,263.4	2.00	-2.00	0.00
5,880.0	15.07	338.43	5,355.3	2,114.8	-836.0	2,274.0	2.00	-2.00	0.00
5,920.0	14.27	338.43	5,394.0	2,124.2	-839.7	2,284.1	2.00	-2.00	0.00
5,960.0	13.47	338.43	5,432.8	2,133.1	-843.2	2,293.7	2.00	-2.00	0.00
6,000.0	12.67	338.43	5,471.8	2,141.5	-846.5	2,302.8	2.00	-2.00	0.00
6,040.0	11.87	338.43	5,510.9	2,149.4	-849.7	2,311.3	2.00	-2.00	0.00
6,080.0	11.07	338.43	5,550.1	2,156.8	-852.6	2,319.2	2.00	-2.00	0.00
6,120.0	10.27	338.43	5,589.4	2,163.7	-855.3	2,326.6	2.00	-2.00	0.00
6,160.0	9.47	338.43	5,628.8	2,170.1	-857.8	2,333.5	2.00	-2.00	0.00
6,200.0	8.67	338.43	5,668.3	2,175.9	-860.2	2,339.8	2.00	-2.00	0.00
6,240.0	7.87	338.43	5,707.9	2,181.3	-862.3	2,345.5	2.00	-2.00	0.00
6,280.0	7.07	338.43	5,747.6	2,186.1	-864.2	2,350.7	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Company:	Mineral Resources Inc	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Project:	SEC.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	North Reference:	True
Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-16-11)		

Planned 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)
6,320.0	6.27	338.43	5,787.3	2,190.5	-865.9	2,355.4	2.00	-2.00	0.00
6,360.0	5.47	338.43	5,827.1	2,194.3	-867.4	2,359.5	2.00	-2.00	0.00
6,400.0	4.67	338.43	5,866.9	2,197.5	-868.7	2,363.0	2.00	-2.00	0.00
6,440.0	3.87	338.43	5,906.8	2,200.3	-869.8	2,366.0	2.00	-2.00	0.00
6,480.0	3.07	338.43	5,946.7	2,202.6	-870.7	2,368.4	2.00	-2.00	0.00
6,520.0	2.27	338.43	5,986.7	2,204.3	-871.4	2,370.3	2.00	-2.00	0.00
6,560.0	1.47	338.43	6,026.7	2,205.5	-871.8	2,371.6	2.00	-2.00	0.00
6,600.0	0.67	338.43	6,066.7	2,206.2	-872.1	2,372.3	2.00	-2.00	0.00
6,633.3	0.00	0.00	6,100.0	2,206.4	-872.2	2,372.5	2.00	-2.00	64.69
TARGET BHL 683'FNL, 1995'FWL									
6,640.0	0.00	0.00	6,106.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,680.0	0.00	0.00	6,146.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,720.0	0.00	0.00	6,186.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,760.0	0.00	0.00	6,226.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,266.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,840.0	0.00	0.00	6,306.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,880.0	0.00	0.00	6,346.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,920.0	0.00	0.00	6,386.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
6,960.0	0.00	0.00	6,426.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,466.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,040.0	0.00	0.00	6,506.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,080.0	0.00	0.00	6,546.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,120.0	0.00	0.00	6,586.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,160.0	0.00	0.00	6,626.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,200.0	0.00	0.00	6,666.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,233.3	0.00	0.00	6,700.0	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
LEGAL BOX 400' X 400' 661'FNL & 1964'FWL									
7,240.0	0.00	0.00	6,706.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,280.0	0.00	0.00	6,746.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,320.0	0.00	0.00	6,786.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,360.0	0.00	0.00	6,826.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,400.0	0.00	0.00	6,866.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,440.0	0.00	0.00	6,906.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,480.0	0.00	0.00	6,946.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,520.0	0.00	0.00	6,986.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,560.0	0.00	0.00	7,026.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,066.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,640.0	0.00	0.00	7,106.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,680.0	0.00	0.00	7,146.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,720.0	0.00	0.00	7,186.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,760.0	0.00	0.00	7,226.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,266.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,840.0	0.00	0.00	7,306.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,880.0	0.00	0.00	7,346.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,920.0	0.00	0.00	7,386.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
7,960.0	0.00	0.00	7,426.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,466.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,040.0	0.00	0.00	7,506.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,080.0	0.00	0.00	7,546.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,120.0	0.00	0.00	7,586.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,160.0	0.00	0.00	7,626.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,200.0	0.00	0.00	7,666.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,240.0	0.00	0.00	7,706.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00
8,280.0	0.00	0.00	7,746.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Company:	Mineral Resources Inc	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Project:	SEC.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	North Reference:	True
Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (5-16-11)		

Planned 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)	
8,320.0	0.00	0.00	7,786.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00	
8,360.0	0.00	0.00	7,826.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00	
8,400.0	0.00	0.00	7,866.7	2,206.4	-872.2	2,372.5	0.00	0.00	0.00	
8,433.3	0.00	0.00	7,900.0	2,206.4	-872.2	2,372.5	0.00	0.00	0.00	

Targets										
Target Name	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
LEGAL BOX 400' X 400'	- plan misses target center by 38.0ft at 7233.3ft MD (6700.0 TVD, 2206.4 N, -872.2 E)	0.00	0.00	6,700.0	2,228.4	-903.2	1,385,928.86	3,203,881.35	40.390467	-104.768052
	- Rectangle (sides W400.0 H400.0 D1,200.0)									
TARGET BHL 683'FN	- plan hits target center	0.00	0.00	6,100.0	2,206.4	-872.2	1,385,907.09	3,203,912.54	40.390406	-104.767941
	- Point									

Casing Points							
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")		
500.6	500.0	8 5/8"		8-5/8	12-1/4		



Directional

Mineral Resources Inc

SEC.22-T5N-R66W

T-Bone 5-3-22 Pad Sec.22-T5N-R66W

Meadowview 3-1-22

Wellbore #1

Plan #1 (5-16-11)

