

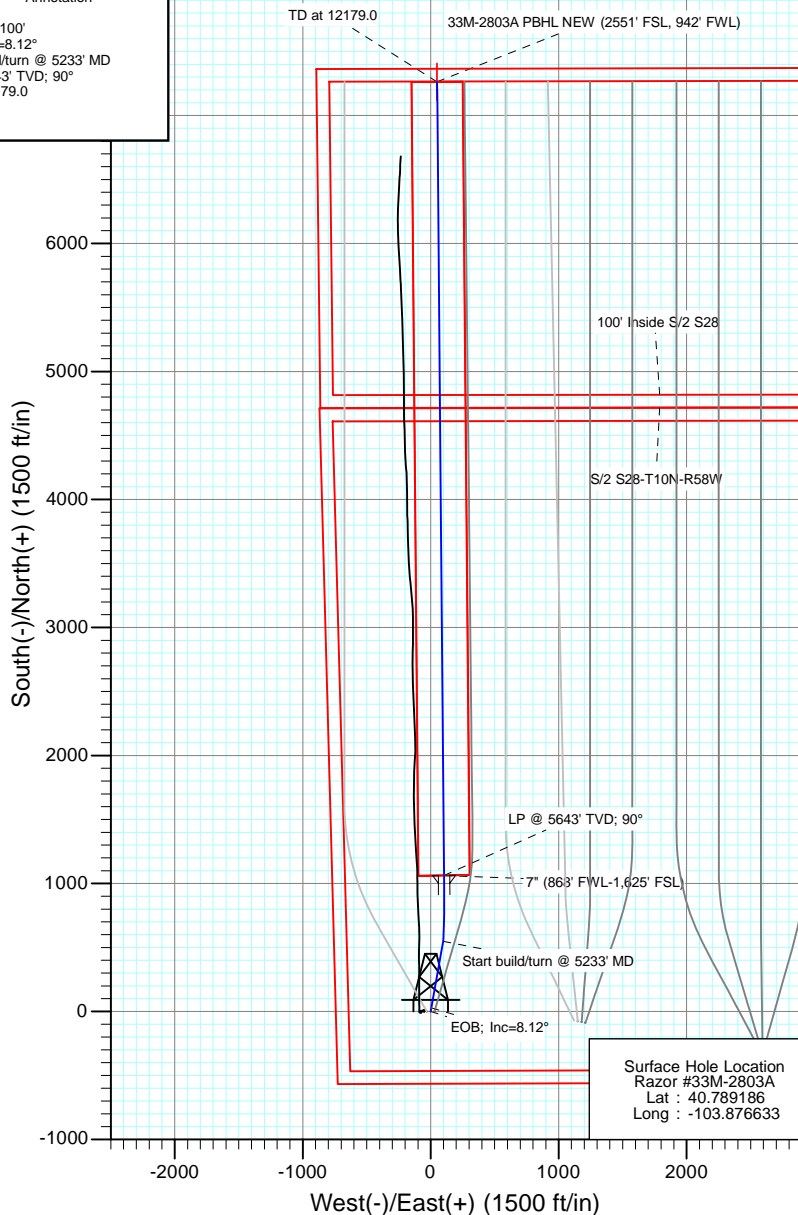
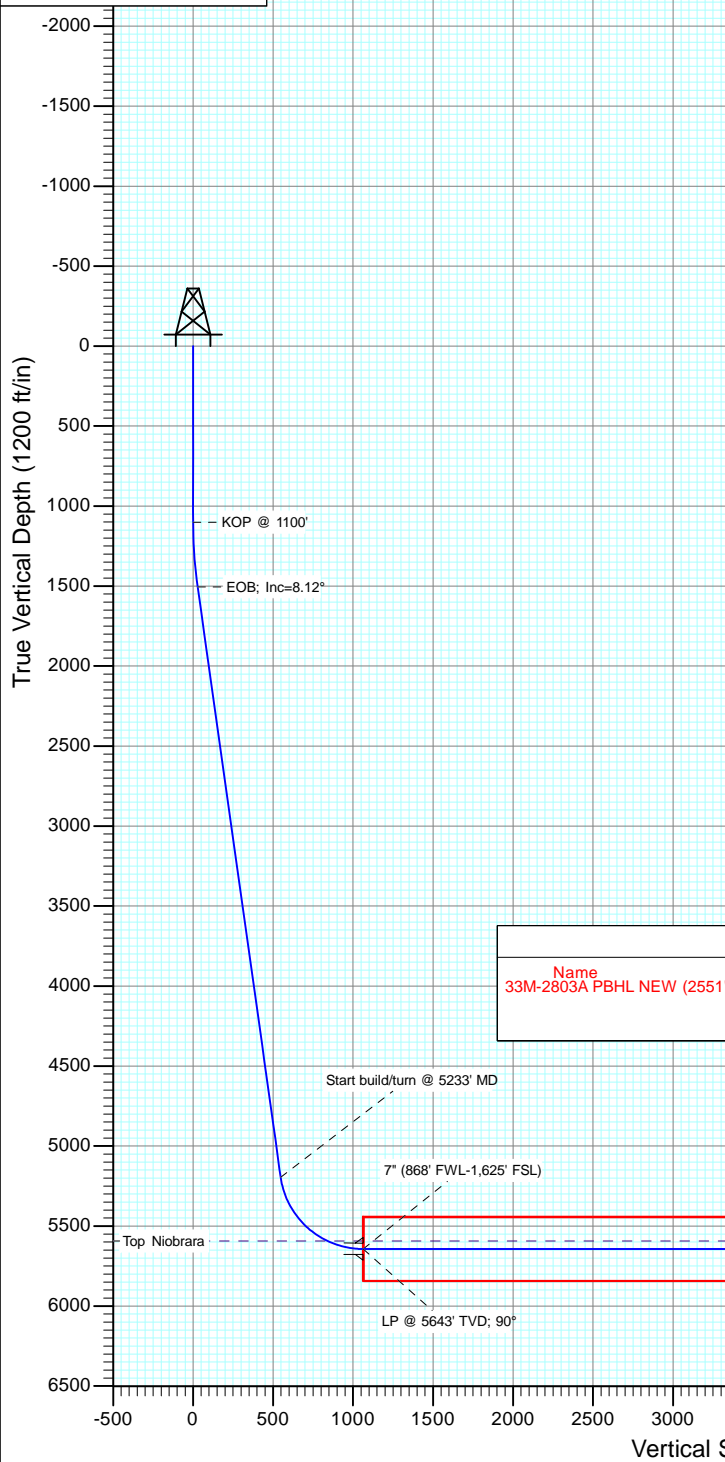
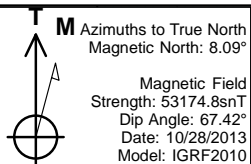


Project: Weld County, CO  
Site: S33-T10N-R58W  
Well: Razor #33M-2803A  
Wellbore: HZ  
Design: Plan #3



#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0	KOP @ 1100'
3	1506.0	8.12	10.05	1504.6	28.3	5.0	2.00	10.05	28.3	EOB; Inc=8.12°
4	5233.4	8.12	10.05	5194.6	546.7	96.9	0.00	0.00	547.3	Start build/turn @ 5233' MD
5	5979.0	90.00	359.50	5643.0	1062.6	104.1	11.00	-10.65	1063.3	LP @ 5643' TVD; 90°
6	12179.0	90.00	359.50	5643.0	7262.4	50.0	0.00	0.00	7262.5	TD at 12179.0



