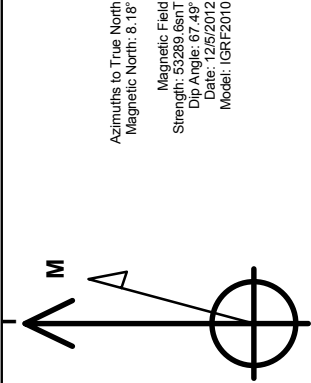


Whiting Oil & Gas

Well Name: **Razor 25-2411H**
Surface Location: Razor #25-2514H Pad Sec.25-T10N-R58W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
+N/-S +E/-W Northing Easting Longitude Slot
0.0 0.0 1544615.11 3464882.70 40.816264 -103.820411
Original Well Elev WELL @ 4777.7ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
Target Circle - Razor 25-2514	1.0	-50.6	0.0	Circle (Radius: 300.0)
BHL 660'FNL, 660'FWL, SEC.24	5726.0	4911.3	-45.4	Point



ANNOTATIONS	
TVD	MD
4907.5	4907.5
5448.1	5498.0
5726.0	6193.0
Razor #25-2514H Pad Sec.25-T10N-R58W	
Razor 25-2411H	
Plan #4 (12-10-12)	

SHL 264'FNL, 661'FWL, SEC.25

Casing Pt. -
660' FSL, 652' FWL

300' from Razor 25-2514H

Target Circle - Razor 25-2514

Razor 25-2411H

KOP

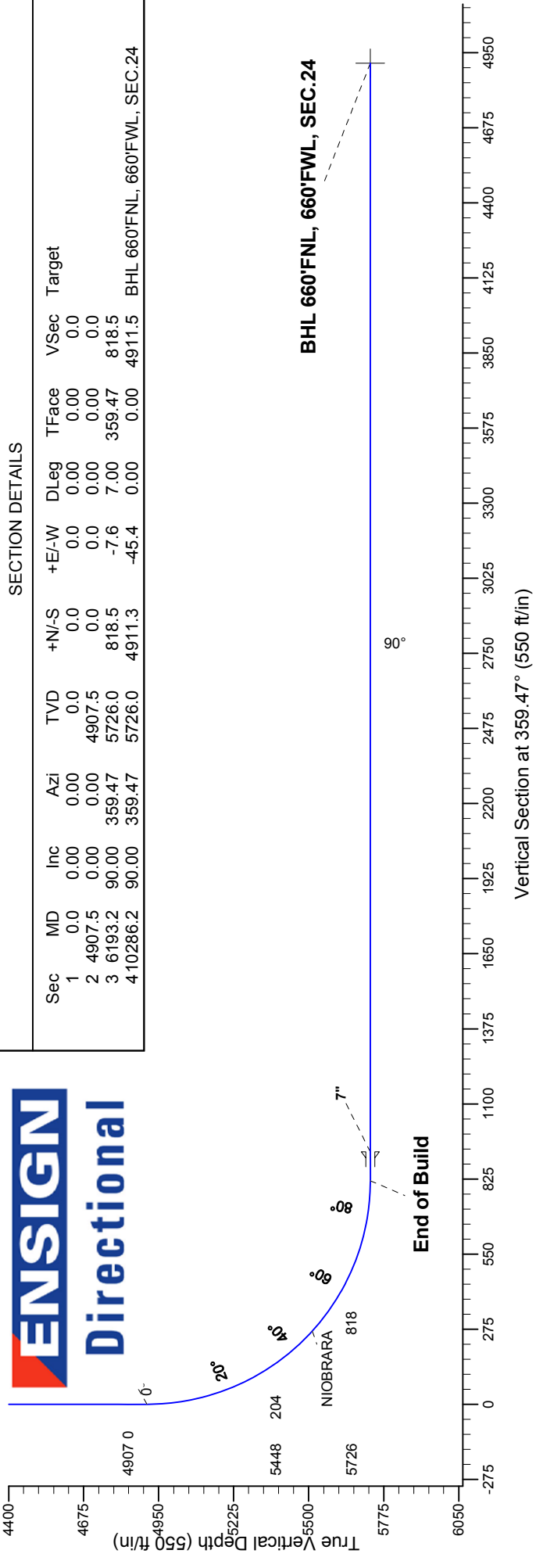
7"

End of Build

South(-)/North(+) (1700 ft/in)

West(-)/East(+) (1700 ft/in)

ENSIGN
Directional



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	4907.5	0.00	0.00	4907.5	0.0	0.0	0.00	0.00	0.0	
3	6193.2	90.00	359.47	5726.0	818.5	-7.6	7.00	359.47	818.5	
4	10286.2	90.00	359.47	5726.0	4911.3	-45.4	0.00	0.00	4911.5	BHL 660'FNL, 660'FWL, SEC.24



Directional

Whiting Oil & Gas

SEC.25-T10N-R58W

Razor #25-2514H Pad Sec.25-T10N-R58W

Razor 25-2411H

Wellbore #1

Plan: Plan #4 (12-10-12)

Standard Planning Report

10 December, 2012

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	
4,907.5	0.00	0.00	4,907.5	0.0	0.0	0.00	0.00	0.00	0.00	
6,193.2	90.00	359.47	5,726.0	818.5	-7.6	7.00	7.00	0.00	359.47	
10,286.2	90.00	359.47	5,726.0	4,911.3	-45.4	0.00	0.00	0.00	0.00	BHL 660'FNL, 660'