Anticollision Report

02 June, 2011

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
1,900.0	1,810.0	1,914.9	1,877.9	9.9	6.5	164.31	271.5	-42.4	226.5	216.2	10.34	21.901	
2,000.0	1,898.3	2,013.5	1,971.2	10.9	7.2	164.17	302.7	-49.3	243.3	232.2	11.15	21.827	
2,100.0	1,986.7	2,112.1	2,064.5	11.8	7.8	164.05	333.8	-56.2	260.2	248.2	11.96	21.749	
2,200.0	2,075.0	2,210.6	2,157.7	12.7	8.4	163.94	365.0	-63.1	277.1	264.3	12.79	21.669	
2,300.0	2,163.4	2,309.2	2,251.0	13.6	9.0	163.84	396.2	-69.9	293.9	280.3	13.61	21.591	
2,400.0	2,251.8	2,407.8	2,344.2	14.6	9.6	163.76	427.4	-76.8	310.8	296.3	14.44	21.515	
2,500.0	2,340.1	2,506.3	2,437.5	15.5	10.2	163.68	458.5	-83.7	327.6	312.3	15.28	21.443	
2,600.0	2,428.5	2,604.9	2,530.7	16.4	10.9	163.61	489.7	-90.6	344.5	328.4	16.12	21.373	
2,700.0	2,516.8	2,703.5	2,624.0	17.4	11.5	163.55	520.9	-97.5	361.3	344.4	16.96	21.307	
2,800.0	2,605.2	2,802.0	2,717.2	18.3	12.1	163.49	552.1	-104.3	378.2	360.4	17.80	21.244	
2,900.0	2,693.5	2,900.6	2,810.5	19.2	12.8	163.44	583.2	-111.2	395.1	376.4	18.65	21.185	
3,000.0	2,781.9	2,999.2	2,903.8	20.2	13.4	163.39	614.4	-118.1	411.9	392.4	19.50	21.129	
3,100.0	2,870.2	3,097.8	2,997.0	21.1	14.0	163.35	645.6	-125.0	428.8	408.4	20.34	21.076	
3,200.0	2,958.6	3,196.3	3,090.3	22.0	14.6	163.31	676.7	-131.9	445.6	424.4	21.19	21.026	
3,300.0	3,046.9	3,294.9	3,183.5	23.0	15.3	163.27	707.9	-138.7	462.5	440.4	22.05	20.978	
3,400.0	3,135.3	3,393.5	3,276.8	23.9	15.9	163.24	739.1	-145.6	479.4	456.5	22.90	20.933	
3,500.0	3,223.6	3,492.0	3,370.0	24.9	16.5	163.20	770.3	-152.5	496.2	472.5	23.75	20.890	
3,600.0	3,312.0	3,590.6	3,463.3	25.8	17.2	163.17	801.4	-159.4	513.1	488.5	24.61	20.850	
3,700.0	3,400.3	3,689.2	3,556.5	26.7	17.8	163.15	832.6	-166.3	529.9	504.5	25.46	20.812	
3,800.0	3,488.7	3,787.7	3,649.8	27.7	18.5	163.12	863.8	-173.2	546.8	520.5	26.32	20.775	
3,900.0	3,577.0	3,886.3	3,743.1	28.6	19.1	163.09	895.0	-180.0	563.7	536.5	27.18	20.740	
4,000.0	3,665.4	3,984.9	3,836.3	29.5	19.7	163.07	926.1	-186.9	580.5	552.5	28.03	20.707	
4,100.0	3,753.7	4,083.4	3,929.6	30.5	20.4	163.05	957.3	-193.8	597.4	568.5	28.89	20.676	
4,200.0	3,842.1	4,182.0	4,022.8	31.4	21.0	163.03	988.5	-200.7	614.2	584.5	29.75	20.646	
4,300.0	3,930.4	4,280.6	4,116.1	32.4	21.6	163.01	1,019.7	-207.6	631.1	600.5	30.61	20.617	
4,400.0	4,018.8	4,379.1	4,209.3	33.3	22.3	162.99	1,050.8	-214.4	648.0	616.5	31.47	20.590	
4,500.0	4,107.1	4,477.7	4,302.6	34.2	22.9	162.97	1,082.0	-221.3	664.8	632.5	32.33	20.564	
4,600.0	4,195.5	4,576.3	4,395.8	35.2	23.5	162.95	1,113.2	-228.2	681.7	648.5	33.19	20.539	
4,700.0	4,283.8	4,674.8	4,489.1	36.1	24.2	162.93	1,144.3	-235.1	698.5	664.5	34.05	20.515	
4,800.0	4,372.2	4,773.4	4,582.3	37.0	24.8	162.92	1,175.5	-242.0	715.4	680.5	34.91	20.492	
4,900.0	4,460.5	4,872.0	4,675.6	38.0	25.5	162.90	1,206.7	-248.9	732.3	696.5	35.77	20.470	
5,000.0	4,548.9	4,970.5	4,768.9	38.9	26.1	162.89	1,237.9	-255.7	749.1	712.5	36.63	20.449	
5,100.0	4,637.3	5,069.1	4,862.1	39.9	26.7	162.88	1,269.0	-262.6	766.0	728.5	37.50	20.429	
5,200.0	4,725.6	5,167.7	4,955.4	40.8	27.4	162.86	1,300.2	-269.5	782.8	744.5	38.36	20.409	
5,236.8	4,758.1	5,204.0	4,989.7	41.1	27.6	162.86	1,311.7	-272.0	789.1	750.4	38.68	20.402	
5,300.0	4,814.3	5,266.4	5,048.7	41.7	28.0	162.90	1,331.4	-276.4	799.0	759.8	39.25	20.356	
