

RMR Operating, LLC

Lea County, NM (NAD83)

Madera 25 Fed Com

#5H

OH

Plan: Design #1

Standard Planning Report

17 June, 2015

Wellplanning Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #5H
Company:	RMR Operating, LLC	TVD Reference:	WELL @ 3238.8usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	MD Reference:	WELL @ 3238.8usft (Original Well Elev)
Site:	Madera 25 Fed Com	North Reference:	Grid
Well:	#5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Design #1		

Project	Lea County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Madera 25 Fed Com		
Site Position:		Northing:	372,699.59 usft
From:	Lat/Long	Easting:	821,435.73 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 1' 17.080 N
		Longitude:	103° 25' 46.424 W
		Grid Convergence:	0.48 °

Well	#5H		
Well Position	+N/-S	0.0 usft	Northing: 372,699.59 usft
	+E/-W	0.0 usft	Easting: 821,435.73 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,214.8 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	6/17/2015	7.01
			Dip Angle (°)
			59.92
			Field Strength (nT)
			48,110

Design	Design #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
			Direction (°)
			179.51

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8,537.0	0.00	0.00	8,537.0	0.0	0.0	0.00	0.00	0.00	0.00	
9,437.1	90.00	179.51	9,110.0	-573.0	4.9	10.00	10.00	0.00	179.51	
16,262.6	90.00	179.51	9,110.0	-7,398.2	63.3	0.00	0.00	0.00	0.00	PBHL(M25FC#5H)

Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
Company: RMR Operating, LLC
Project: Lea County, NM (NAD83)
Site: Madera 25 Fed Com
Well: #5H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #5H
WELL @ 3238.8usft (Original Well Elev)
WELL @ 3238.8usft (Original Well Elev)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	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
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00

Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
Company: RMR Operating, LLC
Project: Lea County, NM (NAD83)
Site: Madera 25 Fed Com
Well: #5H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #5H
TVD Reference: WELL @ 3238.8usft (Original Well Elev)
MD Reference: WELL @ 3238.8usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,537.0	0.00	0.00	8,537.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - 8537.0 'MD, 0.00° INC, 0.00° AZI									
8,550.0	1.30	179.51	8,550.0	-0.1	0.0	0.1	10.00	10.00	0.00
8,600.0	6.30	179.51	8,599.9	-3.5	0.0	3.5	10.00	10.00	0.00
8,650.0	11.30	179.51	8,649.3	-11.1	0.1	11.1	10.00	10.00	0.00
8,700.0	16.30	179.51	8,697.8	-23.0	0.2	23.0	10.00	10.00	0.00
8,750.0	21.30	179.51	8,745.1	-39.1	0.3	39.1	10.00	10.00	0.00
8,800.0	26.30	179.51	8,790.9	-59.3	0.5	59.3	10.00	10.00	0.00
8,850.0	31.30	179.51	8,834.7	-83.4	0.7	83.4	10.00	10.00	0.00
8,900.0	36.30	179.51	8,876.2	-111.2	1.0	111.2	10.00	10.00	0.00
8,950.0	41.30	179.51	8,915.2	-142.5	1.2	142.5	10.00	10.00	0.00
9,000.0	46.30	179.51	8,951.2	-177.1	1.5	177.1	10.00	10.00	0.00
9,050.0	51.30	179.51	8,984.2	-214.7	1.8	214.7	10.00	10.00	0.00
9,100.0	56.30	179.51	9,013.7	-255.0	2.2	255.0	10.00	10.00	0.00
9,150.0	61.30	179.51	9,039.6	-297.8	2.5	297.8	10.00	10.00	0.00
9,200.0	66.30	179.51	9,061.7	-342.6	2.9	342.6	10.00	10.00	0.00
9,250.0	71.29	179.51	9,079.7	-389.2	3.3	389.2	10.00	10.00	0.00
9,300.0	76.29	179.51	9,093.7	-437.2	3.7	437.2	10.00	10.00	0.00
9,350.0	81.29	179.51	9,103.4	-486.3	4.2	486.3	10.00	10.00	0.00
9,400.0	86.29	179.51	9,108.8	-535.9	4.6	536.0	10.00	10.00	0.00
9,437.1	90.00	179.51	9,110.0	-573.0	4.9	573.0	10.00	10.00	0.00

Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
Company: RMR Operating, LLC
Project: Lea County, NM (NAD83)
Site: Madera 25 Fed Com
Well: #5H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well #5H
WELL @ 3238.8usft (Original Well Elev)
WELL @ 3238.8usft (Original Well Elev)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
EOC- 9437.1 'MD, 90.00° INC, 179.51° AZI									
9,500.0	90.00	179.51	9,110.0	-635.9	5.4	635.9	0.00	0.00	0.00
9,600.0	90.00	179.51	9,110.0	-735.9	6.3	735.9	0.00	0.00	0.00
9,700.0	90.00	179.51	9,110.0	-835.9	7.1	835.9	0.00	0.00	0.00
9,800.0	90.00	179.51	9,110.0	-935.9	8.0	935.9	0.00	0.00	0.00
9,900.0	90.00	179.51	9,110.0	-1,035.9	8.9	1,035.9	0.00	0.00	0.00
10,000.0	90.00	179.51	9,110.0	-1,135.9	9.7	1,135.9	0.00	0.00	0.00
10,100.0	90.00	179.51	9,110.0	-1,235.9	10.6	1,235.9	0.00	0.00	0.00
10,200.0	90.00	179.51	9,110.0	-1,335.9	11.4	1,335.9	0.00	0.00	0.00
10,300.0	90.00	179.51	9,110.0	-1,435.9	12.3	1,435.9	0.00	0.00	0.00
10,400.0	90.00	179.51	9,110.0	-1,535.9	13.1	1,535.9	0.00	0.00	0.00
10,500.0	90.00	179.51	9,110.0	-1,635.9	14.0	1,635.9	0.00	0.00	0.00
10,600.0	90.00	179.51	9,110.0	-1,735.9	14.8	1,735.9	0.00	0.00	0.00
10,700.0	90.00	179.51	9,110.0	-1,835.9	15.7	1,835.9	0.00	0.00	0.00
10,800.0	90.00	179.51	9,110.0	-1,935.9	16.6	1,935.9	0.00	0.00	0.00
10,900.0	90.00	179.51	9,110.0	-2,035.9	17.4	2,035.9	0.00	0.00	0.00
11,000.0	90.00	179.51	9,110.0	-2,135.9	18.3	2,135.9	0.00	0.00	0.00
11,100.0	90.00	179.51	9,110.0	-2,235.9	19.1	2,235.9	0.00	0.00	0.00
11,200.0	90.00	179.51	9,110.0	-2,335.8	20.0	2,335.9	0.00	0.00	0.00
11,300.0	90.00	179.51	9,110.0	-2,435.8	20.8	2,435.9	0.00	0.00	0.00
11,400.0	90.00	179.51	9,110.0	-2,535.8	21.7	2,535.9	0.00	0.00	0.00
11,500.0	90.00	179.51	9,110.0	-2,635.8	22.5	2,635.9	0.00	0.00	0.00
11,600.0	90.00	179.51	9,110.0	-2,735.8	23.4	2,735.9	0.00	0.00	0.00
11,700.0	90.00	179.51	9,110.0	-2,835.8	24.3	2,835.9	0.00	0.00	0.00
11,800.0	90.00	179.51	9,110.0	-2,935.8	25.1	2,935.9	0.00	0.00	0.00
11,900.0	90.00	179.51	9,110.0	-3,035.8	26.0	3,035.9	0.00	0.00	0.00
12,000.0	90.00	179.51	9,110.0	-3,135.8	26.8	3,135.9	0.00	0.00	0.00
12,100.0	90.00	179.51	9,110.0	-3,235.8	27.7	3,235.9	0.00	0.00	0.00
12,200.0	90.00	179.51	9,110.0	-3,335.8	28.5	3,335.9	0.00	0.00	0.00
12,300.0	90.00	179.51	9,110.0	-3,435.8	29.4	3,435.9	0.00	0.00	0.00
12,400.0	90.00	179.51	9,110.0	-3,535.8	30.2	3,535.9	0.00	0.00	0.00
12,500.0	90.00	179.51	9,110.0	-3,635.8	31.1	3,635.9	0.00	0.00	0.00
12,600.0	90.00	179.51	9,110.0	-3,735.8	31.9	3,735.9	0.00	0.00	0.00
12,700.0	90.00	179.51	9,110.0	-3,835.8	32.8	3,835.9	0.00	0.00	0.00
12,800.0	90.00	179.51	9,110.0	-3,935.8	33.7	3,935.9	0.00	0.00	0.00
12,900.0	90.00	179.51	9,110.0	-4,035.8	34.5	4,035.9	0.00	0.00	0.00
13,000.0	90.00	179.51	9,110.0	-4,135.8	35.4	4,135.9	0.00	0.00	0.00
13,100.0	90.00	179.51	9,110.0	-4,235.8	36.2	4,235.9	0.00	0.00	0.00
13,200.0	90.00	179.51	9,110.0	-4,335.8	37.1	4,335.9	0.00	0.00	0.00
13,300.0	90.00	179.51	9,110.0	-4,435.8	37.9	4,435.9	0.00	0.00	0.00
13,400.0	90.00	179.51	9,110.0	-4,535.8	38.8	4,535.9	0.00	0.00	0.00
13,500.0	90.00	179.51	9,110.0	-4,635.8	39.6	4,635.9	0.00	0.00	0.00
13,600.0	90.00	179.51	9,110.0	-4,735.8	40.5	4,735.9	0.00	0.00	0.00
13,700.0	90.00	179.51	9,110.0	-4,835.8	41.4	4,835.9	0.00	0.00	0.00
13,800.0	90.00	179.51	9,110.0	-4,935.8	42.2	4,935.9	0.00	0.00	0.00
13,900.0	90.00	179.51	9,110.0	-5,035.7	43.1	5,035.9	0.00	0.00	0.00
14,000.0	90.00	179.51	9,110.0	-5,135.7	43.9	5,135.9	0.00	0.00	0.00
14,100.0	90.00	179.51	9,110.0	-5,235.7	44.8	5,235.9	0.00	0.00	0.00
14,200.0	90.00	179.51	9,110.0	-5,335.7	45.6	5,335.9	0.00	0.00	0.00
14,300.0	90.00	179.51	9,110.0	-5,435.7	46.5	5,435.9	0.00	0.00	0.00
14,400.0	90.00	179.51	9,110.0	-5,535.7	47.3	5,535.9	0.00	0.00	0.00
14,500.0	90.00	179.51	9,110.0	-5,635.7	48.2	5,635.9	0.00	0.00	0.00
14,600.0	90.00	179.51	9,110.0	-5,735.7	49.1	5,735.9	0.00	0.00	0.00
14,700.0	90.00	179.51	9,110.0	-5,835.7	49.9	5,835.9	0.00	0.00	0.00

Wellplanning Planning Report

Database: EDM 5000.1 Single User Db
Company: RMR Operating, LLC
Project: Lea County, NM (NAD83)
Site: Madera 25 Fed Com
Well: #5H
Wellbore: OH
Design: Design #1

Local Co-ordinate Reference: Well #5H
TVD Reference: WELL @ 3238.8usft (Original Well Elev)
MD Reference: WELL @ 3238.8usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.00	179.51	9,110.0	-5,935.7	50.8	5,935.9	0.00	0.00	0.00
14,900.0	90.00	179.51	9,110.0	-6,035.7	51.6	6,035.9	0.00	0.00	0.00
15,000.0	90.00	179.51	9,110.0	-6,135.7	52.5	6,135.9	0.00	0.00	0.00
15,100.0	90.00	179.51	9,110.0	-6,235.7	53.3	6,235.9	0.00	0.00	0.00
15,200.0	90.00	179.51	9,110.0	-6,335.7	54.2	6,335.9	0.00	0.00	0.00
15,300.0	90.00	179.51	9,110.0	-6,435.7	55.0	6,435.9	0.00	0.00	0.00
15,400.0	90.00	179.51	9,110.0	-6,535.7	55.9	6,535.9	0.00	0.00	0.00
15,500.0	90.00	179.51	9,110.0	-6,635.7	56.8	6,635.9	0.00	0.00	0.00
15,600.0	90.00	179.51	9,110.0	-6,735.7	57.6	6,735.9	0.00	0.00	0.00
15,700.0	90.00	179.51	9,110.0	-6,835.7	58.5	6,835.9	0.00	0.00	0.00
15,800.0	90.00	179.51	9,110.0	-6,935.7	59.3	6,935.9	0.00	0.00	0.00
15,900.0	90.00	179.51	9,110.0	-7,035.7	60.2	7,035.9	0.00	0.00	0.00
16,000.0	90.00	179.51	9,110.0	-7,135.7	61.0	7,135.9	0.00	0.00	0.00
16,100.0	90.00	179.51	9,110.0	-7,235.7	61.9	7,235.9	0.00	0.00	0.00
16,200.0	90.00	179.51	9,110.0	-7,335.7	62.7	7,335.9	0.00	0.00	0.00
16,262.6	90.00	179.51	9,110.0	-7,398.2	63.3	7,398.5	0.00	0.00	0.00
TD at 16262.6 - PBHL(M25FC#5H)									