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	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
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	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
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	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
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,520.0	0.00	0.00	1,520.0	0.0	0.0	0.0	0.00	0.00	0.00
1,560.0	0.00	0.00	1,560.0	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
1,640.0	0.00	0.00	1,640.0	0.0	0.0	0.0	0.00	0.00	0.00
1,680.0	0.00	0.00	1,680.0	0.0	0.0	0.0	0.00	0.00	0.00
1,720.0	0.00	0.00	1,720.0	0.0	0.0	0.0	0.00	0.00	0.00
1,760.0	0.00	0.00	1,760.0	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
1,840.0	0.00	0.00	1,840.0	0.0	0.0	0.0	0.00	0.00	0.00
1,880.0	0.00	0.00	1,880.0	0.0	0.0	0.0	0.00	0.00	0.00
1,920.0	0.00	0.00	1,920.0	0.0	0.0	0.0	0.00	0.00	0.00
1,960.0	0.00	0.00	1,960.0	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
2,040.0	0.00	0.00	2,040.0	0.0	0.0	0.0	0.00	0.00	0.00
2,080.0	0.00	0.00	2,080.0	0.0	0.0	0.0	0.00	0.00	0.00
2,120.0	0.00	0.00	2,120.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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)
2,160.0	0.00	0.00	2,160.0	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
2,240.0	0.00	0.00	2,240.0	0.0	0.0	0.0	0.00	0.00	0.00
2,280.0	0.00	0.00	2,280.0	0.0	0.0	0.0	0.00	0.00	0.00
2,320.0	0.00	0.00	2,320.0	0.0	0.0	0.0	0.00	0.00	0.00
2,360.0	0.00	0.00	2,360.0	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
2,440.0	0.00	0.00	2,440.0	0.0	0.0	0.0	0.00	0.00	0.00
2,480.0	0.00	0.00	2,480.0	0.0	0.0	0.0	0.00	0.00	0.00
2,520.0	0.00	0.00	2,520.0	0.0	0.0	0.0	0.00	0.00	0.00
2,560.0	0.00	0.00	2,560.0	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
2,640.0	0.00	0.00	2,640.0	0.0	0.0	0.0	0.00	0.00	0.00
2,680.0	0.00	0.00	2,680.0	0.0	0.0	0.0	0.00	0.00	0.00
2,720.0	0.00	0.00	2,720.0	0.0	0.0	0.0	0.00	0.00	0.00
2,760.0	0.00	0.00	2,760.0	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
2,840.0	0.00	0.00	2,840.0	0.0	0.0	0.0	0.00	0.00	0.00
2,880.0	0.00	0.00	2,880.0	0.0	0.0	0.0	0.00	0.00	0.00
2,920.0	0.00	0.00	2,920.0	0.0	0.0	0.0	0.00	0.00	0.00
2,960.0	0.00	0.00	2,960.0	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
3,040.0	0.00	0.00	3,040.0	0.0	0.0	0.0	0.00	0.00	0.00
3,080.0	0.00	0.00	3,080.0	0.0	0.0	0.0	0.00	0.00	0.00
3,120.0	0.00	0.00	3,120.0	0.0	0.0	0.0	0.00	0.00	0.00
3,160.0	0.00	0.00	3,160.0	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
3,240.0	0.00	0.00	3,240.0	0.0	0.0	0.0	0.00	0.00	0.00
3,280.0	0.00	0.00	3,280.0	0.0	0.0	0.0	0.00	0.00	0.00
3,320.0	0.00	0.00	3,320.0	0.0	0.0	0.0	0.00	0.00	0.00
3,360.0	0.00	0.00	3,360.0	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
3,440.0	0.00	0.00	3,440.0	0.0	0.0	0.0	0.00	0.00	0.00
3,480.0	0.00	0.00	3,480.0	0.0	0.0	0.0	0.00	0.00	0.00
3,520.0	0.00	0.00	3,520.0	0.0	0.0	0.0	0.00	0.00	0.00
3,560.0	0.00	0.00	3,560.0	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
3,640.0	0.00	0.00	3,640.0	0.0	0.0	0.0	0.00	0.00	0.00
3,680.0	0.00	0.00	3,680.0	0.0	0.0	0.0	0.00	0.00	0.00
3,720.0	0.00	0.00	3,720.0	0.0	0.0	0.0	0.00	0.00	0.00
3,760.0	0.00	0.00	3,760.0	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
3,840.0	0.00	0.00	3,840.0	0.0	0.0	0.0	0.00	0.00	0.00
3,880.0	0.00	0.00	3,880.0	0.0	0.0	0.0	0.00	0.00	0.00
3,920.0	0.00	0.00	3,920.0	0.0	0.0	0.0	0.00	0.00	0.00
3,960.0	0.00	0.00	3,960.0	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
4,040.0	0.00	0.00	4,040.0	0.0	0.0	0.0	0.00	0.00	0.00
4,080.0	0.00	0.00	4,080.0	0.0	0.0	0.0	0.00	0.00	0.00