5,400.0	4,904.4	5,365.5	5,142.5	42.3	28.6	162.88	1,362.8	-283.3	812.2	772.0	40.14	20.231	
5,500.0	4,996.0	5,451.0	5,223.5	43.0	29.1	162.82	1,389.3	-289.2	822.6	781.7	40.92	20.103	
5,600.0	5,088.9	5,530.0	5,299.1	43.6	29.5	162.77	1,411.9	-294.2	832.0	790.4	41.58	20.009	
5,700.0	5,183.1	5,600.0	5,366.6	44.1	29.8	162.73	1,430.2	-298.2	840.7	798.5	42.15	19.947	
5,800.0	5,278.4	5,687.7	5,451.7	44.6	30.1	162.68	1,450.9	-302.8	848.3	805.6	42.70	19.869	
5,900.0	5,374.6	5,766.5	5,528.6	45.1	30.4	162.65	1,467.3	-306.4	855.2	812.1	43.14	19.823	
6,000.0	5,471.8	5,845.1	5,605.9	45.5	30.7	162.62	1,481.6	-309.5	861.2	817.7	43.52	19.791	
6,100.0	5,569.7	5,923.8	5,683.5	45.8	30.9	162.60	1,493.8	-312.2	866.3	822.5	43.82	19.773	
6,200.0	5,668.3	6,000.0	5,759.1	46.1	31.1	162.58	1,503.6	-314.4	870.6	826.6	44.04	19.770	
6,300.0	5,767.4	6,080.9	5,839.5	46.4	31.3	162.57	1,511.9	-316.2	874.0	829.8	44.19	19.778	
6,400.0	5,866.9	6,159.4	5,917.8	46.6	31.4	162.56	1,517.8	-317.5	876.5	832.3	44.27	19.801	
6,500.0	5,966.7	6,237.9	5,996.2	46.7	31.5	162.55	1,521.6	-318.4	878.2	833.9	44.27	19.836	
6,600.0	6,066.7	6,316.3	6,074.6	46.8	31.6	162.55	1,523.4	-318.8	878.9	834.7	44.20	19.883	
6,633.3	6,100.0	6,342.7	6,101.0	46.8	31.7	140.98	1,523.5	-318.8	879.0	834.8	44.17	19.901	
6,700.0	6,166.7	6,409.4	6,167.7	46.9	31.7	140.98	1,523.5	-318.8	879.0	834.7	44.32	19.832	
6,800.0	6,266.7	6,509.4	6,267.7	46.9	31.8	140.98	1,523.5	-318.8	879.0	834.4	44.57	19.722	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design T-Bone 5-3-22 Pad Sec.22-T5N-R66W - Bone 4-2-22 - Wellbore #1 - Plan #1 (5-16-11)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,900.0	6,366.7	6,609.4	6,367.7	47.0	31.9	140.98	1,523.5	-318.8	879.0	834.2	44.82	19.612	
7,000.0	6,466.7	6,709.4	6,467.7	47.0	32.0	140.98	1,523.5	-318.8	879.0	833.9	45.07	19.502	
7,100.0	6,566.7	6,809.4	6,567.7	47.1	32.1	140.98	1,523.5	-318.8	879.0	833.6	45.33	19.391	
7,200.0	6,666.7	6,909.4	6,667.7	47.2	32.2	140.98	1,523.5	-318.8	879.0	833.4	45.59	19.281	
7,300.0	6,766.7	7,009.4	6,767.7	47.2	32.3	140.98	1,523.5	-318.8	879.0	833.1	45.85	19.171	
7,400.0	6,866.7	7,109.4	6,867.7	47.3	32.4	140.98	1,523.5	-318.8	879.0	832.9	46.12	19.060	
7,500.0	6,966.7	7,209.4	6,967.7	47.4	32.5	140.98	1,523.5	-318.8	879.0	832.6	46.38	18.950	
7,600.0	7,066.7	7,309.4	7,067.7	47.4	32.6	140.98	1,523.5	-318.8	879.0	832.3	46.65	18.840	
7,700.0	7,166.7	7,409.4	7,167.7	47.5	32.7	140.98	1,523.5	-318.8	879.0	832.0	46.93	18.730	
7,800.0	7,266.7	7,509.4	7,267.7	47.6	32.8	140.98	1,523.5	-318.8	879.0	831.8	47.20	18.621	
7,900.0	7,366.7	7,609.4	7,367.7	47.6	32.9	140.98	1,523.5	-318.8	879.0	831.5	47.48	18.512	
8,000.0	7,466.7	7,709.4	7,467.7	47.7	33.0	140.98	1,523.5	-318.8	879.0	831.2	47.76	18.402	
8,100.0	7,566.7	7,809.4	7,567.7	47.8	33.1	140.98	1,523.5	-318.8	879.0	830.9	48.05	18.294	
8,200.0	7,666.7	7,909.4	7,667.7	47.8	33.2	140.98	1,523.5	-318.8	879.0	830.6	48.33	18.185	
8,300.0	7,766.7	8,009.4	7,767.7	47.9	33.3	140.98	1,523.5	-318.8	879.0	830.4	48.62	18.077	
8,400.0	7,866.7	8,109.4	7,867.7	48.0	33.4	140.98	1,523.5	-318.8	879.0	830.1	48.91	17.970	
8,421.9	7,888.5	8,131.2	7,889.5	48.0	33.4	140.98	1,523.5	-318.8	879.0	830.0	48.98	17.946	
8,433.3	7,900.0	8,141.7	7,900.0	48.0	33.4	140.98	1,523.5	-318.8	879.0	830.0	49.01	17.934	