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
PBHL(M25FC#5H)	0.00	0.00	9,110.0	-7,398.2	63.8	365,301.34	821,499.52	32° 0' 3.867 N	103° 25' 46.402 W
- plan misses target center by 0.5usft at 16262.6usft MD (9110.0 TVD, -7398.2 N, 63.3 E)									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,537.0	8,537.0	0.0	0.0	KOP - 8537.0 'MD, 0.00° INC, 0.00° AZI
9,437.1	9,110.0	-573.0	4.9	EOC- 9437.1 'MD, 90.00° INC, 179.51° AZI
16,262.6	9,110.0	-7,398.2	63.3	TD at 16262.6

Madera 25 Fed Com #5H
Lea County, NM (NAD83)
Northing: (Y) 372699.59
Easting: (X) 821435.74
Design #1

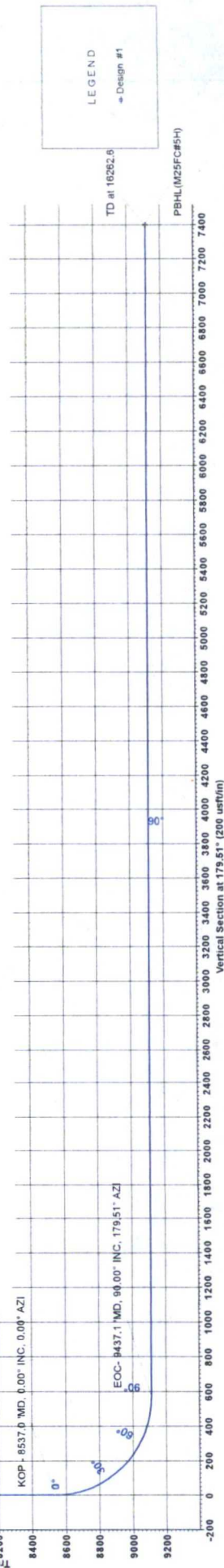
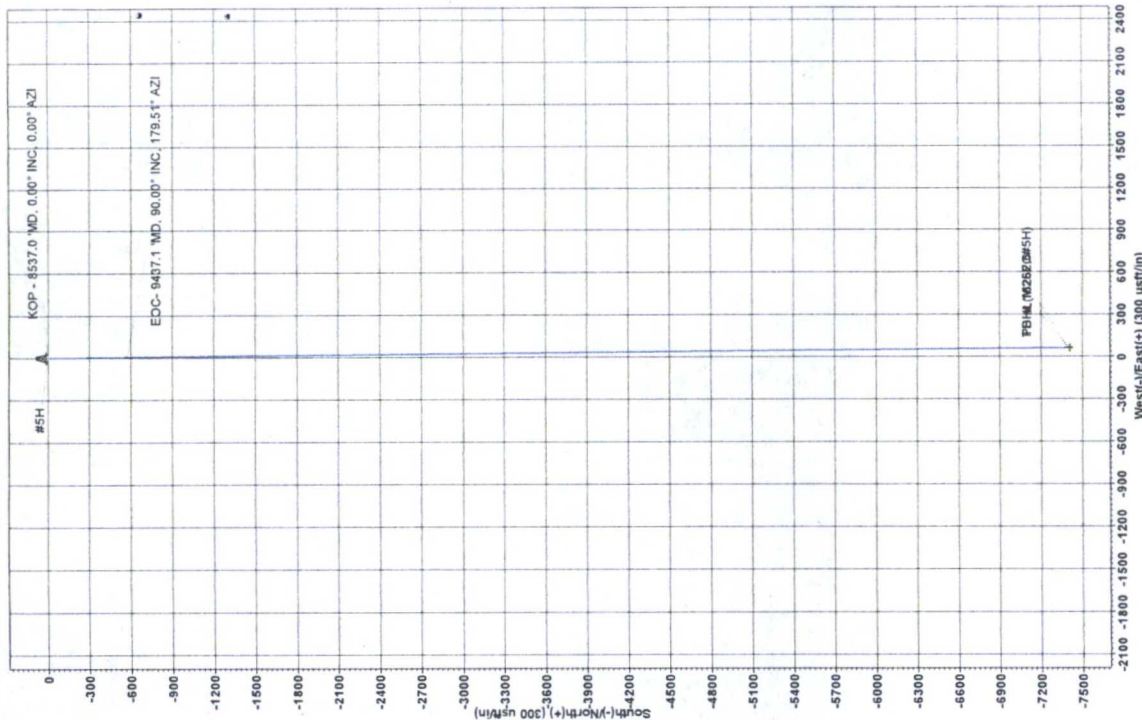
Azimuth to Grid North
True North -0.48°
Magnetic North -6.53°
Magnetic Field
Strength 48110.0nT
Dip Angle 59.92°
Date 6/17/2015
Magnetic Declination
Magnetic Declination
To convert a Magnetic Direction to a Grid Direction, Add 6.53°
To convert a True Direction to a Grid Direction, Subtract 0.48°

WELL @ 3238.8nft (Original Well Elev)				
	+N-S	+E-W	Northing	Easting
Slot	0.0	0.0	372699.59	821435.74

SECTION DETAILS									
MD	Inc	Azi	+N-S	TVD	+E-W	Dleg	TFace	Vsect	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
8537.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
9437.1	90.00	179.51	9110.0	-573.0	4.9	10.00	179.51	573.0	PBHL(M25FC#5H)
16262.6	90.00	179.51	9110.0	-7398.2	63.3	0.00	0.00	7398.5	

DESIGN TARGET DETAILS				
Name	TVD	+N-S	+E-W	Easting
PBHL(M25FC#5H)	9110.0	-7398.2	63.8	821499.52