4,120.0	0.00	0.00	4,120.0	0.0	0.0	0.0	0.00	0.00	0.00
4,160.0	0.00	0.00	4,160.0	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
4,240.0	0.00	0.00	4,240.0	0.0	0.0	0.0	0.00	0.00	0.00
4,280.0	0.00	0.00	4,280.0	0.0	0.0	0.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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)
4,320.0	0.00	0.00	4,320.0	0.0	0.0	0.0	0.00	0.00	0.00
4,360.0	0.00	0.00	4,360.0	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
4,440.0	0.00	0.00	4,440.0	0.0	0.0	0.0	0.00	0.00	0.00
4,480.0	0.00	0.00	4,480.0	0.0	0.0	0.0	0.00	0.00	0.00
4,520.0	0.00	0.00	4,520.0	0.0	0.0	0.0	0.00	0.00	0.00
4,560.0	0.00	0.00	4,560.0	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
4,640.0	0.00	0.00	4,640.0	0.0	0.0	0.0	0.00	0.00	0.00
4,680.0	0.00	0.00	4,680.0	0.0	0.0	0.0	0.00	0.00	0.00
4,720.0	0.00	0.00	4,720.0	0.0	0.0	0.0	0.00	0.00	0.00
4,760.0	0.00	0.00	4,760.0	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
4,840.0	0.00	0.00	4,840.0	0.0	0.0	0.0	0.00	0.00	0.00
4,880.0	0.00	0.00	4,880.0	0.0	0.0	0.0	0.00	0.00	0.00
4,907.5	0.00	0.00	4,907.5	0.0	0.0	0.0	0.00	0.00	0.00
KOP									
4,920.0	0.88	359.47	4,920.0	0.1	0.0	0.1	7.01	7.01	0.00
4,960.0	3.68	359.47	4,960.0	1.7	0.0	1.7	7.00	7.00	0.00
5,000.0	6.48	359.47	4,999.8	5.2	0.0	5.2	7.00	7.00	0.00
5,040.0	9.28	359.47	5,039.4	10.7	-0.1	10.7	7.00	7.00	0.00
5,080.0	12.08	359.47	5,078.7	18.1	-0.2	18.1	7.00	7.00	0.00
5,120.0	14.88	359.47	5,117.6	27.4	-0.3	27.4	7.00	7.00	0.00
5,160.0	17.68	359.47	5,156.0	38.6	-0.4	38.6	7.00	7.00	0.00
5,200.0	20.48	359.47	5,193.8	51.7	-0.5	51.7	7.00	7.00	0.00
5,240.0	23.28	359.47	5,230.9	66.6	-0.6	66.6	7.00	7.00	0.00
5,280.0	26.08	359.47	5,267.3	83.3	-0.8	83.3	7.00	7.00	0.00
5,320.0	28.88	359.47	5,302.8	101.8	-0.9	101.8	7.00	7.00	0.00
5,360.0	31.68	359.47	5,337.3	121.9	-1.1	121.9	7.00	7.00	0.00
5,400.0	34.48	359.47	5,370.8	143.8	-1.3	143.8	7.00	7.00	0.00
5,440.0	37.28	359.47	5,403.2	167.2	-1.5	167.2	7.00	7.00	0.00
5,480.0	40.08	359.47	5,434.4	192.2	-1.8	192.2	7.00	7.00	0.00
5,498.0	41.34	359.47	5,448.1	203.9	-1.9	203.9	7.00	7.00	0.00
300' from Razor 25-2514H									
5,520.0	42.88	359.47	5,464.4	218.7	-2.0	218.7	7.00	7.00	0.00
5,560.0	45.68	359.47	5,493.0	246.6	-2.3	246.6	7.00	7.00	0.00
5,589.0	47.71	359.47	5,512.9	267.7	-2.5	267.7	7.00	7.00	0.00
NIORARA									
5,600.0	48.48	359.47	5,520.3	275.9	-2.5	275.9	7.00	7.00	0.00
5,640.0	51.28	359.47	5,546.1	306.5	-2.8	306.5	7.00	7.00	0.00
5,680.0	54.08	359.47	5,570.3	338.3	-3.1	338.3	7.00	7.00	0.00
5,720.0	56.88	359.47	5,593.0	371.2	-3.4	371.2	7.00	7.00	0.00
5,760.0	59.68	359.47	5,614.0	405.2	-3.7	405.3	7.00	7.00	0.00
5,800.0	62.48	359.47	5,633.4	440.2	-4.1	440.3	7.00	7.00	0.00
5,840.0	65.28	359.47	5,651.0	476.1	-4.4	476.2	7.00	7.00	0.00
5,880.0	68.08	359.47	5,666.8	512.9	-4.7	512.9	7.00	7.00	0.00
5,920.0	70.88	359.47	5,680.8	550.3	-5.1	550.4	7.00	7.00	0.00
5,960.0	73.68	359.47	5,693.0	588.4	-5.4	588.5	7.00	7.00	0.00
6,000.0	76.48	359.47	5,703.3	627.1	-5.8	627.1	7.00	7.00	0.00
6,040.0	79.28	359.47	5,711.7	666.2	-6.2	666.2	7.00	7.00	0.00
6,080.0	82.08	359.47	5,718.2	705.6	-6.5	705.7	7.00	7.00	0.00
6,120.0	84.88	359.47	5,722.7	745.4	-6.9	745.4	7.00	7.00	0.00
6,160.0	87.68	359.47	5,725.3	785.3	-7.3	785.3	7.00	7.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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)
6,193.0	89.99	359.47	5,726.0	818.3	-7.6	818.3	7.00	7.00	0.00
End of Build									
6,193.2	90.00	359.47	5,726.0	818.5	-7.6	818.5	7.00	7.00	0.00
6,200.0	90.00	359.47	5,726.0	825.3	-7.6	825.3	0.00	0.00	0.00
6,240.0	90.00	359.47	5,726.0	865.3	-8.0	865.3	0.00	0.00	0.00