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-34.67	1,079.9	-746.9	1,313.0				
100.0	100.0	98.0	98.0	0.1	0.1	-34.67	1,079.9	-746.9	1,313.0	1,312.7	0.22	5,900.381	
200.0	200.0	198.0	198.0	0.3	0.3	-34.67	1,079.9	-746.9	1,313.0	1,312.3	0.67	1,960.229	
300.0	300.0	298.0	298.0	0.6	0.6	-13.12	1,079.9	-746.9	1,311.3	1,310.1	1.13	1,164.585	
400.0	399.8	397.8	397.8	0.8	0.8	-13.20	1,079.9	-746.9	1,306.2	1,304.6	1.59	823.534	
500.0	499.5	497.5	497.5	1.0	1.0	-13.33	1,079.9	-746.9	1,297.7	1,295.6	2.05	633.956	
600.0	598.7	596.7	596.7	1.3	1.2	-13.51	1,079.9	-746.9	1,285.8	1,283.3	2.51	512.331	
700.0	697.5	695.5	695.5	1.7	1.5	-13.75	1,079.9	-746.9	1,270.6	1,267.6	2.98	426.982	
800.0	795.6	793.6	793.6	2.0	1.7	-14.04	1,079.9	-746.9	1,252.1	1,248.6	3.45	363.275	
900.0	893.1	891.1	891.1	2.5	1.9	-14.41	1,079.9	-746.9	1,230.2	1,226.3	3.92	313.523	
1,000.0	989.6	987.6	987.6	2.9	2.1	-14.85	1,079.9	-746.9	1,205.1	1,200.7	4.41	273.301	
1,100.0	1,085.3	1,083.3	1,083.3	3.5	2.3	-15.37	1,079.9	-746.9	1,176.8	1,171.9	4.91	239.885	
1,200.0	1,179.8	1,177.8	1,177.8	4.1	2.5	-15.98	1,079.9	-746.9	1,145.4	1,139.9	5.42	211.500	
1,300.0	1,273.2	1,271.2	1,271.2	4.8	2.7	-16.69	1,079.9	-746.9	1,110.8	1,104.9	5.94	186.946	
1,400.0	1,365.2	1,363.2	1,363.2	5.5	3.0	-17.53	1,079.9	-746.9	1,073.2	1,066.7	6.49	165.376	
1,500.0	1,455.8	1,453.8	1,453.8	6.3	3.2	-18.51	1,079.9	-746.9	1,032.7	1,025.6	7.06	146.178	
1,596.5	1,541.9	1,539.9	1,539.9	7.2	3.3	-19.62	1,079.9	-746.9	990.8	983.2	7.65	129.474	
1,600.0	1,544.9	1,542.9	1,542.9	7.2	3.4	-19.65	1,079.9	-746.9	989.3	981.6	7.68	128.883	
1,700.0	1,633.3	1,631.3	1,631.3	8.1	3.6	-20.59	1,079.9	-746.9	944.7	936.4	8.35	113.111	
1,800.0	1,721.6	1,719.6	1,719.6	9.0	3.8	-21.62	1,079.9	-746.9	900.4	891.3	9.06	99.396	
1,900.0	1,810.0	1,808.0	1,808.0	9.9	4.0	-22.76	1,079.9	-746.9	856.3	846.5	9.80	87.396	
2,000.0	1,898.3	1,896.3	1,896.3	10.9	4.1	-24.01	1,079.9	-746.9	812.6	802.0	10.58	76.837	
2,100.0	1,986.7	1,984.7	1,984.7	11.8	4.3	-25.40	1,079.9	-746.9	769.2	757.8	11.39	67.501	
2,200.0	2,075.0	2,073.0	2,073.0	12.7	4.5	-26.95	1,079.9	-746.9	726.2	713.9	12.26	59.213	
2,300.0	2,163.4	2,161.4	2,161.4	13.6	4.7	-28.68	1,079.9	-746.9	683.7	670.6	13.19	51.830	
2,400.0	2,251.8	2,249.8	2,249.8	14.6	4.9	-30.63	1,079.9	-746.9	641.9	627.7	14.19	45.242	
2,500.0	2,340.1	2,338.1	2,338.1	15.5	5.1	-32.84	1,079.9	-746.9	600.8	585.5	15.26	39.358	
2,600.0	2,428.5	2,426.5	2,426.5	16.4	5.3	-35.34	1,079.9	-746.9	560.6	544.1	16.44	34.108	
2,700.0	2,516.8	2,514.8	2,514.8	17.4	5.5	-38.19	1,079.9	-746.9	521.5	503.8	17.72	29.437	
2,800.0	2,605.2	2,603.2	2,603.2	18.3	5.7	-41.45	1,079.9	-746.9	483.8	464.6	19.12	25.302	
2,900.0	2,693.5	2,691.5	2,691.5	19.2	5.9	-45.19	1,079.9	-746.9	447.8	427.1	20.66	21.673	
3,000.0	2,781.9	2,779.9	2,779.9	20.2	6.1	-49.50	1,079.9	-746.9	413.9	391.6	22.34	18.526	
3,100.0	2,870.2	2,868.2	2,868.2	21.1	6.3	-54.43	1,079.9	-746.9	382.9	358.7	24.16	15.845	
3,200.0	2,958.6	2,956.6	2,956.6	22.0	6.5	-60.05	1,079.9	-746.9	355.3	329.2	26.09	13.618	
3,300.0	3,046.9	3,044.9	3,044.9	23.0	6.7	-66.39	1,079.9	-746.9	332.0	303.9	28.06	11.833	
3,400.0	3,135.3	3,133.3	3,133.3	23.9	6.9	-73.41	1,079.9	-746.9	314.0	284.1	29.97	10.479	
3,500.0	3,223.6	3,221.6	3,221.6	24.9	7.1	-80.97	1,079.9	-746.9	302.4	270.7	31.70	9.539	
3,600.0	3,312.0	3,310.0	3,310.0	25.8	7.3	-88.86	1,079.9	-746.9	297.7	264.5	33.11	8.989	
3,614.2	3,324.5	3,322.5	3,322.5	25.9	7.4	-90.00	1,079.9	-746.9	297.6	264.3	33.28	8.941 CC, ES	
3,700.0	3,400.3	3,398.3	3,398.3	26.7	7.5	-96.80	1,079.9	-746.9	300.3	266.2	34.12	8.800 SF	
3,800.0	3,488.7	3,486.7	3,486.7	27.7	7.7	-104.48	1,079.9	-746.9	310.0	275.3	34.70	8.934	
3,900.0	3,577.0	3,575.0	3,575.0	28.6	7.9	-111.67	1,079.9	-746.9	326.3	291.4	34.92	9.345	
4,000.0	3,665.4	3,663.4	3,663.4	29.5	8.1	-118.21	1,079.9	-746.9	348.1	313.3	34.85	9.990	
4,100.0	3,753.7	3,751.7	3,751.7	30.5	8.3	-124.04	1,079.9	-746.9	374.6	340.0	34.62	10.822	
4,200.0	3,842.1	3,840.1	3,840.1	31.4	8.5	-129.17	1,079.9	-746.9	404.8	370.5	34.30	11.800	
4,300.0	3,930.4	3,928.4	3,928.4	32.4	8.7	-133.64	1,079.9	-746.9	437.9	403.9	33.98	12.887	
4,400.0	4,018.8	4,016.8	4,016.8	33.3	8.9	-137.54	1,079.9	-746.9	473.3	439.6	33.68	14.052	