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone
Local Origin: Well #5H, Grid North
Latitude: 32° 17' 08.0 N
Longitude: 103° 25' 46.42 W
Grid East: 821435.74
Grid North: 372699.59
Scale Factor: 1.000
Geomagnetic Model: IGRF-2010
Sample Date: 17-Jun-15
Dip Angle from Horizontal: 59.92°
Magnetic Field Strength: 48110
To convert a Magnetic Direction to a Grid Direction, Add 6.53°
To convert a True Direction to a Grid Direction, Subtract 0.48°



LEGEND
Design #1

>

H HEADER INFORMATION -----
 H COMPANY : RMR Operating, LLC
 H FIELD : Lea County, NM (NAD83)
 H SITE : Madera 25 Fed Com
 H WELL : #5H
 H WELLPATH: OH
 H DEPTHUNT: usft
 H SURVDATE: 1/1/1990

H-----
 H WELL INFORMATION
 H WELL EW MAP : 821435.74
 H WELL NS MAP : 372699.59
 H DATUM ELEVN : 3238.80
 H VSECT ANGLE : 179.51
 H VSECT NORTH : 0.00
 H VSECT EAST : 0.00

H-----
 H SURVEY TYPE INFORMATION
 H 0.00 - 16262.59 DESIGN #1 :

H-----
 H SURVEY LIST

H MD	INC	AZI	TVD	NS	EW
0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00
1000.00	0.00	0.00	1000.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00
1200.00	0.00	0.00	1200.00	0.00	0.00
1300.00	0.00	0.00	1300.00	0.00	0.00
1400.00	0.00	0.00	1400.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00
1600.00	0.00	0.00	1600.00	0.00	0.00
1700.00	0.00	0.00	1700.00	0.00	0.00
1800.00	0.00	0.00	1800.00	0.00	0.00
1900.00	0.00	0.00	1900.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00
2100.00	0.00	0.00	2100.00	0.00	0.00
2200.00	0.00	0.00	2200.00	0.00	0.00
2300.00	0.00	0.00	2300.00	0.00	0.00
2400.00	0.00	0.00	2400.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00
2600.00	0.00	0.00	2600.00	0.00	0.00
2700.00	0.00	0.00	2700.00	0.00	0.00
2800.00	0.00	0.00	2800.00	0.00	0.00
2900.00	0.00	0.00	2900.00	0.00	0.00
3000.00	0.00	0.00	3000.00	0.00	0.00
3100.00	0.00	0.00	3100.00	0.00	0.00
3200.00	0.00	0.00	3200.00	0.00	0.00
3300.00	0.00	0.00	3300.00	0.00	0.00
3400.00	0.00	0.00	3400.00	0.00	0.00
3500.00	0.00	0.00	3500.00	0.00	0.00

3600.00	0.00	0.00	3600.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00
3800.00	0.00	0.00	3800.00	0.00	0.00
3900.00	0.00	0.00	3900.00	0.00	0.00
4000.00	0.00	0.00	4000.00	0.00	0.00
4100.00	0.00	0.00	4100.00	0.00	0.00
4200.00	0.00	0.00	4200.00	0.00	0.00
4300.00	0.00	0.00	4300.00	0.00	0.00
4400.00	0.00	0.00	4400.00	0.00	0.00
4500.00	0.00	0.00	4500.00	0.00	0.00
4600.00	0.00	0.00	4600.00	0.00	0.00
4700.00	0.00	0.00	4700.00	0.00	0.00
4800.00	0.00	0.00	4800.00	0.00	0.00
4900.00	0.00	0.00	4900.00	0.00	0.00
5000.00	0.00	0.00	5000.00	0.00	0.00
5100.00	0.00	0.00	5100.00	0.00	0.00
5200.00	0.00	0.00	5200.00	0.00	0.00
5300.00	0.00	0.00	5300.00	0.00	0.00
5400.00	0.00	0.00	5400.00	0.00	0.00
5500.00	0.00	0.00	5500.00	0.00	0.00
5600.00	0.00	0.00	5600.00	0.00	0.00
5700.00	0.00	0.00	5700.00	0.00	0.00
5800.00	0.00	0.00	5800.00	0.00	0.00
5900.00	0.00	0.00	5900.00	0.00	0.00
6000.00	0.00	0.00	6000.00	0.00	0.00
6100.00	0.00	0.00	6100.00	0.00	0.00
6200.00	0.00	0.00	6200.00	0.00	0.00
6300.00	0.00	0.00	6300.00	0.00	0.00
6400.00	0.00	0.00	6400.00	0.00	0.00
6500.00	0.00	0.00	6500.00	0.00	0.00
6600.00	0.00	0.00	6600.00	0.00	0.00
6700.00	0.00	0.00	6700.00	0.00	0.00
6800.00	0.00	0.00	6800.00	0.00	0.00
6900.00	0.00	0.00	6900.00	0.00	0.00
7000.00	0.00	0.00	7000.00	0.00	0.00
7100.00	0.00	0.00	7100.00	0.00	0.00
7200.00	0.00	0.00	7200.00	0.00	0.00
7300.00	0.00	0.00	7300.00	0.00	0.00
7400.00	0.00	0.00	7400.00	0.00	0.00
7500.00	0.00	0.00	7500.00	0.00	0.00
7600.00	0.00	0.00	7600.00	0.00	0.00
7700.00	0.00	0.00	7700.00	0.00	0.00
7800.00	0.00	0.00	7800.00	0.00	0.00
7900.00	0.00	0.00	7900.00	0.00	0.00
8000.00	0.00	0.00	8000.00	0.00	0.00
8100.00	0.00	0.00	8100.00	0.00	0.00
8200.00	0.00	0.00	8200.00	0.00	0.00
8300.00	0.00	0.00	8300.00	0.00	0.00
8400.00	0.00	0.00	8400.00	0.00	0.00
8500.00	0.00	0.00	8500.00	0.00	0.00
8537.00	0.00	0.00	8537.00	0.00	0.00
8550.00	1.30	179.51	8550.00	-0.15	0.00
8600.00	6.30	179.51	8599.87	-3.46	0.03
8650.00	11.30	179.51	8649.27	-11.11	0.09
8700.00	16.30	179.51	8697.81	-23.03	0.20
8750.00	21.30	179.51	8745.13	-39.13	0.33
8800.00	26.30	179.51	8790.86	-59.30	0.51
8850.00	31.30	179.51	8834.66	-83.38	0.71
8900.00	36.30	179.51	8876.20	-111.18	0.95
8950.00	41.30	179.51	8915.16	-142.50	1.22
9000.00	46.30	179.51	8951.24	-177.09	1.51