#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
33M-2803A PBHL NEW (2551' FSL, 942' FWL)	5643.0	7262.4	50.0	1541726.53	3449427.68	40.809119	-103.876452

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5593.0	5748.8	Top Niobrara

Plan #3  
Razor #33M-2803A  
WELL @ 4746.2ft (Original Well Elev)  
Ground Elevation @ 4729.4  
North American Datum 1983  
Well Razor #33M-2803A, True North

Vertical Section at 0.39° (1200 ft/in)

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Company:</b>	Whiting Petroleum Corporation	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site:</b>	S33-T10N-R58W	<b>North Reference:</b>	True
<b>Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #3		

<b>Project</b>	Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site		S33-T10N-R58W			
Site Position:		Northing:	1,534,463.93 ft	Latitude:	40.789186
From:	Lat/Long	Easting:	3,449,480.46 ft	Longitude:	-103.876742
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	1.05 °

Well	Razor #33M-2803A					
Well Position	+N/-S	0.0 ft	Northing:	1,534,464.47 ft	Latitude:	40.789186
	+E/-W	0.0 ft	Easting:	3,449,510.63 ft	Longitude:	-103.876633
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,729.4 ft

<b>Wellbore</b>	HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	10/28/2013	8.09	67.42	53,175

<b>Design</b>	Plan #3				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN		<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	0.39	

<b>Plan Sections</b>										
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	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,506.0	8.12	10.05	1,504.6	28.3	5.0	2.00	2.00	0.00	10.05	
5,233.4	8.12	10.05	5,194.6	546.7	96.9	0.00	0.00	0.00	0.00	
5,979.0	90.00	359.50	5,643.0	1,062.6	104.1	11.00	10.98	-1.41	-10.65	
12,179.0	90.00	359.50	5,643.0	7,262.4	50.0	0.00	0.00	0.00	0.00	33M-2803A PBHL NE

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Company:</b>	Whiting Petroleum Corporation	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site:</b>	S33-T10N-R58W	<b>North Reference:</b>	True
<b>Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #3		

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)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1100'
1,200.0	2.00	10.05	1,200.0	1.7	0.3	1.7	2.00	2.00	
1,300.0	4.00	10.05	1,299.8	6.9	1.2	6.9	2.00	2.00	
1,400.0	6.00	10.05	1,399.5	15.5	2.7	15.5	2.00	2.00	
1,500.0	8.00	10.05	1,498.7	27.5	4.9	27.5	2.00	2.00	
1,506.0	8.12	10.05	1,504.6	28.3	5.0	28.3	2.00	2.00	EOB; Inc=8.12°
1,600.0	8.12	10.05	1,597.7	41.4	7.3	41.4	0.00	0.00	
1,700.0	8.12	10.05	1,696.7	55.3	9.8	55.3	0.00	0.00	
1,800.0	8.12	10.05	1,795.7	69.2	12.3	69.3	0.00	0.00	
1,900.0	8.12	10.05	1,894.7	83.1	14.7	83.2	0.00	0.00	
2,000.0	8.12	10.05	1,993.7	97.0	17.2	97.1	0.00	0.00	
2,100.0	8.12	10.05	2,092.7	110.9	19.7	111.0	0.00	0.00	
2,200.0	8.12	10.05	2,191.7	124.8	22.1	125.0	0.00	0.00	
2,300.0	8.12	10.05	2,290.7	138.7	24.6	138.9	0.00	0.00	
2,400.0	8.12	10.05	2,389.7	152.6	27.0	152.8	0.00	0.00	
2,500.0	8.12	10.05	2,488.7	166.5	29.5	166.7	0.00	0.00	
2,600.0	8.12	10.05	2,587.7	180.4	32.0	180.7	0.00	0.00	
2,700.0	8.12	10.05	2,686.7	194.3	34.4	194.6	0.00	0.00	
2,800.0	8.12	10.05	2,785.7	208.3	36.9	208.5	0.00	0.00	
2,900.0	8.12	10.05	2,884.7	222.2	39.4	222.4	0.00	0.00	
3,000.0	8.12	10.05	2,983.7	236.1	41.8	236.4	0.00	0.00	
3,100.0	8.12	10.05	3,082.7	250.0	44.3	250.3	0.00	0.00	
3,200.0	8.12	10.05	3,181.7	263.9	46.8	264.2	0.00	0.00	
3,300.0	8.12	10.05	3,280.7	277.8	49.2	278.1	0.00	0.00	
3,400.0	8.12	10.05	3,379.7	291.7	51.7	292.1	0.00	0.00	
3,500.0	8.12	10.05	3,478.7	305.6	54.2	306.0	0.00	0.00	
3,600.0	8.12	10.05	3,577.6	319.5	56.6	319.9	0.00	0.00	
3,700.0	8.12	10.05	3,676.6	333.4	59.1	333.8	0.00	0.00	
3,800.0	8.12	10.05	3,775.6	347.3	61.6	347.7	0.00	0.00	
3,900.0	8.12	10.05	3,874.6	361.2	64.0	361.7	0.00	0.00	
4,000.0	8.12	10.05	3,973.6	375.2	66.5	375.6	0.00	0.00	
4,100.0	8.12	10.05	4,072.6	389.1	69.0	389.5	0.00	0.00	
4,200.0	8.12	10.05	4,171.6	403.0	71.4	403.4	0.00	0.00	
4,300.0	8.12	10.05	4,270.6	416.9	73.9	417.4	0.00	0.00	
4,400.0	8.12	10.05	4,369.6	430.8	76.3	431.3	0.00	0.00	
4,500.0	8.12	10.05	4,468.6	444.7	78.8	445.2	0.00	0.00	
4,600.0	8.12	10.05	4,567.6	458.6	81.3	459.1	0.00	0.00	
4,700.0	8.12	10.05	4,666.6	472.5	83.7	473.1	0.00	0.00	
4,800.0	8.12	10.05	4,765.6	486.4	86.2	487.0	0.00	0.00	
4,900.0	8.12	10.05	4,864.6	500.3	88.7	500.9	0.00	0.00	
5,000.0	8.12	10.05	4,963.6	514.2	91.1	514.8	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Company:</b>	Whiting Petroleum Corporation	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site:</b>	S33-T10N-R58W	<b>North Reference:</b>	True
<b>Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #3		