6,280.0	90.00	359.47	5,726.0	905.3	-8.4	905.3	0.00	0.00	0.00
6,299.0	90.00	359.47	5,726.0	924.3	-8.5	924.3	0.00	0.00	0.00
7"									
6,320.0	90.00	359.47	5,726.0	945.3	-8.7	945.3	0.00	0.00	0.00
6,360.0	90.00	359.47	5,726.0	985.3	-9.1	985.3	0.00	0.00	0.00
6,400.0	90.00	359.47	5,726.0	1,025.3	-9.5	1,025.3	0.00	0.00	0.00
6,440.0	90.00	359.47	5,726.0	1,065.3	-9.8	1,065.3	0.00	0.00	0.00
6,480.0	90.00	359.47	5,726.0	1,105.3	-10.2	1,105.3	0.00	0.00	0.00
6,520.0	90.00	359.47	5,726.0	1,145.3	-10.6	1,145.3	0.00	0.00	0.00
6,560.0	90.00	359.47	5,726.0	1,185.3	-11.0	1,185.3	0.00	0.00	0.00
6,600.0	90.00	359.47	5,726.0	1,225.3	-11.3	1,225.3	0.00	0.00	0.00
6,640.0	90.00	359.47	5,726.0	1,265.3	-11.7	1,265.3	0.00	0.00	0.00
6,680.0	90.00	359.47	5,726.0	1,305.3	-12.1	1,305.3	0.00	0.00	0.00
6,720.0	90.00	359.47	5,726.0	1,345.3	-12.4	1,345.3	0.00	0.00	0.00
6,760.0	90.00	359.47	5,726.0	1,385.2	-12.8	1,385.3	0.00	0.00	0.00
6,800.0	90.00	359.47	5,726.0	1,425.2	-13.2	1,425.3	0.00	0.00	0.00
6,840.0	90.00	359.47	5,726.0	1,465.2	-13.5	1,465.3	0.00	0.00	0.00
6,880.0	90.00	359.47	5,726.0	1,505.2	-13.9	1,505.3	0.00	0.00	0.00
6,920.0	90.00	359.47	5,726.0	1,545.2	-14.3	1,545.3	0.00	0.00	0.00
6,960.0	90.00	359.47	5,726.0	1,585.2	-14.6	1,585.3	0.00	0.00	0.00
7,000.0	90.00	359.47	5,726.0	1,625.2	-15.0	1,625.3	0.00	0.00	0.00
7,040.0	90.00	359.47	5,726.0	1,665.2	-15.4	1,665.3	0.00	0.00	0.00
7,080.0	90.00	359.47	5,726.0	1,705.2	-15.8	1,705.3	0.00	0.00	0.00
7,120.0	90.00	359.47	5,726.0	1,745.2	-16.1	1,745.3	0.00	0.00	0.00
7,160.0	90.00	359.47	5,726.0	1,785.2	-16.5	1,785.3	0.00	0.00	0.00
7,200.0	90.00	359.47	5,726.0	1,825.2	-16.9	1,825.3	0.00	0.00	0.00
7,240.0	90.00	359.47	5,726.0	1,865.2	-17.2	1,865.3	0.00	0.00	0.00
7,280.0	90.00	359.47	5,726.0	1,905.2	-17.6	1,905.3	0.00	0.00	0.00
7,320.0	90.00	359.47	5,726.0	1,945.2	-18.0	1,945.3	0.00	0.00	0.00
7,360.0	90.00	359.47	5,726.0	1,985.2	-18.3	1,985.3	0.00	0.00	0.00
7,400.0	90.00	359.47	5,726.0	2,025.2	-18.7	2,025.3	0.00	0.00	0.00
7,440.0	90.00	359.47	5,726.0	2,065.2	-19.1	2,065.3	0.00	0.00	0.00
7,480.0	90.00	359.47	5,726.0	2,105.2	-19.5	2,105.3	0.00	0.00	0.00
7,520.0	90.00	359.47	5,726.0	2,145.2	-19.8	2,145.3	0.00	0.00	0.00
7,560.0	90.00	359.47	5,726.0	2,185.2	-20.2	2,185.3	0.00	0.00	0.00
7,600.0	90.00	359.47	5,726.0	2,225.2	-20.6	2,225.3	0.00	0.00	0.00
7,640.0	90.00	359.47	5,726.0	2,265.2	-20.9	2,265.3	0.00	0.00	0.00
7,680.0	90.00	359.47	5,726.0	2,305.2	-21.3	2,305.3	0.00	0.00	0.00
7,720.0	90.00	359.47	5,726.0	2,345.2	-21.7	2,345.3	0.00	0.00	0.00
7,760.0	90.00	359.47	5,726.0	2,385.2	-22.0	2,385.3	0.00	0.00	0.00
7,800.0	90.00	359.47	5,726.0	2,425.2	-22.4	2,425.3	0.00	0.00	0.00
7,840.0	90.00	359.47	5,726.0	2,465.2	-22.8	2,465.3	0.00	0.00	0.00
7,880.0	90.00	359.47	5,726.0	2,505.2	-23.2	2,505.3	0.00	0.00	0.00
7,920.0	90.00	359.47	5,726.0	2,545.2	-23.5	2,545.3	0.00	0.00	0.00
7,960.0	90.00	359.47	5,726.0	2,585.2	-23.9	2,585.3	0.00	0.00	0.00
8,000.0	90.00	359.47	5,726.0	2,625.2	-24.3	2,625.3	0.00	0.00	0.00
8,040.0	90.00	359.47	5,726.0	2,665.2	-24.6	2,665.3	0.00	0.00	0.00
8,080.0	90.00	359.47	5,726.0	2,705.2	-25.0	2,705.3	0.00	0.00	0.00
8,120.0	90.00	359.47	5,726.0	2,745.2	-25.4	2,745.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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)
8,160.0	90.00	359.47	5,726.0	2,785.2	-25.7	2,785.3	0.00	0.00	0.00
8,200.0	90.00	359.47	5,726.0	2,825.2	-26.1	2,825.3	0.00	0.00	0.00
8,240.0	90.00	359.47	5,726.0	2,865.2	-26.5	2,865.3	0.00	0.00	0.00
8,280.0	90.00	359.47	5,726.0	2,905.2	-26.8	2,905.3	0.00	0.00	0.00
8,320.0	90.00	359.47	5,726.0	2,945.2	-27.2	2,945.3	0.00	0.00	0.00