4,500.0	4,107.1	4,105.1	4,105.1	34.2	9.1	-140.93	1,079.9	-746.9	510.6	477.1	33.44	15.267	
4,600.0	4,195.5	4,193.5	4,193.5	35.2	9.3	-143.89	1,079.9	-746.9	549.3	516.0	33.27	16.512	
4,700.0	4,283.8	4,281.8	4,281.8	36.1	9.5	-146.48	1,079.9	-746.9	589.2	556.1	33.16	17.769	
4,800.0	4,372.2	4,370.2	4,370.2	37.0	9.7	-148.77	1,079.9	-746.9	630.1	597.0	33.12	19.026	
4,900.0	4,460.5	4,458.5	4,458.5	38.0	9.9	-150.78	1,079.9	-746.9	671.8	638.6	33.14	20.271	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design T-Bone 5-3-22 Pad Sec.22-T5N-R66W - Jar Well (Exist.) - Wellbore #1 - Design #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,548.9	4,546.9	4,546.9	38.9	10.1	-152.57	1,079.9	-746.9	714.0	680.8	33.22	21.497	
5,100.0	4,637.3	4,635.3	4,635.3	39.9	10.3	-154.17	1,079.9	-746.9	756.9	723.5	33.34	22.698	
5,200.0	4,725.6	4,723.6	4,723.6	40.8	10.5	-155.61	1,079.9	-746.9	800.2	766.6	33.52	23.872	
5,236.8	4,758.1	4,756.1	4,756.1	41.1	10.6	-156.10	1,079.9	-746.9	816.2	782.6	33.59	24.296	
5,300.0	4,814.3	4,812.3	4,812.3	41.7	10.7	-157.12	1,079.9	-746.9	843.2	809.5	33.70	25.022	
5,400.0	4,904.4	4,902.4	4,902.4	42.3	10.9	-158.52	1,079.9	-746.9	883.9	850.0	33.88	26.089	
5,500.0	4,996.0	4,994.0	4,994.0	43.0	11.1	-159.71	1,079.9	-746.9	921.8	887.7	34.11	27.026	
5,600.0	5,088.9	5,086.9	5,086.9	43.6	11.3	-160.72	1,079.9	-746.9	956.8	922.4	34.36	27.843	
5,700.0	5,183.1	5,181.1	5,181.1	44.1	11.5	-161.58	1,079.9	-746.9	988.8	954.2	34.64	28.548	
5,800.0	5,278.4	5,276.4	5,276.4	44.6	11.7	-162.30	1,079.9	-746.9	1,017.8	982.9	34.92	29.151	
5,900.0	5,374.6	5,372.6	5,372.6	45.1	12.0	-162.91	1,079.9	-746.9	1,043.7	1,008.5	35.19	29.659	
6,000.0	5,471.8	5,469.8	5,469.8	45.5	12.2	-163.41	1,079.9	-746.9	1,066.3	1,030.9	35.45	30.079	
6,100.0	5,569.7	5,567.7	5,567.7	45.8	12.4	-163.83	1,079.9	-746.9	1,085.8	1,050.1	35.70	30.416	
6,200.0	5,668.3	5,666.3	5,666.3	46.1	12.6	-164.16	1,079.9	-746.9	1,101.9	1,066.0	35.92	30.676	
6,300.0	5,767.4	5,765.4	5,765.4	46.4	12.8	-164.42	1,079.9	-746.9	1,114.8	1,078.7	36.12	30.862	
6,400.0	5,866.9	5,864.9	5,864.9	46.6	13.1	-164.60	1,079.9	-746.9	1,124.3	1,088.0	36.29	30.977	
6,500.0	5,966.7	5,964.7	5,964.7	46.7	13.3	-164.72	1,079.9	-746.9	1,130.5	1,094.0	36.44	31.024	
6,600.0	6,066.7	6,064.7	6,064.7	46.8	13.5	-164.78	1,079.9	-746.9	1,133.3	1,096.7	36.56	31.002	
6,633.3	6,100.0	6,098.0	6,098.0	46.8	13.6	173.65	1,079.9	-746.9	1,133.5	1,096.9	36.59	30.980	
6,700.0	6,166.7	6,164.7	6,164.7	46.9	13.7	173.65	1,079.9	-746.9	1,133.5	1,096.7	36.81	30.793	
6,800.0	6,266.7	6,264.7	6,264.7	46.9	14.0	173.65	1,079.9	-746.9	1,133.5	1,096.3	37.15	30.509	
6,900.0	6,366.7	6,364.7	6,364.7	47.0	14.2	173.65	1,079.9	-746.9	1,133.5	1,096.0	37.50	30.228	
7,000.0	6,466.7	6,464.7	6,464.7	47.0	14.4	173.65	1,079.9	-746.9	1,133.5	1,095.6	37.84	29.952	
7,100.0	6,566.7	6,564.7	6,564.7	47.1	14.6	173.65	1,079.9	-746.9	1,133.5	1,095.3	38.19	29.679	
7,200.0	6,666.7	6,664.7	6,664.7	47.2	14.9	173.65	1,079.9	-746.9	1,133.5	1,094.9	38.54	29.410	
7,300.0	6,766.7	6,764.7	6,764.7	47.2	15.1	173.65	1,079.9	-746.9	1,133.5	1,094.6	38.89	29.144	
7,400.0	6,866.7	6,864.7	6,864.7	47.3	15.3	173.65	1,079.9	-746.9	1,133.5	1,094.2	39.24	28.883	
7,500.0	6,966.7	6,964.7	6,964.7	47.4	15.5	173.65	1,079.9	-746.9	1,133.5	1,093.9	39.60	28.625	
7,600.0	7,066.7	7,064.7	7,064.7	47.4	15.8	173.65	1,079.9	-746.9	1,133.5	1,093.5	39.95	28.370	
7,700.0	7,166.7	7,164.7	7,164.7	47.5	16.0	173.65	1,079.9	-746.9	1,133.5	1,093.2	40.31	28.119	
7,800.0	7,266.7	7,264.7	7,264.7	47.6	16.2	173.65	1,079.9	-746.9	1,133.5	1,092.8	40.67	27.872	
7,900.0	7,366.7	7,364.7	7,364.7	47.6	16.4	173.65	1,079.9	-746.9	1,133.5	1,092.4	41.03	27.628	
8,000.0	7,466.7	7,464.7	7,464.7	47.7	16.7	173.65	1,079.9	-746.9	1,133.5	1,092.1	41.39	27.387	
8,100.0	7,566.7	7,564.7	7,564.7	47.8	16.9	173.65	1,079.9	-746.9	1,133.5	1,091.7	41.75	27.150	
8,200.0	7,666.7	7,664.7	7,664.7	47.8	17.1	173.65	1,079.9	-746.9	1,133.5	1,091.4	42.11	26.916	
8,300.0	7,766.7	7,764.7	7,764.7	47.9	17.3	173.65	1,079.9	-746.9	1,133.5	1,091.0	42.48	26.685	
8,400.0	7,866.7	7,864.7	7,864.7	48.0	17.6	173.65	1,079.9	-746.9	1,133.5	1,090.6	42.84	26.457	
8,433.3	7,900.0	7,898.0	7,898.0	48.0	17.6	173.65	1,079.9	-746.9	1,133.5	1,090.5	42.96	26.382	

Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.97	0.0	-13.9	13.9	13.9	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-89.97	0.0	-13.9	13.9	13.7	0.22	61.973		
200.0	200.0	200.0	200.0	0.3	0.3	-89.97	0.0	-13.9	13.9	13.3	0.67	20.658		
287.4	287.4	287.3	287.3	0.5	0.5	-79.22	-1.3	-13.9	13.7	12.6	1.05	13.087 CC		
300.0	300.0	299.9	299.9	0.6	0.5	-82.59	-1.7	-13.9	13.7	12.6	1.10	12.472 ES		
400.0	399.8	399.3	399.2	0.8	0.7	-117.05	-6.5	-13.9	17.3	15.7	1.55	11.143		
500.0	499.5	499.2	499.0	1.0	1.0	-139.86	-10.0	-13.9	25.9	23.9	2.01	12.885		
600.0	598.7	599.5	599.3	1.3	1.2	-152.42	-10.0	-13.9	36.2	33.7	2.46	14.692		
700.0	697.5	699.7	699.5	1.7	1.4	-159.29	-7.1	-15.2	47.6	44.7	2.91	16.351		
800.0	795.6	800.3	799.8	2.0	1.6	-162.22	-1.6	-18.9	60.1	56.8	3.37	17.830		
900.0	893.1	901.2	900.2	2.5	1.8	-163.09	6.3	-25.2	73.5	69.6	3.86	19.044		
1,000.0	989.6	1,002.3	1,000.4	2.9	2.1	-162.80	16.7	-34.1	87.5	83.1	4.38	19.989		
1,100.0	1,085.3	1,103.8	1,100.3	3.5	2.4	-161.84	29.6	-45.5	102.1	97.2	4.94	20.669		
1,200.0	1,179.8	1,205.4	1,199.8	4.1	2.8	-160.45	45.0	-59.5	117.5	111.9	5.57	21.091		
1,300.0	1,273.2	1,307.3	1,298.7	4.8	3.2	-158.80	62.9	-76.1	133.6	127.3	6.28	21.265		
1,400.0	1,365.2	1,409.3	1,396.9	5.5	3.7	-157.00	83.2	-95.2	150.5	143.4	7.10	21.213		
1,500.0	1,455.8	1,511.5	1,494.1	6.3	4.2	-155.11	106.1	-116.8	168.3	160.3	8.03	20.965		
1,596.5	1,541.9	1,610.2	1,586.9	7.2	4.9	-153.25	130.4	-140.0	186.3	177.3	9.04	20.599		
1,600.0	1,544.9	1,613.8	1,590.2	7.2	4.9	-153.19	131.3	-140.9	187.0	177.9	9.09	20.580		
1,700.0	1,633.3	1,716.4	1,685.4	8.1	5.6	-151.17	159.0	-167.6	205.0	194.6	10.34	19.815		
1,800.0	1,721.6	1,819.4	1,779.4	9.0	6.4	-148.71	189.2	-196.8	221.1	209.3	11.79	18.757		
1,900.0	1,810.0	1,922.4	1,871.9	9.9	7.3	-145.85	221.7	-228.5	235.5	222.1	13.43	17.540		
2,000.0	1,898.3	2,022.5	1,960.4	10.9	8.2	-142.84	255.0	-261.0	249.0	233.7	15.22	16.359		
2,100.0	1,986.7	2,120.7	2,047.3	11.8	9.1	-140.14	287.9	-293.2	262.9	245.8	17.06	15.411		
2,200.0	2,075.0	2,219.0	2,134.1	12.7	10.0	-137.72	320.9	-325.3	277.3	258.4	18.94	14.644		
2,300.0	2,163.4	2,317.3	2,221.0	13.6	11.0	-135.53	353.8	-357.5	292.2	271.4	20.84	14.019		
2,400.0	2,251.8	2,415.6	2,307.9	14.6	11.9	-133.56	386.7	-389.6	307.5	284.7	22.77	13.505		
2,500.0	2,340.1	2,513.9	2,394.7	15.5	12.9	-131.77	419.6	-421.7	323.1	298.4	24.71	13.078		
2,600.0	2,428.5	2,612.2	2,481.6	16.4	13.8	-130.15	452.5	-453.9	339.0	312.3	26.65	12.720		
2,700.0	2,516.8	2,710.5	2,568.4	17.4	14.8	-128.67	485.4	-486.0	355.1	326.5	28.60	12.418		
2,800.0	2,605.2	2,808.8	2,655.3	18.3	15.7	-127.33	518.3	-518.2	371.4	340.9	30.54	12.161		
2,900.0	2,693.5	2,907.1	2,742.2	19.2	16.7	-126.09	551.2	-550.3	388.0	355.5	32.49	11.940		
3,000.0	2,781.9	3,005.4	2,829.0	20.2	17.6	-124.96	584.2	-582.5	404.6	370.2	34.44	11.749		
3,100.0	2,870.2	3,103.7	2,915.9	21.1	18.6	-123.91	617.1	-614.6	421.5	385.1	36.38	11.583		
3,200.0	2,958.6	3,202.0	3,002.7	22.0	19.6	-122.95	650.0	-646.8	438.4	400.1	38.33	11.438		
3,300.0	3,046.9	3,300.3	3,089.6	23.0	20.5	-122.06	682.9	-678.9	455.5	415.2	40.27	11.311		
3,400.0	3,135.3	3,398.6	3,176.5	23.9	21.5	-121.23	715.8	-711.1	472.6	430.4	42.21	11.198		
3,500.0	3,223.6	3,496.8	3,263.3	24.9	22.5	-120.46	748.7	-743.2	489.9	445.7	44.14	11.098		
3,600.0	3,312.0	3,595.1	3,350.2	25.8	23.4	-119.74	781.6	-775.4	507.2	461.1	46.08	11.008		
3,700.0	3,400.3	3,693.4	3,437.1	26.7	24.4	-119.07	814.5	-807.5	524.6	476.6	48.01	10.928		
3,800.0	3,488.7	3,791.7	3,523.9	27.7	25.4	-118.44	847.5	-839.7	542.1	492.2	49.94	10.856		
3,900.0	3,577.0	3,890.0	3,610.8	28.6	26.3	-117.85	880.4	-871.8	559.6	507.8	51.86	10.791		
4,000.0	3,665.4	3,988.3	3,697.6	29.5	27.3	-117.30	913.3	-904.0	577.2	523.4	53.78	10.732		
4,100.0	3,753.7	4,086.6	3,784.5	30.5	28.3	-116.78	946.2	-936.1	594.8	539.1	55.71	10.678		
4,200.0	3,842.1	4,184.9	3,871.4	31.4	29.2	-116.29	979.1	-968.2	612.5	554.9	57.62	10.629		
4,300.0	3,930.4	4,283.2	3,958.2	32.4	30.2	-115.82	1,012.0	-1,000.4	630.2	570.7	59.54	10.585		
4,400.0	4,018.8	4,381.5	4,045.1	33.3	31.2	-115.39	1,044.9	-1,032.5	648.0	586.5	61.46	10.544		
4,500.0	4,107.1	4,479.8	4,131.9	34.2	32.1	-114.97	1,077.8	-1,064.7	665.8	602.4	63.37	10.506		
4,600.0	4,195.5	4,578.1	4,218.8	35.2	33.1	-114.58	1,110.8	-1,096.8	683.6	618.3	65.28	10.472		
4,700.0	4,283.8	4,676.4	4,305.7	36.1	34.1	-114.21	1,143.7	-1,129.0	701.5	634.3	67.19	10.440		
4,800.0	4,372.2	4,774.7	4,392.5	37.0	35.1	-113.85	1,176.6	-1,161.1	719.3	650.2	69.10	10.410		
4,900.0	4,460.5	4,873.0	4,479.4	38.0	36.0	-113.52	1,209.5	-1,193.3	737.2	666.2	71.01	10.383		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