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)	Comments / Formations
5,100.0	8.12	10.05	5,062.6	528.1	93.6	528.8	0.00	0.00	
5,200.0	8.12	10.05	5,161.6	542.0	96.1	542.7	0.00	0.00	
5,233.4	8.12	10.05	5,194.6	546.7	96.9	547.3	0.00	0.00	Start build/turn @ 5233' MD
5,300.0	15.38	4.95	5,259.8	560.1	98.5	560.8	11.00	10.90	
5,400.0	26.35	2.52	5,353.1	595.6	100.6	596.3	11.00	10.97	
5,500.0	37.34	1.46	5,437.9	648.3	102.4	649.0	11.00	10.99	
5,600.0	48.33	0.83	5,511.2	716.2	103.7	716.9	11.00	10.99	
5,700.0	59.33	0.39	5,570.1	796.8	104.5	797.5	11.00	10.99	
5,748.8	64.69	0.21	5,593.0	839.8	104.7	840.6	11.00	11.00	Top Niobrara
5,800.0	70.32	0.04	5,612.6	887.1	104.8	887.8	11.00	11.00	
5,900.0	81.32	359.73	5,637.0	983.9	104.6	984.6	11.00	11.00	
5,978.2	89.92	359.50	5,643.0	1,061.8	104.1	1,062.5	11.00	11.00	7" (868' FWL-1,625' FSL)
5,979.0	90.00	359.50	5,643.0	1,062.6	104.1	1,063.3	11.00	11.00	LP @ 5643' TVD; 90°
6,000.0	90.00	359.50	5,643.0	1,083.6	103.9	1,084.3	0.00	0.00	
6,100.0	90.00	359.50	5,643.0	1,183.6	103.0	1,184.3	0.00	0.00	
6,200.0	90.00	359.50	5,643.0	1,283.6	102.2	1,284.3	0.00	0.00	
6,300.0	90.00	359.50	5,643.0	1,383.6	101.3	1,384.3	0.00	0.00	
6,400.0	90.00	359.50	5,643.0	1,483.6	100.4	1,484.3	0.00	0.00	
6,500.0	90.00	359.50	5,643.0	1,583.6	99.6	1,584.3	0.00	0.00	
6,600.0	90.00	359.50	5,643.0	1,683.6	98.7	1,684.2	0.00	0.00	
6,700.0	90.00	359.50	5,643.0	1,783.6	97.8	1,784.2	0.00	0.00	
6,800.0	90.00	359.50	5,643.0	1,883.6	96.9	1,884.2	0.00	0.00	
6,900.0	90.00	359.50	5,643.0	1,983.6	96.1	1,984.2	0.00	0.00	
7,000.0	90.00	359.50	5,643.0	2,083.6	95.2	2,084.2	0.00	0.00	
7,100.0	90.00	359.50	5,643.0	2,183.6	94.3	2,184.2	0.00	0.00	
7,200.0	90.00	359.50	5,643.0	2,283.6	93.4	2,284.2	0.00	0.00	
7,300.0	90.00	359.50	5,643.0	2,383.6	92.6	2,384.2	0.00	0.00	
7,400.0	90.00	359.50	5,643.0	2,483.6	91.7	2,484.1	0.00	0.00	
7,500.0	90.00	359.50	5,643.0	2,583.6	90.8	2,584.1	0.00	0.00	
7,600.0	90.00	359.50	5,643.0	2,683.6	90.0	2,684.1	0.00	0.00	
7,700.0	90.00	359.50	5,643.0	2,783.6	89.1	2,784.1	0.00	0.00	
7,800.0	90.00	359.50	5,643.0	2,883.6	88.2	2,884.1	0.00	0.00	
7,900.0	90.00	359.50	5,643.0	2,983.6	87.3	2,984.1	0.00	0.00	
8,000.0	90.00	359.50	5,643.0	3,083.5	86.5	3,084.1	0.00	0.00	
8,100.0	90.00	359.50	5,643.0	3,183.5	85.6	3,184.1	0.00	0.00	
8,200.0	90.00	359.50	5,643.0	3,283.5	84.7	3,284.0	0.00	0.00	
8,300.0	90.00	359.50	5,643.0	3,383.5	83.8	3,384.0	0.00	0.00	
8,400.0	90.00	359.50	5,643.0	3,483.5	83.0	3,484.0	0.00	0.00	
8,500.0	90.00	359.50	5,643.0	3,583.5	82.1	3,584.0	0.00	0.00	
8,600.0	90.00	359.50	5,643.0	3,683.5	81.2	3,684.0	0.00	0.00	
8,700.0	90.00	359.50	5,643.0	3,783.5	80.4	3,784.0	0.00	0.00	
8,800.0	90.00	359.50	5,643.0	3,883.5	79.5	3,884.0	0.00	0.00	
8,900.0	90.00	359.50	5,643.0	3,983.5	78.6	3,984.0	0.00	0.00	
9,000.0	90.00	359.50	5,643.0	4,083.5	77.7	4,083.9	0.00	0.00	
9,100.0	90.00	359.50	5,643.0	4,183.5	76.9	4,183.9	0.00	0.00	
9,200.0	90.00	359.50	5,643.0	4,283.5	76.0	4,283.9	0.00	0.00	
9,300.0	90.00	359.50	5,643.0	4,383.5	75.1	4,383.9	0.00	0.00	
9,400.0	90.00	359.50	5,643.0	4,483.5	74.3	4,483.9	0.00	0.00	
9,500.0	90.00	359.50	5,643.0	4,583.5	73.4	4,583.9	0.00	0.00	
9,600.0	90.00	359.50	5,643.0	4,683.5	72.5	4,683.9	0.00	0.00	
9,700.0	90.00	359.50	5,643.0	4,783.5	71.6	4,783.9	0.00	0.00	
9,800.0	90.00	359.50	5,643.0	4,883.5	70.8	4,883.9	0.00	0.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Company:</b>	Whiting Petroleum Corporation	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site:</b>	S33-T10N-R58W	<b>North Reference:</b>	True
<b>Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #3		

### 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)	Comments / Formations
9,900.0	90.00	359.50	5,643.0	4,983.5	69.9	4,983.8	0.00	0.00	
10,000.0	90.00	359.50	5,643.0	5,083.5	69.0	5,083.8	0.00	0.00	
10,100.0	90.00	359.50	5,643.0	5,183.5	68.1	5,183.8	0.00	0.00	
10,200.0	90.00	359.50	5,643.0	5,283.5	67.3	5,283.8	0.00	0.00	
10,300.0	90.00	359.50	5,643.0	5,383.5	66.4	5,383.8	0.00	0.00	
10,400.0	90.00	359.50	5,643.0	5,483.5	65.5	5,483.8	0.00	0.00	
10,500.0	90.00	359.50	5,643.0	5,583.5	64.7	5,583.8	0.00	0.00	
10,600.0	90.00	359.50	5,643.0	5,683.4	63.8	5,683.8	0.00	0.00	
10,700.0	90.00	359.50	5,643.0	5,783.4	62.9	5,783.7	0.00	0.00	
10,800.0	90.00	359.50	5,643.0	5,883.4	62.0	5,883.7	0.00	0.00	
10,900.0	90.00	359.50	5,643.0	5,983.4	61.2	5,983.7	0.00	0.00	
11,000.0	90.00	359.50	5,643.0	6,083.4	60.3	6,083.7	0.00	0.00	
11,100.0	90.00	359.50	5,643.0	6,183.4	59.4	6,183.7	0.00	0.00	
11,200.0	90.00	359.50	5,643.0	6,283.4	58.5	6,283.7	0.00	0.00	
11,300.0	90.00	359.50	5,643.0	6,383.4	57.7	6,383.7	0.00	0.00	
11,400.0	90.00	359.50	5,643.0	6,483.4	56.8	6,483.7	0.00	0.00	
11,500.0	90.00	359.50	5,643.0	6,583.4	55.9	6,583.6	0.00	0.00	
11,600.0	90.00	359.50	5,643.0	6,683.4	55.1	6,683.6	0.00	0.00	
11,700.0	90.00	359.50	5,643.0	6,783.4	54.2	6,783.6	0.00	0.00	
11,800.0	90.00	359.50	5,643.0	6,883.4	53.3	6,883.6	0.00	0.00	
11,900.0	90.00	359.50	5,643.0	6,983.4	52.4	6,983.6	0.00	0.00	
12,000.0	90.00	359.50	5,643.0	7,083.4	51.6	7,083.6	0.00	0.00	
12,100.0	90.00	359.50	5,643.0	7,183.4	50.7	7,183.6	0.00	0.00	
12,179.0	90.00	359.50	5,643.0	7,262.4	50.0	7,262.5	0.00	0.00	TD at 12179.0

### Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
33M-2803A PBHL 2(497)	90.00	0.00	5,643.0	7,262.4	-394.7	1,541,718.39	3,448,983.06	40.809119	-103.878059
- hit/miss target									
- Shape									
- plan misses target center by 444.7ft at 12179.0ft MD (5643.0 TVD, 7262.4 N, 50.0 E)									
- Point									
33M-2803A PBHL	0.00	1.05	5,643.0	7,262.4	-74.7	1,541,724.24	3,449,302.96	40.809119	-103.876903
- plan misses target center by 124.7ft at 12179.0ft MD (5643.0 TVD, 7262.4 N, 50.0 E)									
- Point									
33M-2803A PBHL NEW	-90.00	359.50	5,643.0	7,262.4	50.0	1,541,726.53	3,449,427.68	40.809119	-103.876452
- plan hits target center									
- Rectangle (sides W400.0 H400.0 D0.0)									

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
5,978.2	5,643.0	7" (868' FWL-1,625' FSL)	7.000	7.500

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Company:</b>	Whiting Petroleum Corporation	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Project:</b>	Weld County, CO	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site:</b>	S33-T10N-R58W	<b>North Reference:</b>	True
<b>Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	HZ		
<b>Design:</b>	Plan #3		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,748.8	5,593.0	Top Niobrara		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,100.0	1,100.0	0.0	0.0	KOP @ 1100'	
1,506.0	1,504.6	28.3	5.0	EOB; Inc=8.12°	
5,233.4	5,194.6	546.7	96.9	Start build/turn @ 5233' MD	
5,979.0	5,643.0	1,062.6	104.1	LP @ 5643' TVD; 90°	
12,179.0	5,643.0	7,262.4	50.0	TD at 12179.0	

# **Whiting Petroleum Corporation**

**Weld County, CO**

**S33-T10N-R58W**

**Razor #33M-2803A**

**HZ**

**Plan #3**

## **Anticollision Report**

**04 February, 2014**

## Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0ft	<b>Error Model:</b>	Systematic Ellipse
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,200.4ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma		

<b>Survey Tool Program</b>	<b>Date</b>	2/4/2014		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	12,179.0	Plan #3 (HZ)	ISCWSA MWD	MWD - ISCWSA

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S33-T10N-R58W						
Razor #33M-2801A - HZ - Plan #2	1,100.0	1,100.0	30.2	25.5	6.446	CC
Razor #33M-2801A - HZ - Plan #2	1,200.0	1,200.0	30.5	25.4	5.952	ES
Razor #33M-2801A - HZ - Plan #2	12,179.0	12,570.4	724.5	446.9	2.610	SF
Razor #33M-2804B - HZ - Plan #2	1,000.0	1,000.0	29.9	25.7	7.065	CC
Razor #33M-2804B - HZ - Plan #2	12,179.0	12,538.8	233.8	-21.9	0.914	Level 1, ES, SF
Razor #33M-2813H(EXISTING) - EXISTING - EXISTING	1,352.6	1,353.9	63.0	57.5	11.348	CC
Razor #33M-2813H(EXISTING) - EXISTING - EXISTING	11,600.1	12,175.0	294.3	48.4	1.197	Level 2, ES, SF
Razor #33N-2805A - HZ - Plan #1	6,367.1	6,789.9	484.8	420.2	7.512	CC
Razor #33N-2805A - HZ - Plan #1	12,179.0	12,597.4	535.2	253.5	1.900	ES, SF
Razor #33N-2806B - HZ - Plan #1	12,173.6	12,575.6	869.2	588.6	3.098	CC
Razor #33N-2806B - HZ - Plan #1	12,179.0	12,575.6	869.3	588.6	3.097	ES, SF
Razor #33N-2807A - HZ - Plan #1	5,622.4	5,855.7	1,139.3	1,102.9	31.326	CC
Razor #33N-2807A - HZ - Plan #1	12,179.0	12,490.6	1,194.9	914.8	4.267	ES, SF
Razor #33N-2808B - HZ - Plan #1						Out of range
Razor #33O-2809A - HZ - Plan #1						Out of range
Razor #33O-2810B - HZ - Plan #1						Out of range
Razor #33O-2811A - HZ - Plan #1						Out of range
Razor #33O-2812B - HZ - Plan #1						Out of range
Razor #33P-3313A - HZ - Plan #1						Out of range
Razor #33P-3314B - HZ - Plan #1						Out of range
Razor #33P-3315A - HZ - Plan #1						Out of range
Razor #33P-3316B - HZ - Plan #1						Out of range



# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2801A - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-30.2	30.2					
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-30.2	30.2	30.0	0.19	161.404		
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-30.2	30.2	29.5	0.64	47.418		
300.0	300.0	300.0	300.0	0.5	0.5	-89.98	0.0	-30.2	30.2	29.1	1.09	27.791		
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	0.0	-30.2	30.2	28.6	1.54	19.656		
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	0.0	-30.2	30.2	28.2	1.99	15.205		
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	0.0	-30.2	30.2	27.7	2.43	12.397		
700.0	700.0	700.0	700.0	1.4	1.4	-89.98	0.0	-30.2	30.2	27.3	2.88	10.465		
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	0.0	-30.2	30.2	26.8	3.33	9.054		
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	0.0	-30.2	30.2	26.4	3.78	7.978		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	0.0	-30.2	30.2	26.0	4.23	7.131		
1,100.0	1,100.0	1,100.0	1,100.0	2.3	2.3	-89.98	0.0	-30.2	30.2	25.5	4.68	6.446 CC		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-103.25	0.0	-30.2	30.5	25.4	5.13	5.952 ES		
1,300.0	1,299.8	1,299.5	1,299.4	2.8	2.8	-109.40	1.5	-31.0	32.7	27.1	5.57	5.867		
1,400.0	1,399.5	1,398.9	1,398.8	3.0	3.0	-114.41	6.0	-33.6	37.6	31.5	6.02	6.239		
1,500.0	1,498.7	1,498.6	1,498.2	3.3	3.2	-119.92	12.0	-37.1	44.7	38.2	6.48	6.895		
1,600.0	1,597.7	1,598.1	1,597.5	3.5	3.5	-125.71	18.1	-40.5	53.2	46.3	6.95	7.653		
1,700.0	1,696.7	1,697.6	1,696.7	3.8	3.7	-129.88	24.1	-44.0	62.1	54.7	7.44	8.357		
1,800.0	1,795.7	1,797.1	1,796.0	4.1	3.9	-133.00	30.1	-47.4	71.3	63.4	7.92	8.999		
1,900.0	1,894.7	1,896.6	1,895.3	4.4	4.2	-135.40	36.1	-50.9	80.7	72.2	8.42	9.580		
2,000.0	1,993.7	1,996.1	1,994.5	4.7	4.4	-137.30	42.2	-54.3	90.1	81.2	8.92	10.105		
2,100.0	2,092.7	2,095.7	2,093.8	5.0	4.7	-138.84	48.2	-57.8	99.6	90.2	9.42	10.580		
2,200.0	2,191.7	2,195.2	2,193.1	5.3	4.9	-140.11	54.2	-61.2	109.2	99.3	9.92	11.011		
2,300.0	2,290.7	2,294.7	2,292.3	5.6	5.1	-141.17	60.2	-64.6	118.8	108.4	10.42	11.402		
2,400.0	2,389.7	2,394.2	2,391.6	5.9	5.4	-142.08	66.3	-68.1	128.5	117.6	10.93	11.758		
2,500.0	2,488.7	2,493.7	2,490.9	6.2	5.6	-142.85	72.3	-71.5	138.2	126.8	11.44	12.084		
2,600.0	2,587.7	2,593.2	2,590.2	6.6	5.9	-143.53	78.3	-75.0	147.9	136.0	11.95	12.382		
2,700.0	2,686.7	2,692.7	2,689.4	6.9	6.1	-144.12	84.3	-78.4	157.6	145.2	12.46	12.657		
2,800.0	2,785.7	2,792.3	2,788.7	7.2	6.4	-144.65	90.4	-81.9	167.4	154.4	12.97	12.910		
2,900.0	2,884.7	2,891.8	2,888.0	7.5	6.6	-145.11	96.4	-85.3	177.2	163.7	13.48	13.145		
3,000.0	2,983.7	2,991.3	2,987.2	7.9	6.9	-145.53	102.4	-88.8	186.9	172.9	13.99	13.362		
3,100.0	3,082.7	3,090.8	3,086.5	8.2	7.1	-145.90	108.4	-92.2	196.7	182.2	14.50	13.564		
3,200.0	3,181.7	3,190.3	3,185.8	8.5	7.4	-146.24	114.5	-95.7	206.5	191.5	15.02	13.752		
3,300.0	3,280.7	3,289.8	3,285.1	8.9	7.6	-146.55	120.5	-99.1	216.3	200.7	15.53	13.927		
3,400.0	3,379.7	3,389.3	3,384.3	9.2	7.9	-146.84	126.5	-102.6	226.1	210.0	16.04	14.092		
3,500.0	3,478.7	3,488.8	3,483.6	9.5	8.1	-147.10	132.5	-106.0	235.9	219.3	16.56	14.246		
3,600.0	3,577.6	3,588.4	3,582.9	9.9	8.4	-147.33	138.6	-109.5	245.7	228.6	17.07	14.390		
3,700.0	3,676.6	3,687.9	3,682.1	10.2	8.6	-147.55	144.6	-112.9	255.5	237.9	17.59	14.526		
3,800.0	3,775.6	3,787.4	3,781.4	10.5	8.9	-147.76	150.6	-116.4	265.3	247.2	18.10	14.655		
3,900.0	3,874.6	3,886.9	3,880.7	10.9	9.2	-147.95	156.6	-119.8	275.1	256.5	18.62	14.776		
4,000.0	3,973.6	3,986.4	3,979.9	11.2	9.4	-148.12	162.7	-123.3	285.0	265.8	19.14	14.891		
4,100.0	4,072.6	4,085.9	4,079.2	11.5	9.7	-148.29	168.7	-126.7	294.8	275.1	19.65	14.999		
4,200.0	4,171.6	4,185.4	4,178.5	11.9	9.9	-148.44	174.7	-130.2	304.6	284.4	20.17	15.102		
4,300.0	4,270.6	4,284.9	4,277.8	12.2	10.2	-148.59	180.7	-133.6	314.4	293.7	20.69	15.200		
4,400.0	4,369.6	4,384.5	4,377.0	12.5	10.4	-148.72	186.8	-137.0	324.3	303.1	21.20	15.293		
4,500.0	4,468.6	4,484.0	4,476.3	12.9	10.7	-148.85	192.8	-140.5	334.1	312.4	21.72	15.381		
4,600.0	4,567.6	4,583.5	4,575.6	13.2	10.9	-148.97	198.8	-143.9	343.9	321.7	22.24	15.465		
4,700.0	4,666.6	4,683.0	4,674.8	13.6	11.2	-149.08	204.8	-147.4	353.8	331.0	22.76	15.546		
4,800.0	4,765.6	4,782.5	4,774.1	13.9	11.4	-149.19	210.9	-150.8	363.6	340.3	23.27	15.622		
4,900.0	4,864.6	4,882.0	4,873.4	14.2	11.7	-149.29	216.9	-154.3	373.4	349.6	23.79	15.696		
5,000.0	4,963.6	4,981.5	4,972.6	14.6	11.9	-149.39	222.9	-157.7	383.3	359.0	24.31	15.766		
5,100.0	5,062.6	5,081.0	5,071.9	14.9	12.2	-149.48	228.9	-161.2	393.1	368.3	24.83	15.833		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2801A - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
5,200.0	5,161.6	5,185.1	5,175.6	15.2	12.5	-149.53	235.5	-164.9	402.9	377.5	25.36	15.885		
5,300.0	5,259.8	5,318.3	5,305.0	15.6	13.0	-141.96	261.8	-180.0	410.6	384.5	26.07	15.749		
5,400.0	5,353.1	5,444.1	5,416.4	16.2	13.7	-134.77	312.0	-208.7	424.4	397.4	26.98	15.733		
5,500.0	5,437.9	5,560.5	5,504.3	17.1	14.6	-127.51	377.8	-246.4	446.3	417.8	28.46	15.683		
5,600.0	5,511.2	5,667.3	5,568.5	18.1	15.8	-119.78	451.8	-288.7	476.6	445.9	30.73	15.511		
5,700.0	5,570.1	5,766.1	5,611.2	19.3	17.0	-111.71	529.0	-332.9	514.5	480.8	33.70	15.267		
5,800.0	5,612.6	5,858.8	5,635.3	20.7	18.4	-103.53	606.6	-377.3	558.3	521.2	37.03	15.076		
5,900.0	5,637.0	5,947.4	5,643.2	22.2	19.8	-95.54	683.1	-421.1	605.7	565.4	40.31	15.027		
6,000.0	5,643.0	6,078.2	5,643.2	23.8	21.8	-90.02	798.6	-482.2	651.8	607.9	43.82	14.873		
6,100.0	5,643.0	6,219.9	5,643.2	25.5	24.1	-90.02	928.2	-539.4	691.3	643.8	47.50	14.555		
6,200.0	5,643.0	6,370.2	5,643.2	27.1	26.6	-90.02	1,069.9	-589.4	723.8	672.3	51.51	14.052		