8,360.0	90.00	359.47	5,726.0	2,985.2	-27.6	2,985.3	0.00	0.00	0.00
8,400.0	90.00	359.47	5,726.0	3,025.2	-28.0	3,025.3	0.00	0.00	0.00
8,440.0	90.00	359.47	5,726.0	3,065.2	-28.3	3,065.3	0.00	0.00	0.00
8,480.0	90.00	359.47	5,726.0	3,105.2	-28.7	3,105.3	0.00	0.00	0.00
8,520.0	90.00	359.47	5,726.0	3,145.2	-29.1	3,145.3	0.00	0.00	0.00
8,560.0	90.00	359.47	5,726.0	3,185.2	-29.4	3,185.3	0.00	0.00	0.00
8,600.0	90.00	359.47	5,726.0	3,225.2	-29.8	3,225.3	0.00	0.00	0.00
8,640.0	90.00	359.47	5,726.0	3,265.2	-30.2	3,265.3	0.00	0.00	0.00
8,680.0	90.00	359.47	5,726.0	3,305.2	-30.5	3,305.3	0.00	0.00	0.00
8,720.0	90.00	359.47	5,726.0	3,345.2	-30.9	3,345.3	0.00	0.00	0.00
8,760.0	90.00	359.47	5,726.0	3,385.2	-31.3	3,385.3	0.00	0.00	0.00
8,800.0	90.00	359.47	5,726.0	3,425.2	-31.7	3,425.3	0.00	0.00	0.00
8,840.0	90.00	359.47	5,726.0	3,465.2	-32.0	3,465.3	0.00	0.00	0.00
8,880.0	90.00	359.47	5,726.0	3,505.2	-32.4	3,505.3	0.00	0.00	0.00
8,920.0	90.00	359.47	5,726.0	3,545.2	-32.8	3,545.3	0.00	0.00	0.00
8,960.0	90.00	359.47	5,726.0	3,585.2	-33.1	3,585.3	0.00	0.00	0.00
9,000.0	90.00	359.47	5,726.0	3,625.2	-33.5	3,625.3	0.00	0.00	0.00
9,040.0	90.00	359.47	5,726.0	3,665.2	-33.9	3,665.3	0.00	0.00	0.00
9,080.0	90.00	359.47	5,726.0	3,705.2	-34.2	3,705.3	0.00	0.00	0.00
9,120.0	90.00	359.47	5,726.0	3,745.1	-34.6	3,745.3	0.00	0.00	0.00
9,160.0	90.00	359.47	5,726.0	3,785.1	-35.0	3,785.3	0.00	0.00	0.00
9,200.0	90.00	359.47	5,726.0	3,825.1	-35.3	3,825.3	0.00	0.00	0.00
9,240.0	90.00	359.47	5,726.0	3,865.1	-35.7	3,865.3	0.00	0.00	0.00
9,280.0	90.00	359.47	5,726.0	3,905.1	-36.1	3,905.3	0.00	0.00	0.00
9,320.0	90.00	359.47	5,726.0	3,945.1	-36.5	3,945.3	0.00	0.00	0.00
9,360.0	90.00	359.47	5,726.0	3,985.1	-36.8	3,985.3	0.00	0.00	0.00
9,400.0	90.00	359.47	5,726.0	4,025.1	-37.2	4,025.3	0.00	0.00	0.00
9,440.0	90.00	359.47	5,726.0	4,065.1	-37.6	4,065.3	0.00	0.00	0.00
9,480.0	90.00	359.47	5,726.0	4,105.1	-37.9	4,105.3	0.00	0.00	0.00
9,520.0	90.00	359.47	5,726.0	4,145.1	-38.3	4,145.3	0.00	0.00	0.00
9,560.0	90.00	359.47	5,726.0	4,185.1	-38.7	4,185.3	0.00	0.00	0.00
9,600.0	90.00	359.47	5,726.0	4,225.1	-39.0	4,225.3	0.00	0.00	0.00
9,640.0	90.00	359.47	5,726.0	4,265.1	-39.4	4,265.3	0.00	0.00	0.00
9,680.0	90.00	359.47	5,726.0	4,305.1	-39.8	4,305.3	0.00	0.00	0.00
9,720.0	90.00	359.47	5,726.0	4,345.1	-40.2	4,345.3	0.00	0.00	0.00
9,760.0	90.00	359.47	5,726.0	4,385.1	-40.5	4,385.3	0.00	0.00	0.00
9,800.0	90.00	359.47	5,726.0	4,425.1	-40.9	4,425.3	0.00	0.00	0.00
9,840.0	90.00	359.47	5,726.0	4,465.1	-41.3	4,465.3	0.00	0.00	0.00
9,880.0	90.00	359.47	5,726.0	4,505.1	-41.6	4,505.3	0.00	0.00	0.00
9,920.0	90.00	359.47	5,726.0	4,545.1	-42.0	4,545.3	0.00	0.00	0.00
9,960.0	90.00	359.47	5,726.0	4,585.1	-42.4	4,585.3	0.00	0.00	0.00
10,000.0	90.00	359.47	5,726.0	4,625.1	-42.7	4,625.3	0.00	0.00	0.00
10,040.0	90.00	359.47	5,726.0	4,665.1	-43.1	4,665.3	0.00	0.00	0.00
10,080.0	90.00	359.47	5,726.0	4,705.1	-43.5	4,705.3	0.00	0.00	0.00
10,120.0	90.00	359.47	5,726.0	4,745.1	-43.9	4,745.3	0.00	0.00	0.00
10,160.0	90.00	359.47	5,726.0	4,785.1	-44.2	4,785.3	0.00	0.00	0.00
10,200.0	90.00	359.47	5,726.0	4,825.1	-44.6	4,825.3	0.00	0.00	0.00
10,240.0	90.00	359.47	5,726.0	4,865.1	-45.0	4,865.3	0.00	0.00	0.00
10,280.0	90.00	359.47	5,726.0	4,905.1	-45.3	4,905.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Razor 25-2411H
Company:	Whiting Oil & Gas	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Project:	SEC.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	North Reference:	True
Well:	Razor 25-2411H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 (12-10-12)		