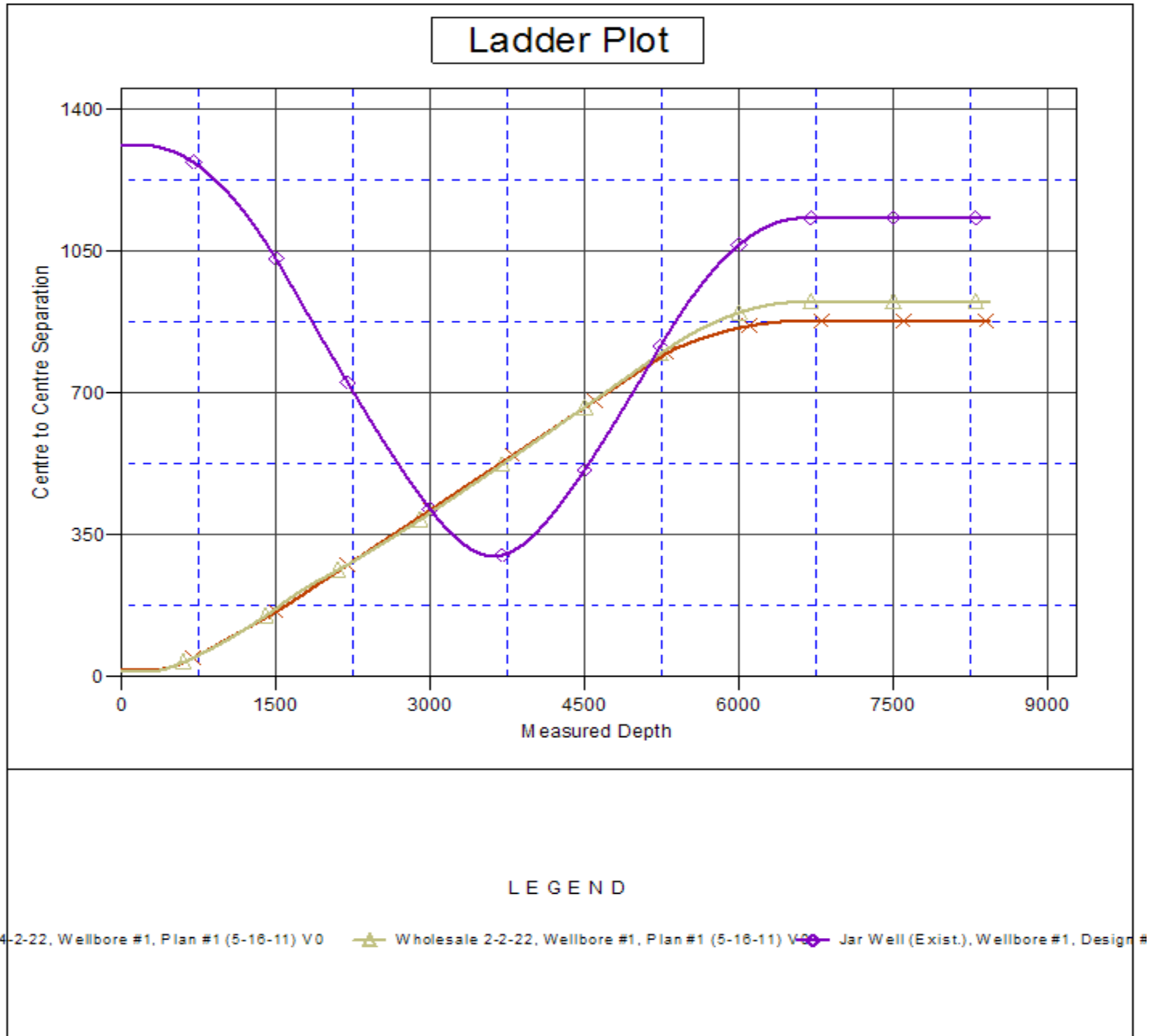
Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
T-Bone 5-3-22 Pad Sec.22-T5N-R66W - Wholesale 2-2-22 - Wellbore #1 - Plan #1 (5-16-11)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,548.9	4,971.2	4,566.3	38.9	37.0	-113.19	1,242.4	-1,225.4	755.2	682.3	72.91	10.357	
5,100.0	4,637.3	5,069.5	4,653.1	39.9	38.0	-112.89	1,275.3	-1,257.6	773.1	698.3	74.82	10.334	
5,200.0	4,725.6	5,167.8	4,740.0	40.8	38.9	-112.60	1,308.2	-1,289.7	791.1	714.4	76.72	10.312	
5,236.8	4,758.1	5,203.9	4,771.8	41.1	39.3	-112.49	1,320.3	-1,301.5	797.7	720.3	77.40	10.307	
5,300.0	4,814.3	5,265.4	4,826.7	41.7	39.8	-112.55	1,340.3	-1,321.0	808.9	730.5	78.40	10.317	
5,400.0	4,904.4	5,363.1	4,914.9	42.3	40.5	-112.64	1,370.2	-1,350.3	825.5	745.7	79.82	10.342	
5,500.0	4,996.0	5,461.0	5,004.7	43.0	41.1	-112.73	1,398.1	-1,377.5	841.0	759.8	81.14	10.364	
5,600.0	5,088.9	5,559.2	5,096.1	43.6	41.8	-112.81	1,423.9	-1,402.7	855.2	772.8	82.37	10.383	
5,700.0	5,183.1	5,657.7	5,188.9	44.1	42.3	-112.88	1,447.4	-1,425.7	868.2	784.7	83.49	10.398	
5,800.0	5,278.4	5,756.4	5,283.0	44.6	42.8	-112.95	1,468.7	-1,446.5	879.9	795.3	84.51	10.411	
5,900.0	5,374.6	5,855.3	5,378.2	45.1	43.3	-113.01	1,487.7	-1,465.0	890.3	804.8	85.42	10.422	
6,000.0	5,471.8	5,954.4	5,474.5	45.5	43.7	-113.06	1,504.4	-1,481.3	899.4	813.1	86.23	10.430	
6,100.0	5,569.7	6,053.6	5,571.8	45.8	44.0	-113.11	1,518.7	-1,495.3	907.2	820.3	86.93	10.436	
6,200.0	5,668.3	6,153.1	5,669.8	46.1	44.3	-113.14	1,530.6	-1,506.9	913.7	826.1	87.52	10.440	
6,300.0	5,767.4	6,252.6	5,768.4	46.4	44.6	-113.17	1,540.1	-1,516.2	918.8	830.8	88.00	10.441	
6,400.0	5,866.9	6,352.2	5,867.6	46.6	44.8	-113.20	1,547.1	-1,523.0	922.6	834.2	88.38	10.439	
6,500.0	5,966.7	6,451.9	5,967.1	46.7	44.9	-113.21	1,551.6	-1,527.4	925.1	836.4	88.66	10.434	
6,600.0	6,066.7	6,551.7	6,066.7	46.8	45.0	-113.22	1,553.7	-1,529.5	926.2	837.4	88.84	10.426	
6,633.3	6,100.0	6,584.9	6,100.0	46.8	45.0	-134.79	1,553.8	-1,529.6	926.3	837.4	88.88	10.422	
6,700.0	6,166.7	6,651.6	6,166.7	46.9	45.1	-134.79	1,553.8	-1,529.6	926.3	837.3	88.86	10.413	
6,800.0	6,266.7	6,751.6	6,266.7	46.9	45.2	-134.79	1,553.8	-1,529.6	926.3	837.2	89.08	10.398	
6,900.0	6,366.7	6,851.6	6,366.7	47.0	45.2	-134.79	1,553.8	-1,529.6	926.3	837.1	89.21	10.383	
7,000.0	6,466.7	6,951.6	6,466.7	47.0	45.3	-134.79	1,553.8	-1,529.6	926.3	836.9	89.35	10.367	
7,100.0	6,566.7	7,051.6	6,566.7	47.1	45.4	-134.79	1,553.8	-1,529.6	926.3	836.8	89.48	10.352	