9050.00	51.30	179.51	8984.16	-214.70	1.84
9100.00	56.30	179.51	9013.69	-255.03	2.18
9150.00	61.30	179.51	9039.58	-297.78	2.55
9200.00	66.30	179.51	9061.66	-342.63	2.93
9250.00	71.29	179.51	9079.73	-389.22	3.33
9300.00	76.29	179.51	9093.68	-437.22	3.74
9350.00	81.29	179.51	9103.40	-486.25	4.16
9400.00	86.29	179.51	9108.80	-535.94	4.58
9437.07	90.00	179.51	9110.00	-572.98	4.90
9500.00	90.00	179.51	9110.00	-635.91	5.44
9600.00	90.00	179.51	9110.00	-735.91	6.29
9700.00	90.00	179.51	9110.00	-835.90	7.15
9800.00	90.00	179.51	9110.00	-935.90	8.00
9900.00	90.00	179.51	9110.00	-1035.90	8.86
10000.00	90.00	179.51	9110.00	-1135.89	9.71
10100.00	90.00	179.51	9110.00	-1235.89	10.57
10200.00	90.00	179.51	9110.00	-1335.88	11.42
10300.00	90.00	179.51	9110.00	-1435.88	12.28
10400.00	90.00	179.51	9110.00	-1535.88	13.14
10500.00	90.00	179.51	9110.00	-1635.87	13.99
10600.00	90.00	179.51	9110.00	-1735.87	14.85
10700.00	90.00	179.51	9110.00	-1835.87	15.70
10800.00	90.00	179.51	9110.00	-1935.86	16.56
10900.00	90.00	179.51	9110.00	-2035.86	17.41
11000.00	90.00	179.51	9110.00	-2135.86	18.27
11100.00	90.00	179.51	9110.00	-2235.85	19.12
11200.00	90.00	179.51	9110.00	-2335.85	19.98
11300.00	90.00	179.51	9110.00	-2435.84	20.83
11400.00	90.00	179.51	9110.00	-2535.84	21.69
11500.00	90.00	179.51	9110.00	-2635.84	22.54
11600.00	90.00	179.51	9110.00	-2735.83	23.40
11700.00	90.00	179.51	9110.00	-2835.83	24.25
11800.00	90.00	179.51	9110.00	-2935.83	25.11
11900.00	90.00	179.51	9110.00	-3035.82	25.96
12000.00	90.00	179.51	9110.00	-3135.82	26.82
12100.00	90.00	179.51	9110.00	-3235.82	27.67
12200.00	90.00	179.51	9110.00	-3335.81	28.53
12300.00	90.00	179.51	9110.00	-3435.81	29.38
12400.00	90.00	179.51	9110.00	-3535.80	30.24
12500.00	90.00	179.51	9110.00	-3635.80	31.09
12600.00	90.00	179.51	9110.00	-3735.80	31.95
12700.00	90.00	179.51	9110.00	-3835.79	32.80
12800.00	90.00	179.51	9110.00	-3935.79	33.66
12900.00	90.00	179.51	9110.00	-4035.79	34.52
13000.00	90.00	179.51	9110.00	-4135.78	35.37
13100.00	90.00	179.51	9110.00	-4235.78	36.23
13200.00	90.00	179.51	9110.00	-4335.78	37.08
13300.00	90.00	179.51	9110.00	-4435.77	37.94
13400.00	90.00	179.51	9110.00	-4535.77	38.79
13500.00	90.00	179.51	9110.00	-4635.76	39.65
13600.00	90.00	179.51	9110.00	-4735.76	40.50
13700.00	90.00	179.51	9110.00	-4835.76	41.36
13800.00	90.00	179.51	9110.00	-4935.75	42.21
13900.00	90.00	179.51	9110.00	-5035.75	43.07
14000.00	90.00	179.51	9110.00	-5135.75	43.92
14100.00	90.00	179.51	9110.00	-5235.74	44.78
14200.00	90.00	179.51	9110.00	-5335.74	45.63
14300.00	90.00	179.51	9110.00	-5435.73	46.49
14400.00	90.00	179.51	9110.00	-5535.73	47.34
14500.00	90.00	179.51	9110.00	-5635.73	48.20
14600.00	90.00	179.51	9110.00	-5735.72	49.05

14700.00	90.00	179.51	9110.00	-5835.72	49.91
14800.00	90.00	179.51	9110.00	-5935.72	50.76
14900.00	90.00	179.51	9110.00	-6035.71	51.62
15000.00	90.00	179.51	9110.00	-6135.71	52.47
15100.00	90.00	179.51	9110.00	-6235.71	53.33
15200.00	90.00	179.51	9110.00	-6335.70	54.18
15300.00	90.00	179.51	9110.00	-6435.70	55.04
15400.00	90.00	179.51	9110.00	-6535.69	55.90
15500.00	90.00	179.51	9110.00	-6635.69	56.75
15600.00	90.00	179.51	9110.00	-6735.69	57.61
15700.00	90.00	179.51	9110.00	-6835.68	58.46
15800.00	90.00	179.51	9110.00	-6935.68	59.32
15900.00	90.00	179.51	9110.00	-7035.68	60.17
16000.00	90.00	179.51	9110.00	-7135.67	61.03
16100.00	90.00	179.51	9110.00	-7235.67	61.88
16200.00	90.00	179.51	9110.00	-7335.67	62.74
16262.59	90.00	179.51	9110.00	-7398.25	63.27

RMR Operating
#5H - Design #1

Lea County
Madera 25 Fed Com
Your Ref:

Measured Vertical VerticalDogleg
DepthIncl.Azim.DepthNorthingsEastingsSectionRate
(ft) (ft)(ft)(ft)(ft)(°/100ft)