6,300.0	5,643.0	6,527.9	5,643.2	28.9	29.3	-90.01	1,222.4	-629.7	748.5	692.7	55.78	13.419		
6,400.0	5,643.0	6,691.3	5,643.2	30.6	32.0	-90.01	1,383.3	-658.0	765.0	704.8	60.25	12.697		
6,500.0	5,643.0	6,858.2	5,643.2	32.3	34.7	-90.01	1,549.5	-672.6	772.9	708.1	64.83	11.922		
6,600.0	5,643.0	6,992.3	5,643.2	34.1	36.8	-90.01	1,683.6	-674.5	773.2	704.3	68.87	11.227		
6,700.0	5,643.0	7,092.3	5,643.2	35.9	38.4	-90.01	1,783.6	-674.5	772.3	700.0	72.34	10.677		
6,800.0	5,643.0	7,192.3	5,643.2	37.7	40.0	-90.01	1,883.6	-674.5	771.4	695.6	75.84	10.172		
6,900.0	5,643.0	7,292.3	5,643.2	39.5	41.6	-90.01	1,983.6	-674.5	770.6	691.2	79.37	9.708		
7,000.0	5,643.0	7,392.3	5,643.2	41.3	43.3	-90.01	2,083.6	-674.5	769.7	686.7	82.93	9.281		
7,100.0	5,643.0	7,492.3	5,643.2	43.2	45.0	-90.01	2,183.6	-674.5	768.8	682.3	86.52	8.886		
7,200.0	5,643.0	7,592.3	5,643.2	45.0	46.7	-90.01	2,283.6	-674.5	767.9	677.8	90.12	8.521		
7,300.0	5,643.0	7,692.3	5,643.2	46.9	48.4	-90.01	2,383.6	-674.5	767.1	673.3	93.75	8.182		
7,400.0	5,643.0	7,792.3	5,643.2	48.7	50.1	-90.01	2,483.6	-674.5	766.2	668.8	97.39	7.867		
7,500.0	5,643.0	7,892.3	5,643.2	50.6	51.9	-90.01	2,583.6	-674.5	765.3	664.3	101.04	7.574		
7,600.0	5,643.0	7,992.3	5,643.2	52.4	53.6	-90.01	2,683.6	-674.5	764.4	659.7	104.71	7.300		
7,700.0	5,643.0	8,092.3	5,643.2	54.3	55.4	-90.01	2,783.6	-674.5	763.6	655.2	108.40	7.044		
7,800.0	5,643.0	8,192.3	5,643.2	56.2	57.2	-90.01	2,883.6	-674.5	762.7	650.6	112.09	6.804		
7,900.0	5,643.0	8,292.3	5,643.1	58.0	59.0	-90.01	2,983.6	-674.5	761.8	646.0	115.79	6.579		
8,000.0	5,643.0	8,392.3	5,643.1	59.9	60.8	-90.01	3,083.5	-674.5	761.0	641.4	119.50	6.368		
8,100.0	5,643.0	8,492.3	5,643.1	61.8	62.6	-90.01	3,183.5	-674.5	760.1	636.9	123.22	6.168		
8,200.0	5,643.0	8,592.3	5,643.1	63.7	64.4	-90.01	3,283.5	-674.5	759.2	632.3	126.95	5.980		
8,300.0	5,643.0	8,692.3	5,643.1	65.6	66.2	-90.01	3,383.5	-674.5	758.3	627.7	130.68	5.803		
8,400.0	5,643.0	8,792.3	5,643.1	67.4	68.0	-90.01	3,483.5	-674.5	757.5	623.0	134.42	5.635		
8,500.0	5,643.0	8,892.3	5,643.1	69.3	69.8	-90.01	3,583.5	-674.5	756.6	618.4	138.17	5.476		
8,600.0	5,643.0	8,992.3	5,643.1	71.2	71.7	-90.01	3,683.5	-674.5	755.7	613.8	141.92	5.325		
8,700.0	5,643.0	9,092.3	5,643.1	73.1	73.5	-90.01	3,783.5	-674.5	754.8	609.2	145.67	5.182		
8,800.0	5,643.0	9,192.3	5,643.1	75.0	75.3	-90.01	3,883.5	-674.5	754.0	604.5	149.43	5.046		
8,900.0	5,643.0	9,292.3	5,643.1	76.9	77.2	-90.01	3,983.5	-674.5	753.1	599.9	153.19	4.916		
9,000.0	5,643.0	9,392.3	5,643.1	78.8	79.0	-90.01	4,083.5	-674.5	752.2	595.3	156.96	4.792		
9,100.0	5,643.0	9,492.3	5,643.1	80.7	80.9	-90.01	4,183.5	-674.5	751.3	590.6	160.73	4.675		
9,200.0	5,643.0	9,592.2	5,643.1	82.6	82.7	-90.01	4,283.5	-674.5	750.5	586.0	164.51	4.562		
9,300.0	5,643.0	9,692.2	5,643.1	84.5	84.6	-90.01	4,383.5	-674.5	749.6	581.3	168.29	4.454		
9,400.0	5,643.0	9,792.2	5,643.1	86.4	86.4	-90.01	4,483.5	-674.5	748.7	576.7	172.07	4.351		
9,500.0	5,643.0	9,892.2	5,643.1	88.3	88.3	-90.01	4,583.5	-674.5	747.9	572.0	175.85	4.253		
9,600.0	5,643.0	9,992.2	5,643.1	90.2	90.2	-90.01	4,683.5	-674.5	747.0	567.4	179.63	4.158		
9,700.0	5,643.0	10,092.2	5,643.1	92.1	92.0	-90.01	4,783.5	-674.5	746.1	562.7	183.42	4.068		
9,800.0	5,643.0	10,192.2	5,643.1	94.0	93.9	-90.01	4,883.5	-674.5	745.2	558.0	187.21	3.981		
9,900.0	5,643.0	10,292.2	5,643.1	95.9	95.8	-90.01	4,983.5	-674.5	744.4	553.4	191.01	3.897		
10,000.0	5,643.0	10,392.2	5,643.1	97.8	97.7	-90.01	5,083.5	-674.5	743.5	548.7	194.80	3.817		
10,100.0	5,643.0	10,492.2	5,643.1	99.7	99.5	-90.01	5,183.5	-674.5	742.6	544.0	198.60	3.739		
10,200.0	5,643.0	10,592.2	5,643.1	101.6	101.4	-90.00	5,283.5	-674.5	741.7	539.4	202.39	3.665		
10,300.0	5,643.0	10,692.2	5,643.1	103.5	103.3	-90.00	5,383.5	-674.5	740.9	534.7	206.19	3.593		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2801A - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis			
10,400.0	5,643.0	10,792.2	5,643.1	105.4	105.2	-90.00	5,483.5	-674.5	740.0	530.0	210.00	3.524		
10,500.0	5,643.0	10,892.2	5,643.1	107.4	107.0	-90.00	5,583.5	-674.5	739.1	525.3	213.80	3.457		
10,600.0	5,643.0	10,992.2	5,643.1	109.3	108.9	-90.00	5,683.5	-674.5	738.3	520.7	217.60	3.393		
10,700.0	5,643.0	11,092.2	5,643.1	111.2	110.8	-90.00	5,783.4	-674.5	737.4	516.0	221.41	3.330		
10,800.0	5,643.0	11,192.2	5,643.1	113.1	112.7	-90.00	5,883.4	-674.5	736.5	511.3	225.22	3.270		
10,900.0	5,643.0	11,292.2	5,643.1	115.0	114.6	-90.00	5,983.4	-674.5	735.6	506.6	229.02	3.212		
11,000.0	5,643.0	11,392.2	5,643.0	116.9	116.5	-90.00	6,083.4	-674.5	734.8	501.9	232.83	3.156		
11,100.0	5,643.0	11,492.2	5,643.0	118.8	118.4	-90.00	6,183.4	-674.5	733.9	497.3	236.64	3.101		
11,200.0	5,643.0	11,592.2	5,643.0	120.7	120.3	-90.00	6,283.4	-674.5	733.0	492.6	240.45	3.048		
11,300.0	5,643.0	11,692.2	5,643.0	122.6	122.1	-90.00	6,383.4	-674.5	732.1	487.9	244.27	2.997		
11,400.0	5,643.0	11,792.2	5,643.0	124.5	124.0	-90.00	6,483.4	-674.5	731.3	483.2	248.08	2.948		
11,500.0	5,643.0	11,892.2	5,643.0	126.5	125.9	-90.00	6,583.4	-674.5	730.4	478.5	251.89	2.900		
11,600.0	5,643.0	11,992.2	5,643.0	128.4	127.8	-90.00	6,683.4	-674.5	729.5	473.8	255.71	2.853		
11,700.0	5,643.0	12,092.2	5,643.0	130.3	129.7	-90.00	6,783.4	-674.5	728.7	469.1	259.52	2.808		
11,800.0	5,643.0	12,192.1	5,643.0	132.2	131.6	-90.00	6,883.4	-674.5	727.8	464.4	263.34	2.764		
11,900.0	5,643.0	12,292.1	5,643.0	134.1	133.5	-90.00	6,983.4	-674.5	726.9	459.8	267.16	2.721		
12,000.0	5,643.0	12,392.1	5,643.0	136.0	135.4	-90.00	7,083.4	-674.5	726.0	455.1	270.98	2.679		
12,100.0	5,643.0	12,492.1	5,643.0	137.9	137.3	-90.00	7,183.4	-674.5	725.2	450.4	274.80	2.639		
12,179.0	5,643.0	12,570.4	5,643.0	139.5	138.5	-90.00	7,261.6	-674.5	724.5	446.9	277.56	2.610 SF		