7,200.0	6,666.7	7,151.6	6,666.7	47.2	45.4	-134.79	1,553.8	-1,529.6	926.3	836.7	89.62	10.336	
7,300.0	6,766.7	7,251.6	6,766.7	47.2	45.5	-134.79	1,553.8	-1,529.6	926.3	836.5	89.75	10.320	
7,400.0	6,866.7	7,351.6	6,866.7	47.3	45.6	-134.79	1,553.8	-1,529.6	926.3	836.4	89.89	10.304	
7,500.0	6,966.7	7,451.6	6,966.7	47.4	45.6	-134.79	1,553.8	-1,529.6	926.3	836.3	90.04	10.288	
7,600.0	7,066.7	7,551.6	7,066.7	47.4	45.7	-134.79	1,553.8	-1,529.6	926.3	836.1	90.18	10.272	
7,700.0	7,166.7	7,651.6	7,166.7	47.5	45.8	-134.79	1,553.8	-1,529.6	926.3	836.0	90.33	10.255	
7,800.0	7,266.7	7,751.6	7,266.7	47.6	45.8	-134.79	1,553.8	-1,529.6	926.3	835.8	90.47	10.238	
7,900.0	7,366.7	7,851.6	7,366.7	47.6	45.9	-134.79	1,553.8	-1,529.6	926.3	835.7	90.62	10.221	
8,000.0	7,466.7	7,951.6	7,466.7	47.7	46.0	-134.79	1,553.8	-1,529.6	926.3	835.5	90.78	10.204	
8,100.0	7,566.7	8,051.6	7,566.7	47.8	46.1	-134.79	1,553.8	-1,529.6	926.3	835.4	90.93	10.187	
8,200.0	7,666.7	8,151.6	7,666.7	47.8	46.2	-134.79	1,553.8	-1,529.6	926.3	835.2	91.09	10.169	
8,300.0	7,766.7	8,251.6	7,766.7	47.9	46.2	-134.79	1,553.8	-1,529.6	926.3	835.0	91.24	10.152	
8,400.0	7,866.7	8,351.6	7,866.7	48.0	46.3	-134.79	1,553.8	-1,529.6	926.3	834.9	91.40	10.134	
8,433.3	7,900.0	8,384.9	7,900.0	48.0	46.3	-134.79	1,553.8	-1,529.6	926.3	834.8	91.46	10.128 SF	

Company: Mineral Resources Inc
Project: SEC.22-T5N-R66W
Reference Site: T-Bone 5-3-22 Pad Sec.22-T5N-R66W
Site Error: 0.0ft
Reference Well: Meadowview 3-1-22
Well Error: 0.0ft
Reference Wellbore: Wellbore #1
Reference Design: Plan #1 (5-16-11)

Local Co-ordinate Reference: Well Meadowview 3-1-22
TVD Reference: WELL @ 4819.0ft (Original Well Elev)
MD Reference: WELL @ 4819.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: Landmark
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 4819.0ft (Original Well Elev) Coordinates are relative to: Meadowview 3-1-22
Offset Depths are relative to Offset Datum
Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °
Grid Convergence at Surface is: 0.48°



Company:	Mineral Resources Inc	Local Co-ordinate Reference:	Well Meadowview 3-1-22
Project:	SEC.22-T5N-R66W	TVD Reference:	WELL @ 4819.0ft (Original Well Elev)
Reference Site:	T-Bone 5-3-22 Pad Sec.22-T5N-R66W	MD Reference:	WELL @ 4819.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Meadowview 3-1-22	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (5-16-11)	Offset TVD Reference:	Offset Datum

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