0.00	0.000	0.000	0.00	0.00	0.00	0.00	0.00
100.00	0.000	0.000	100.00	0.00	0.00	0.00	0.00
200.00	0.000	0.000	200.00	0.00	0.00	0.00	0.00
300.00	0.000	0.000	300.00	0.00	0.00	0.00	0.00
400.00	0.000	0.000	400.00	0.00	0.00	0.00	0.00
500.00	0.000	0.000	500.00	0.00	0.00	0.00	0.00
600.00	0.000	0.000	600.00	0.00	0.00	0.00	0.00
700.00	0.000	0.000	700.00	0.00	0.00	0.00	0.00
800.00	0.000	0.000	800.00	0.00	0.00	0.00	0.00
900.00	0.000	0.000	900.00	0.00	0.00	0.00	0.00
1000.00	0.000	0.000	1000.00	0.00	0.00	0.00	0.00
1100.00	0.000	0.000	1100.00	0.00	0.00	0.00	0.00
1200.00	0.000	0.000	1200.00	0.00	0.00	0.00	0.00
1300.00	0.000	0.000	1300.00	0.00	0.00	0.00	0.00
1400.00	0.000	0.000	1400.00	0.00	0.00	0.00	0.00
1500.00	0.000	0.000	1500.00	0.00	0.00	0.00	0.00
1600.00	0.000	0.000	1600.00	0.00	0.00	0.00	0.00
1700.00	0.000	0.000	1700.00	0.00	0.00	0.00	0.00
1800.00	0.000	0.000	1800.00	0.00	0.00	0.00	0.00
1900.00	0.000	0.000	1900.00	0.00	0.00	0.00	0.00
2000.00	0.000	0.000	2000.00	0.00	0.00	0.00	0.00
2100.00	0.000	0.000	2100.00	0.00	0.00	0.00	0.00
2200.00	0.000	0.000	2200.00	0.00	0.00	0.00	0.00
2300.00	0.000	0.000	2300.00	0.00	0.00	0.00	0.00
2400.00	0.000	0.000	2400.00	0.00	0.00	0.00	0.00
2500.00	0.000	0.000	2500.00	0.00	0.00	0.00	0.00
2600.00	0.000	0.000	2600.00	0.00	0.00	0.00	0.00
2700.00	0.000	0.000	2700.00	0.00	0.00	0.00	0.00
2800.00	0.000	0.000	2800.00	0.00	0.00	0.00	0.00
2900.00	0.000	0.000	2900.00	0.00	0.00	0.00	0.00
3000.00	0.000	0.000	3000.00	0.00	0.00	0.00	0.00
3100.00	0.000	0.000	3100.00	0.00	0.00	0.00	0.00
3200.00	0.000	0.000	3200.00	0.00	0.00	0.00	0.00
3300.00	0.000	0.000	3300.00	0.00	0.00	0.00	0.00
3400.00	0.000	0.000	3400.00	0.00	0.00	0.00	0.00
3500.00	0.000	0.000	3500.00	0.00	0.00	0.00	0.00
3600.00	0.000	0.000	3600.00	0.00	0.00	0.00	0.00
3700.00	0.000	0.000	3700.00	0.00	0.00	0.00	0.00
3800.00	0.000	0.000	3800.00	0.00	0.00	0.00	0.00
3900.00	0.000	0.000	3900.00	0.00	0.00	0.00	0.00
4000.00	0.000	0.000	4000.00	0.00	0.00	0.00	0.00

Sheet1

4100.00	0.000	0.000	4100.00	0.00	0.00	0.00	0.00
4200.00	0.000	0.000	4200.00	0.00	0.00	0.00	0.00
4300.00	0.000	0.000	4300.00	0.00	0.00	0.00	0.00
4400.00	0.000	0.000	4400.00	0.00	0.00	0.00	0.00
4500.00	0.000	0.000	4500.00	0.00	0.00	0.00	0.00
4600.00	0.000	0.000	4600.00	0.00	0.00	0.00	0.00
4700.00	0.000	0.000	4700.00	0.00	0.00	0.00	0.00
4800.00	0.000	0.000	4800.00	0.00	0.00	0.00	0.00
4900.00	0.000	0.000	4900.00	0.00	0.00	0.00	0.00
5000.00	0.000	0.000	5000.00	0.00	0.00	0.00	0.00
5100.00	0.000	0.000	5100.00	0.00	0.00	0.00	0.00
5200.00	0.000	0.000	5200.00	0.00	0.00	0.00	0.00
5300.00	0.000	0.000	5300.00	0.00	0.00	0.00	0.00
5400.00	0.000	0.000	5400.00	0.00	0.00	0.00	0.00
5500.00	0.000	0.000	5500.00	0.00	0.00	0.00	0.00
5600.00	0.000	0.000	5600.00	0.00	0.00	0.00	0.00
5700.00	0.000	0.000	5700.00	0.00	0.00	0.00	0.00
5800.00	0.000	0.000	5800.00	0.00	0.00	0.00	0.00
5900.00	0.000	0.000	5900.00	0.00	0.00	0.00	0.00
6000.00	0.000	0.000	6000.00	0.00	0.00	0.00	0.00
6100.00	0.000	0.000	6100.00	0.00	0.00	0.00	0.00
6200.00	0.000	0.000	6200.00	0.00	0.00	0.00	0.00
6300.00	0.000	0.000	6300.00	0.00	0.00	0.00	0.00
6400.00	0.000	0.000	6400.00	0.00	0.00	0.00	0.00
6500.00	0.000	0.000	6500.00	0.00	0.00	0.00	0.00
6600.00	0.000	0.000	6600.00	0.00	0.00	0.00	0.00
6700.00	0.000	0.000	6700.00	0.00	0.00	0.00	0.00
6800.00	0.000	0.000	6800.00	0.00	0.00	0.00	0.00
6900.00	0.000	0.000	6900.00	0.00	0.00	0.00	0.00
7000.00	0.000	0.000	7000.00	0.00	0.00	0.00	0.00
7100.00	0.000	0.000	7100.00	0.00	0.00	0.00	0.00
7200.00	0.000	0.000	7200.00	0.00	0.00	0.00	0.00
7300.00	0.000	0.000	7300.00	0.00	0.00	0.00	0.00
7400.00	0.000	0.000	7400.00	0.00	0.00	0.00	0.00
7500.00	0.000	0.000	7500.00	0.00	0.00	0.00	0.00
7600.00	0.000	0.000	7600.00	0.00	0.00	0.00	0.00
7700.00	0.000	0.000	7700.00	0.00	0.00	0.00	0.00
7800.00	0.000	0.000	7800.00	0.00	0.00	0.00	0.00
7900.00	0.000	0.000	7900.00	0.00	0.00	0.00	0.00
8000.00	0.000	0.000	8000.00	0.00	0.00	0.00	0.00
8100.00	0.000	0.000	8100.00	0.00	0.00	0.00	0.00
8200.00	0.000	0.000	8200.00	0.00	0.00	0.00	0.00
8300.00	0.000	0.000	8300.00	0.00	0.00	0.00	0.00
8400.00	0.000	0.000	8400.00	0.00	0.00	0.00	0.00
8500.00	0.000	0.000	8500.00	0.00	0.00	0.00	0.00
8537.00	0.000	0.000	8537.00	0.00	0.00	0.00	0.00
8550.00	1.300	179.510	8550.00	-0.15	0.00	0.15	10.00
8600.00	6.300	179.510	8599.87	-3.46	0.03	3.46	10.00
8650.00	11.299	179.510	8649.27	-11.11	0.09	11.11	10.00
8700.00	16.299	179.510	8697.81	-23.03	0.20	23.03	10.00
8750.00	21.298	179.510	8745.13	-39.13	0.33	39.14	10.00
8800.00	26.298	179.510	8790.86	-59.30	0.51	59.30	10.00
8850.00	31.298	179.510	8834.66	-83.38	0.71	83.38	10.00
8900.00	36.297	179.510	8876.20	-111.18	0.95	111.19	10.00
8950.00	41.297	179.510	8915.16	-142.50	1.22	142.51	10.00
9000.00	46.297	179.510	8951.24	-177.09	1.51	177.10	10.00