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2804B - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA 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)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	90.01	0.0	29.9	29.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	29.9	29.9	29.7	0.19	159.923		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	29.9	29.9	29.3	0.64	46.983		
300.0	300.0	300.0	300.0	0.5	0.5	90.01	0.0	29.9	29.9	28.8	1.09	27.536		
400.0	400.0	400.0	400.0	0.8	0.8	90.01	0.0	29.9	29.9	28.4	1.54	19.475		
500.0	500.0	500.0	500.0	1.0	1.0	90.01	0.0	29.9	29.9	27.9	1.99	15.065		
600.0	600.0	600.0	600.0	1.2	1.2	90.01	0.0	29.9	29.9	27.5	2.43	12.284		
700.0	700.0	700.0	700.0	1.4	1.4	90.01	0.0	29.9	29.9	27.0	2.88	10.369		
800.0	800.0	800.0	800.0	1.7	1.7	90.01	0.0	29.9	29.9	26.6	3.33	8.971		
900.0	900.0	900.0	900.0	1.9	1.9	90.01	0.0	29.9	29.9	26.1	3.78	7.905		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.01	0.0	29.9	29.9	25.7	4.23	7.065 CC		
1,100.0	1,100.0	1,099.7	1,099.7	2.3	2.3	86.87	1.7	30.4	30.4	25.8	4.68	6.502		
1,200.0	1,200.0	1,199.2	1,199.0	2.6	2.6	71.01	6.7	31.8	31.9	26.8	5.13	6.225		
1,300.0	1,299.8	1,299.2	1,298.8	2.8	2.8	68.60	13.4	33.7	33.2	27.6	5.57	5.952		
1,400.0	1,399.5	1,399.2	1,398.5	3.0	3.0	71.92	20.1	35.7	33.3	27.2	6.03	5.512		
1,500.0	1,498.7	1,499.0	1,498.1	3.3	3.3	81.12	26.8	37.6	32.7	26.2	6.51	5.025		
1,524.6	1,523.0	1,523.5	1,522.6	3.3	3.3	84.16	28.4	38.1	32.7	26.0	6.64	4.924		
1,600.0	1,597.7	1,598.7	1,597.6	3.5	3.5	93.71	33.4	39.5	33.1	26.1	7.02	4.722		
1,700.0	1,696.7	1,698.5	1,697.1	3.8	3.7	105.47	40.1	41.4	35.1	27.5	7.52	4.660		
1,800.0	1,795.7	1,798.2	1,796.6	4.1	4.0	115.63	46.8	43.3	38.3	30.3	8.02	4.773		
1,900.0	1,894.7	1,898.0	1,896.1	4.4	4.2	124.00	53.5	45.2	42.5	34.0	8.51	4.997		
2,000.0	1,993.7	1,997.7	1,995.6	4.7	4.5	130.74	60.2	47.2	47.5	38.5	8.99	5.284		
2,100.0	2,092.7	2,097.4	2,095.1	5.0	4.7	136.15	66.9	49.1	53.0	43.5	9.46	5.601		
2,200.0	2,191.7	2,197.2	2,194.6	5.3	5.0	140.51	73.6	51.0	58.9	49.0	9.93	5.929		
2,300.0	2,290.7	2,296.9	2,294.1	5.6	5.2	144.06	80.3	52.9	65.0	54.6	10.40	6.255		
2,400.0	2,389.7	2,396.6	2,393.6	5.9	5.5	146.99	86.9	54.8	71.4	60.6	10.87	6.572		
2,500.0	2,488.7	2,496.4	2,493.1	6.2	5.7	149.44	93.6	56.8	77.9	66.6	11.33	6.877		
2,600.0	2,587.7	2,596.1	2,592.5	6.6	6.0	151.50	100.3	58.7	84.6	72.8	11.80	7.168		
2,700.0	2,686.7	2,695.8	2,692.0	6.9	6.2	153.27	107.0	60.6	91.3	79.1	12.27	7.444		
2,800.0	2,785.7	2,795.6	2,791.5	7.2	6.5	154.79	113.7	62.5	98.1	85.4	12.74	7.705		
2,900.0	2,884.7	2,895.3	2,891.0	7.5	6.7	156.11	120.4	64.4	105.0	91.8	13.21	7.952		
3,000.0	2,983.7	2,995.1	2,990.5	7.9	7.0	157.27	127.1	66.3	111.9	98.3	13.68	8.185		
3,100.0	3,082.7	3,094.8	3,090.0	8.2	7.2	158.29	133.8	68.3	118.9	104.7	14.15	8.405		
3,200.0	3,181.7	3,194.5	3,189.5	8.5	7.5	159.20	140.4	70.2	125.9	111.3	14.62	8.613		
3,300.0	3,280.7	3,294.3	3,289.0	8.9	7.7	160.01	147.1	72.1	132.9	117.8	15.09	8.810		
3,400.0	3,379.7	3,394.0	3,388.5	9.2	8.0	160.75	153.8	74.0	140.0	124.4	15.56	8.996		
3,500.0	3,478.7	3,493.7	3,488.0	9.5	8.2	161.41	160.5	75.9	147.0	131.0	16.03	9.172		
3,600.0	3,577.6	3,593.5	3,587.5	9.9	8.5	162.01	167.2	77.9	154.1	137.6	16.50	9.339		
3,700.0	3,676.6	3,693.2	3,687.0	10.2	8.7	162.56	173.9	79.8	161.2	144.2	16.97	9.498		
3,800.0	3,775.6	3,792.9	3,786.5	10.5	9.0	163.06	180.6	81.7	168.3	150.9	17.45	9.648		
3,900.0	3,874.6	3,892.7	3,886.0	10.9	9.2	163.52	187.3	83.6	175.4	157.5	17.92	9.791		
4,000.0	3,973.6	3,992.4	3,985.5	11.2	9.5	163.95	193.9	85.5	182.6	164.2	18.39	9.927		
4,100.0	4,072.6	4,092.2	4,084.9	11.5	9.7	164.34	200.6	87.4	189.7	170.9	18.87	10.057		
4,200.0	4,171.6	4,191.9	4,184.4	11.9	10.0	164.70	207.3	89.4	196.9	177.5	19.34	10.180		
4,300.0	4,270.6	4,291.6	4,283.9	12.2	10.3	165.04	214.0	91.3	204.0	184.2	19.81	10.298		
4,400.0	4,369.6	4,391.4	4,383.4	12.5	10.5	165.36	220.7	93.2	211.2	190.9	20.29	10.411		
4,500.0	4,468.6	4,491.1	4,482.9	12.9	10.8	165.65	227.4	95.1	218.4	197.6	20.76	10.519		
4,600.0	4,567.6	4,590.8	4,582.4	13.2	11.0	165.93	234.1	97.0	225.6	204.3	21.24	10.622		