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)
10,286.2	90.00	359.47	5,726.0	4,911.3	-45.4	4,911.5	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,299.0	5,726.0	7"	7	8-3/4

Formations				
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)
5,589.0	5,512.9	NIOBRARA		0.00

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,907.5	4,907.5	0.0	0.0	KOP
5,498.0	5,448.1	203.9	-1.9	300' from Razor 25-2514H
6,193.0	5,726.0	818.3	-7.6	End of Build



Directional

Whiting Oil & Gas

SEC.25-T10N-R58W

Razor #25-2514H Pad Sec.25-T10N-R58W

Razor 25-2411H

Wellbore #1

Plan #4 (12-10-12)

Anticollision Report

10 December, 2012

Company:	Whiting Oil & Gas	Local Co-ordinate Reference:	Well Razor 25-2411H
Project:	SEC.25-T10N-R58W	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Reference Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Razor 25-2411H	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 #4 (12-10-12)	Offset TVD Reference:	Offset Datum

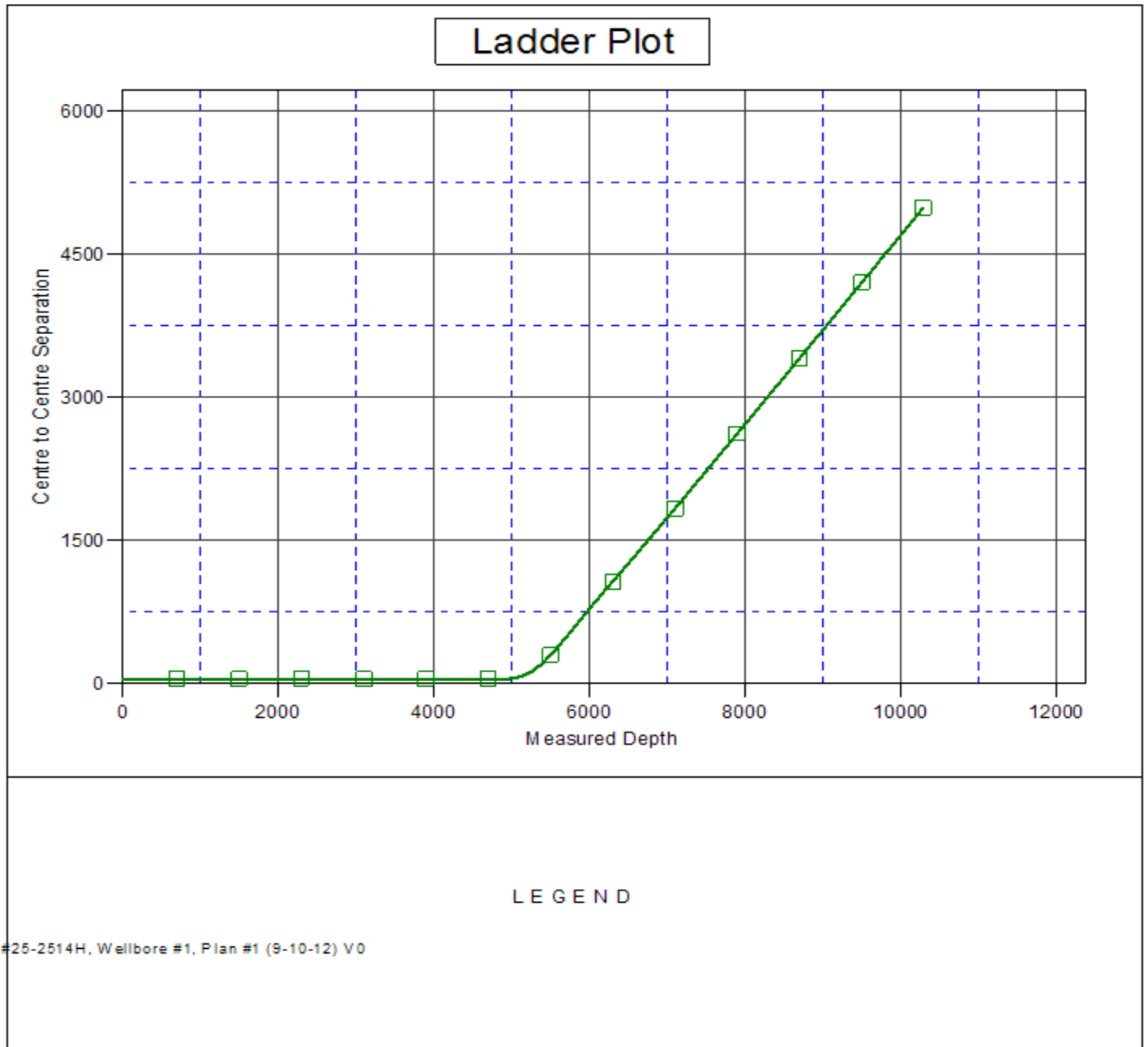
Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,600.0	2,600.0	2,600.0	2,600.0	5.7	5.7	-180.00	-50.6	0.0	50.6	39.2	11.46	4.418		
2,700.0	2,700.0	2,700.0	2,700.0	6.0	6.0	-180.00	-50.6	0.0	50.6	38.7	11.91	4.251		
2,800.0	2,800.0	2,800.0	2,800.0	6.2	6.2	-180.00	-50.6	0.0	50.6	38.3	12.36	4.097		
2,900.0	2,900.0	2,900.0	2,900.0	6.4	6.4	-180.00	-50.6	0.0	50.6	37.8	12.81	3.953		
3,000.0	3,000.0	3,000.0	3,000.0	6.6	6.6	-180.00	-50.6	0.0	50.6	37.4	13.26	3.819		
3,100.0	3,100.0	3,100.0	3,100.0	6.9	6.9	-180.00	-50.6	0.0	50.6	36.9	13.71	3.694		
3,200.0	3,200.0	3,200.0	3,200.0	7.1	7.1	-180.00	-50.6	0.0	50.6	36.5	14.16	3.576		
3,300.0	3,300.0	3,300.0	3,300.0	7.3	7.3	-180.00	-50.6	0.0	50.6	36.0	14.61	3.466		
3,400.0	3,400.0	3,400.0	3,400.0	7.5	7.5	-180.00	-50.6	0.0	50.6	35.6	15.06	3.363		
3,500.0	3,500.0	3,500.0	3,500.0	7.8	7.8	-180.00	-50.6	0.0	50.6	35.1	15.51	3.265		
3,600.0	3,600.0	3,600.0	3,600.0	8.0	8.0	-180.00	-50.6	0.0	50.6	34.7	15.96	3.173		
3,700.0	3,700.0	3,700.0	3,700.0	8.2	8.2	-180.00	-50.6	0.0	50.6	34.2	16.41	3.086		
3,800.0	3,800.0	3,800.0	3,800.0	8.4	8.4	-180.00	-50.6	0.0	50.6	33.8	16.86	3.004		
3,900.0	3,900.0	3,900.0	3,900.0	8.7	8.7	-180.00	-50.6	0.0	50.6	33.3	17.31	2.926		
4,000.0	4,000.0	4,000.0	4,000.0	8.9	8.9	-180.00	-50.6	0.0	50.6	32.9	17.76	2.852		
4,100.0	4,100.0	4,100.0	4,100.0	9.1	9.1	-180.00	-50.6	0.0	50.6	32.4	18.21	2.782		
4,200.0	4,200.0	4,200.0	4,200.0	9.3	9.3	-180.00	-50.6	0.0	50.6	32.0	18.66	2.715		
4,300.0	4,300.0	4,300.0	4,300.0	9.6	9.6	-180.00	-50.6	0.0	50.6	31.5	19.11	2.651		
4,400.0	4,400.0	4,400.0	4,400.0	9.8	9.8	-180.00	-50.6	0.0	50.6	31.1	19.55	2.590		
4,500.0	4,500.0	4,500.0	4,500.0	10.0	10.0	-180.00	-50.6	0.0	50.6	30.6	20.00	2.532		
4,600.0	4,600.0	4,600.0	4,600.0	10.2	10.2	-180.00	-50.6	0.0	50.6	30.2	20.45	2.476		