Sheet1

9050.00	51.296179.510	8984.16	-214.70	1.84	214.71	10.00
9100.00	56.296179.510	9013.69	-255.03	2.18	255.04	10.00
9150.00	61.295179.510	9039.58	-297.78	2.55	297.79	10.00
9200.00	66.295179.510	9061.66	-342.63	2.93	342.64	10.00
9250.00	71.295179.510	9079.73	-389.22	3.33	389.24	10.00
9300.00	76.294179.510	9093.68	-437.22	3.74	437.24	10.00
9350.00	81.294179.510	9103.40	-486.25	4.16	486.27	10.00
9400.00	86.294179.510	9108.80	-535.94	4.58	535.96	10.00
9437.07	90.000179.510	9110.00	-572.98	4.90	573.00	10.00
9500.00	90.000179.510	9110.00	-635.91	5.44	635.93	0.00
9600.00	90.000179.510	9110.00	-735.91	6.29	735.93	0.00
9700.00	90.000179.510	9110.00	-835.90	7.15	835.93	0.00
9800.00	90.000179.510	9110.00	-935.90	8.00	935.93	0.00
9900.00	90.000179.510	9110.00	-1035.90	8.86	1035.93	0.00
10000.00	90.000179.510	9110.00	-1135.89	9.71	1135.93	0.00
10100.00	90.000179.510	9110.00	-1235.89	10.57	1235.93	0.00
10200.00	90.000179.510	9110.00	-1335.88	11.42	1335.93	0.00
10300.00	90.000179.510	9110.00	-1435.88	12.28	1435.93	0.00
10400.00	90.000179.510	9110.00	-1535.88	13.14	1535.93	0.00
10500.00	90.000179.510	9110.00	-1635.87	13.99	1635.93	0.00
10600.00	90.000179.510	9110.00	-1735.87	14.85	1735.93	0.00
10700.00	90.000179.510	9110.00	-1835.87	15.70	1835.93	0.00
10800.00	90.000179.510	9110.00	-1935.86	16.56	1935.93	0.00
10900.00	90.000179.510	9110.00	-2035.86	17.41	2035.93	0.00
11000.00	90.000179.510	9110.00	-2135.86	18.27	2135.93	0.00
11100.00	90.000179.510	9110.00	-2235.85	19.12	2235.93	0.00
11200.00	90.000179.510	9110.00	-2335.85	19.98	2335.93	0.00
11300.00	90.000179.510	9110.00	-2435.84	20.83	2435.93	0.00
11400.00	90.000179.510	9110.00	-2535.84	21.69	2535.93	0.00
11500.00	90.000179.510	9110.00	-2635.84	22.54	2635.93	0.00
11600.00	90.000179.510	9110.00	-2735.83	23.40	2735.93	0.00
11700.00	90.000179.510	9110.00	-2835.83	24.25	2835.93	0.00
11800.00	90.000179.510	9110.00	-2935.83	25.11	2935.93	0.00
11900.00	90.000179.510	9110.00	-3035.82	25.96	3035.93	0.00
12000.00	90.000179.510	9110.00	-3135.82	26.82	3135.93	0.00
12100.00	90.000179.510	9110.00	-3235.82	27.67	3235.93	0.00
12200.00	90.000179.510	9110.00	-3335.81	28.53	3335.93	0.00
12300.00	90.000179.510	9110.00	-3435.81	29.38	3435.93	0.00
12400.00	90.000179.510	9110.00	-3535.80	30.24	3535.93	0.00
12500.00	90.000179.510	9110.00	-3635.80	31.09	3635.93	0.00
12600.00	90.000179.510	9110.00	-3735.80	31.95	3735.93	0.00
12700.00	90.000179.510	9110.00	-3835.79	32.80	3835.93	0.00
12800.00	90.000179.510	9110.00	-3935.79	33.66	3935.93	0.00
12900.00	90.000179.510	9110.00	-4035.79	34.52	4035.93	0.00
13000.00	90.000179.510	9110.00	-4135.78	35.37	4135.93	0.00
13100.00	90.000179.510	9110.00	-4235.78	36.23	4235.93	0.00
13200.00	90.000179.510	9110.00	-4335.78	37.08	4335.93	0.00
13300.00	90.000179.510	9110.00	-4435.77	37.94	4435.93	0.00
13400.00	90.000179.510	9110.00	-4535.77	38.79	4535.93	0.00
13500.00	90.000179.510	9110.00	-4635.76	39.65	4635.93	0.00
13600.00	90.000179.510	9110.00	-4735.76	40.50	4735.93	0.00
13700.00	90.000179.510	9110.00	-4835.76	41.36	4835.93	0.00
13800.00	90.000179.510	9110.00	-4935.75	42.21	4935.93	0.00
13900.00	90.000179.510	9110.00	-5035.75	43.07	5035.93	0.00
14000.00	90.000179.510	9110.00	-5135.75	43.92	5135.93	0.00
14100.00	90.000179.510	9110.00	-5235.74	44.78	5235.93	0.00

Sheet1

14200.00	90.000179.510	9110.00	-5335.74	45.63	5335.93	0.00
14300.00	90.000179.510	9110.00	-5435.73	46.49	5435.93	0.00
14400.00	90.000179.510	9110.00	-5535.73	47.34	5535.93	0.00
14500.00	90.000179.510	9110.00	-5635.73	48.20	5635.93	0.00
14600.00	90.000179.510	9110.00	-5735.72	49.05	5735.93	0.00
14700.00	90.000179.510	9110.00	-5835.72	49.91	5835.93	0.00
14800.00	90.000179.510	9110.00	-5935.72	50.76	5935.93	0.00
14900.00	90.000179.510	9110.00	-6035.71	51.62	6035.93	0.00
15000.00	90.000179.510	9110.00	-6135.71	52.47	6135.93	0.00
15100.00	90.000179.510	9110.00	-6235.71	53.33	6235.93	0.00
15200.00	90.000179.510	9110.00	-6335.70	54.18	6335.93	0.00
15300.00	90.000179.510	9110.00	-6435.70	55.04	6435.93	0.00
15400.00	90.000179.510	9110.00	-6535.69	55.90	6535.93	0.00
15500.00	90.000179.510	9110.00	-6635.69	56.75	6635.93	0.00
15600.00	90.000179.510	9110.00	-6735.69	57.61	6735.93	0.00
15700.00	90.000179.510	9110.00	-6835.68	58.46	6835.93	0.00
15800.00	90.000179.510	9110.00	-6935.68	59.32	6935.93	0.00
15900.00	90.000179.510	9110.00	-7035.68	60.17	7035.93	0.00
16000.00	90.000179.510	9110.00	-7135.67	61.03	7135.93	0.00
16100.00	90.000179.510	9110.00	-7235.67	61.88	7235.93	0.00
16200.00	90.000179.510	9110.00	-7335.67	62.74	7335.93	0.00
16262.59	90.000179.510	9110.00	-7398.25	63.27	7398.52	0.00

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.
Vertical depths are relative to WELL. Northings and Eastings are relative to Well.

The Dogleg Severity is in Degrees per 100 feet.
Vertical Section is from Slot and calculated along an Azimuth of 179.510° (Grid).

Coordinate System is North American Datum 1983 US State Plane 1983
Central meridian is -104.333°.
Grid Convergence at Surface is 0.479°.

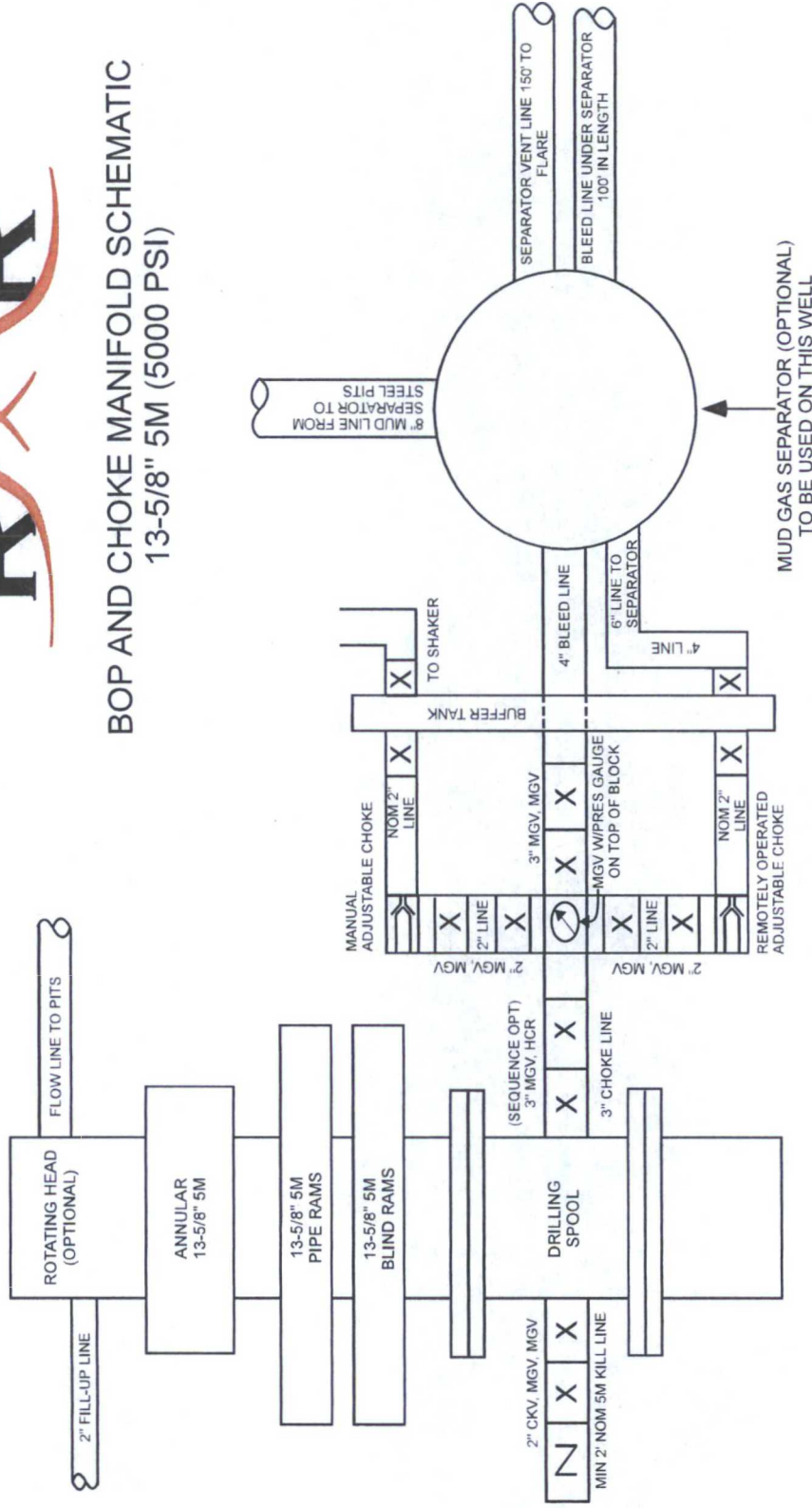
Based upon Minimum Curvature type calculations
the Bottom Hole Displacement is 7398.52ft.

New Mexico Eastern Zone.

at a Measured Depth of 16262.59ft.
in the Direction of 179.510° (Grid).



BOP AND CHOKE MANIFOLD SCHEMATIC 13-5/8" 5M (5000 PSI)



NOTES
MGV - MANUAL GATE VALVE
HCR - REMOTELY OPERATED HIGH CLOSING RATIO VALVE
CKV - CHECK VALVE
LINE SIZES GIVEN IN NOMINAL DIMENSIONS