4,700.0	4,700.0	4,700.0	4,700.0	10.5	10.5	-180.00	-50.6	0.0	50.6	29.7	20.90	2.423		
4,800.0	4,800.0	4,800.0	4,800.0	10.7	10.7	-180.00	-50.6	0.0	50.6	29.3	21.35	2.372		
4,900.0	4,900.0	4,900.0	4,900.0	10.9	10.9	-180.00	-50.6	0.0	50.6	28.8	21.80	2.323 CC, ES, SF		
5,000.0	4,999.8	4,999.8	4,999.8	11.1	11.1	-179.52	-50.6	0.0	55.9	33.7	22.13	2.524		
5,100.0	5,098.2	5,098.2	5,098.2	11.4	11.3	-179.62	-50.6	0.0	73.2	51.0	22.18	3.299		
5,200.0	5,193.8	5,191.2	5,191.2	11.6	11.6	-179.72	-50.8	0.0	102.6	80.6	21.93	4.677		
5,300.0	5,285.1	5,261.4	5,261.0	11.8	11.7	-179.82	-57.3	0.1	151.5	130.2	21.35	7.099		
5,400.0	5,370.8	5,315.2	5,313.6	12.2	11.8	-179.90	-68.6	0.4	219.9	199.4	20.50	10.729		
5,500.0	5,449.6	5,350.0	5,346.9	12.6	11.8	-179.95	-78.7	0.6	302.0	282.6	19.40	15.566		
5,600.0	5,520.3	5,378.0	5,373.2	13.2	11.9	-179.99	-88.5	0.8	393.0	374.9	18.13	21.678		
5,700.0	5,581.8	5,400.0	5,393.4	13.9	11.9	179.95	-97.2	1.0	489.5	472.8	16.75	29.221		
5,800.0	5,633.4	5,400.0	5,393.4	14.9	11.9	179.86	-97.2	1.0	588.6	573.3	15.34	38.365		
5,900.0	5,674.0	5,400.0	5,393.4	15.9	11.9	0.12	-97.2	1.0	688.5	674.5	14.04	49.049		
6,000.0	5,703.3	5,400.0	5,393.4	17.2	11.9	0.04	-97.2	1.0	787.8	774.8	12.98	60.710		
6,100.0	5,720.7	5,400.0	5,393.4	18.5	11.9	0.02	-97.2	1.0	885.4	873.1	12.31	71.919		
6,200.0	5,726.0	5,372.8	5,368.3	20.0	11.9	-0.01	-86.6	0.8	979.6	967.4	12.18	80.437		
6,300.0	5,726.0	5,350.0	5,346.9	21.5	11.8	-0.02	-78.7	0.6	1,073.2	1,060.6	12.68	84.651		
6,400.0	5,726.0	5,350.0	5,346.9	23.1	11.8	-0.02	-78.7	0.6	1,167.3	1,154.1	13.23	88.253		
6,500.0	5,726.0	5,350.0	5,346.9	24.7	11.8	-0.02	-78.7	0.6	1,262.3	1,248.5	13.80	91.453		
6,600.0	5,726.0	5,350.0	5,346.9	26.4	11.8	-0.02	-78.7	0.6	1,358.0	1,343.6	14.40	94.301		
6,700.0	5,726.0	5,324.6	5,322.7	28.1	11.8	-0.03	-71.1	0.4	1,453.5	1,438.5	15.00	96.918		
6,800.0	5,726.0	5,300.0	5,298.9	29.8	11.7	-0.04	-64.8	0.3	1,550.1	1,534.5	15.61	99.312		
6,900.0	5,726.0	5,300.0	5,298.9	31.6	11.7	-0.04	-64.8	0.3	1,646.5	1,630.3	16.25	101.307		
7,000.0	5,726.0	5,300.0	5,298.9	33.4	11.7	-0.04	-64.8	0.3	1,743.3	1,726.4	16.91	103.111		
7,100.0	5,726.0	5,300.0	5,298.9	35.2	11.7	-0.04	-64.8	0.3	1,840.4	1,822.8	17.57	104.747		
7,200.0	5,726.0	5,300.0	5,298.9	37.0	11.7	-0.04	-64.8	0.3	1,937.8	1,919.6	18.24	106.237		
7,300.0	5,726.0	5,300.0	5,298.9	38.8	11.7	-0.04	-64.8	0.3	2,035.5	2,016.5	18.92	107.598		
7,400.0	5,726.0	5,300.0	5,298.9	40.6	11.7	-0.04	-64.8	0.3	2,133.3	2,113.7	19.60	108.845		
7,500.0	5,726.0	5,300.0	5,298.9	42.4	11.7	-0.04	-64.8	0.3	2,231.4	2,211.1	20.29	109.993		
7,600.0	5,726.0	5,278.9	5,278.3	44.3	11.7	-0.04	-60.4	0.2	2,329.1	2,308.1	20.96	111.136		
7,700.0	5,726.0	5,275.5	5,274.9	46.1	11.7	-0.05	-59.7	0.2	2,427.3	2,405.7	21.65	112.122		

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

Razor #25-2514H Pad Sec.25-T10N-R58W - Razor #25-2514H - Wellbore #1 - Plan #1 (9-10-12)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference				Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
7,800.0	5,726.0	5,272.3	5,271.8	48.0	11.7	-0.05	-59.1	0.2	2,525.6	2,503.3	22.34	113.035		
7,900.0	5,726.0	5,250.0	5,249.8	49.9	11.7	-0.05	-55.6	0.1	2,624.5	2,601.4	23.02	113.995		
8,000.0	5,726.0	5,250.0	5,249.8	51.7	11.7	-0.05	-55.6	0.1	2,722.9	2,699.1	23.73	114.763		
8,100.0	5,726.0	5,250.0	5,249.8	53.6	11.7	-0.05	-55.6	0.1	2,821.4	2,797.0	24.43	115.481		
8,200.0	5,726.0	5,250.0	5,249.8	55.5	11.7	-0.05	-55.6	0.1	2,920.0	2,894.9	25.14	116.153		
8,300.0	5,726.0	5,250.0	5,249.8	57.4	11.7	-0.05	-55.6	0.1	3,018.7	2,992.9	25.85	116.784		
8,400.0	5,726.0	5,250.0	5,249.8	59.3	11.7	-0.05	-55.6	0.1	3,117.5	3,090.9	26.56	117.377		
8,500.0	5,726.0	5,250.0	5,249.8	61.1	11.7	-0.05	-55.6	0.1	3,216.4	3,189.1	27.27	117.936		
8,600.0	5,726.0	5,250.0	5,249.8	63.0	11.7	-0.05	-55.6	0.1	3,315.3	3,287.3	27.99	118.463		
8,700.0	5,726.0	5,250.0	5,249.8	64.9	11.7	-0.05	-55.6	0.1	3,414.3	3,385.6	28.70	118.961		
8,800.0	5,726.0	5,250.0	5,249.8	66.8	11.7	-0.05	-55.6	0.1	3,513.3	3,483.9	29.42	119.433		
8,900.0	5,726.0	5,250.0	5,249.8	68.7	11.7	-0.05	-55.6	0.1	3,612.4	3,582.3	30.13	119.879		
9,000.0	5,726.0	5,250.0	5,249.8	70.6	11.7	-0.05	-55.6	0.1	3,711.6	3,680.7	30.85	120.303		
9,100.0	5,726.0	5,250.0	5,249.8	72.5	11.7	-0.05	-55.6	0.1	3,810.8	3,779.2	31.57	120.706		
9,200.0	5,726.0	5,250.0	5,249.8	74.4	11.7	-0.05	-55.6	0.1	3,910.0	3,877.7	32.29	121.090		
9,300.0	5,726.0	5,250.0	5,249.8	76.3	11.7	-0.05	-55.6	0.1	4,009.3	3,976.3	33.01	121.455		
9,400.0	5,726.0	5,250.0	5,249.8	78.2	11.7	-0.05	-55.6	0.1	4,108.6	4,074.9	33.73	121.803		
9,500.0	5,726.0	5,250.0	5,249.8	80.1	11.7	-0.05	-55.6	0.1	4,207.9	4,173.5	34.45	122.135		
9,600.0	5,726.0	5,250.0	5,249.8	82.0	11.7	-0.05	-55.6	0.1	4,307.3	4,272.1	35.18	122.453		
9,700.0	5,726.0	5,250.0	5,249.8	84.0	11.7	-0.05	-55.6	0.1	4,406.7	4,370.8	35.90	122.756		
9,800.0	5,726.0	5,250.0	5,249.8	85.9	11.7	-0.05	-55.6	0.1	4,506.1	4,469.5	36.62	123.047		
9,900.0	5,726.0	5,250.0	5,249.8	87.8	11.7	-0.05	-55.6	0.1	4,605.6	4,568.2	37.34	123.326		
10,000.0	5,726.0	5,250.0	5,249.8	89.7	11.7	-0.05	-55.6	0.1	4,705.1	4,667.0	38.07	123.593		
10,100.0	5,726.0	5,250.0	5,249.8	91.6	11.7	-0.05	-55.6	0.1	4,804.6	4,765.8	38.79	123.850		
10,200.0	5,726.0	5,250.0	5,249.8	93.5	11.7	-0.05	-55.6	0.1	4,904.1	4,864.6	39.52	124.096		
10,286.2	5,726.0	5,250.0	5,249.8	95.2	11.7	-0.05	-55.6	0.1	4,989.9	4,949.7	40.14	124.301		

Company:	Whiting Oil & Gas	Local Co-ordinate Reference:	Well Razor 25-2411H
Project:	SEC.25-T10N-R58W	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Reference Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Razor 25-2411H	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 #4 (12-10-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4777.7ft (Original Well Elev) Coordinates are relative to: Razor 25-2411H
 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: 1.09°



Company:	Whiting Oil & Gas	Local Co-ordinate Reference:	Well Razor 25-2411H
Project:	SEC.25-T10N-R58W	TVD Reference:	WELL @ 4777.7ft (Original Well Elev)
Reference Site:	Razor #25-2514H Pad Sec.25-T10N-R58W	MD Reference:	WELL @ 4777.7ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Razor 25-2411H	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 #4 (12-10-12)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4777.7ft (Original Well Elev) Coordinates are relative to: Razor 25-2411H
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: 1.09°