4,700.0	4,666.6	4,690.6	4,681.9	13.6	11.3	166.19	240.8	98.9	232.7	211.0	21.71	10.721		
4,800.0	4,765.6	4,790.3	4,781.4	13.9	11.5	166.43	247.4	100.9	239.9	217.8	22.18	10.815		
4,900.0	4,864.6	4,890.0	4,880.9	14.2	11.8	166.66	254.1	102.8	247.1	224.5	22.66	10.906		
5,000.0	4,963.6	4,989.8	4,980.4	14.6	12.0	166.88	260.8	104.7	254.3	231.2	23.13	10.993		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2804B - HZ - Plan #2													Offset Site Error:	0.0 ft
Survey Program: 0-ISCWSA 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)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,062.6	5,089.5	5,079.9	14.9	12.3	167.09	267.5	106.6	261.5	237.9	23.61	11.077		
5,200.0	5,161.6	5,189.3	5,179.4	15.2	12.5	167.28	274.2	108.5	268.7	244.6	24.08	11.158		
5,300.0	5,259.8	5,312.8	5,302.4	15.6	12.9	172.39	284.6	111.5	279.1	254.9	24.28	11.496		
5,400.0	5,353.1	5,516.5	5,492.1	16.2	13.8	171.60	352.6	131.0	281.6	257.5	24.07	11.699		
5,500.0	5,437.9	5,707.9	5,633.1	17.1	15.4	164.98	475.5	166.2	268.4	244.5	23.87	11.243		
5,600.0	5,511.2	5,873.1	5,710.8	18.1	17.3	154.24	614.8	206.2	246.2	221.2	25.01	9.845		
5,700.0	5,570.1	6,011.8	5,738.3	19.3	19.2	140.74	745.1	243.6	224.3	195.4	28.90	7.761		
5,800.0	5,612.6	6,116.4	5,739.5	20.7	20.6	128.71	845.9	271.2	213.2	179.4	33.82	6.304		
5,812.1	5,616.5	6,128.6	5,739.5	20.9	20.8	127.44	857.8	274.1	213.1	178.7	34.42	6.191		
5,900.0	5,637.0	6,220.8	5,739.5	22.2	22.1	119.52	948.0	293.5	217.8	179.3	38.58	5.646		
6,000.0	5,643.0	6,330.7	5,739.5	23.8	23.6	115.01	1,056.4	310.9	230.0	187.6	42.41	5.423		
6,100.0	5,643.0	6,442.7	5,739.5	25.5	25.3	113.77	1,167.8	322.2	240.0	194.1	45.88	5.231		
6,200.0	5,643.0	6,555.7	5,739.5	27.1	27.0	113.22	1,280.7	327.0	244.7	195.4	49.25	4.969		
6,300.0	5,643.0	6,661.0	5,739.5	28.9	28.7	113.19	1,386.0	326.4	244.9	192.5	52.42	4.673		
6,400.0	5,643.0	6,761.0	5,739.5	30.6	30.3	113.21	1,486.0	325.4	244.7	189.2	55.56	4.405		
6,500.0	5,643.0	6,861.0	5,739.4	32.3	32.0	113.22	1,586.0	324.3	244.6	185.8	58.75	4.163		
6,600.0	5,643.0	6,961.0	5,739.4	34.1	33.7	113.24	1,686.0	323.2	244.4	182.4	61.98	3.943		
6,700.0	5,643.0	7,061.0	5,739.4	35.9	35.4	113.26	1,786.0	322.1	244.2	178.9	65.25	3.742		
6,800.0	5,643.0	7,161.0	5,739.4	37.7	37.1	113.27	1,886.0	321.1	244.0	175.4	68.54	3.560		
6,900.0	5,643.0	7,261.0	5,739.4	39.5	38.8	113.29	1,986.0	320.0	243.8	171.9	71.87	3.392		
7,000.0	5,643.0	7,361.0	5,739.4	41.3	40.6	113.31	2,086.0	318.9	243.6	168.4	75.21	3.239		
7,100.0	5,643.0	7,461.0	5,739.4	43.2	42.4	113.33	2,186.0	317.8	243.4	164.8	78.58	3.098		
7,200.0	5,643.0	7,561.0	5,739.4	45.0	44.2	113.34	2,286.0	316.8	243.2	161.3	81.96	2.968		
7,300.0	5,643.0	7,661.0	5,739.4	46.9	46.0	113.36	2,386.0	315.7	243.0	157.7	85.35	2.847		
7,400.0	5,643.0	7,761.0	5,739.4	48.7	47.8	113.38	2,486.0	314.6	242.8	154.1	88.76	2.736		
7,500.0	5,643.0	7,861.0	5,739.4	50.6	49.6	113.40	2,586.0	313.5	242.7	150.5	92.18	2.632		
7,600.0	5,643.0	7,961.0	5,739.4	52.4	51.4	113.41	2,686.0	312.4	242.5	146.9	95.61	2.536		
7,700.0	5,643.0	8,061.0	5,739.4	54.3	53.3	113.43	2,786.0	311.4	242.3	143.2	99.05	2.446		
7,800.0	5,643.0	8,161.0	5,739.3	56.2	55.1	113.45	2,886.0	310.3	242.1	139.6	102.49	2.362		
7,900.0	5,643.0	8,261.0	5,739.3	58.0	56.9	113.47	2,985.9	309.2	241.9	136.0	105.94	2.283		
8,000.0	5,643.0	8,361.0	5,739.3	59.9	58.8	113.48	3,085.9	308.1	241.7	132.3	109.40	2.209		
8,100.0	5,643.0	8,461.0	5,739.3	61.8	60.6	113.50	3,185.9	307.1	241.5	128.7	112.87	2.140		
8,200.0	5,643.0	8,561.0	5,739.3	63.7	62.5	113.52	3,285.9	306.0	241.3	125.0	116.34	2.074		
8,300.0	5,643.0	8,661.0	5,739.3	65.6	64.4	113.54	3,385.9	304.9	241.1	121.3	119.81	2.013		
8,400.0	5,643.0	8,761.0	5,739.3	67.4	66.2	113.55	3,485.9	303.8	241.0	117.7	123.29	1.954		
8,500.0	5,643.0	8,861.0	5,739.3	69.3	68.1	113.57	3,585.9	302.8	240.8	114.0	126.77	1.899		
8,600.0	5,643.0	8,961.0	5,739.3	71.2	70.0	113.59	3,685.9	301.7	240.6	110.3	130.26	1.847		
8,700.0	5,643.0	9,061.0	5,739.3	73.1	71.8	113.61	3,785.9	300.6	240.4	106.6	133.75	1.797		
8,800.0	5,643.0	9,161.0	5,739.3	75.0	73.7	113.62	3,885.9	299.5	240.2	103.0	137.24	1.750		
8,900.0	5,643.0	9,261.0	5,739.3	76.9	75.6	113.64	3,985.9	298.5	240.0	99.3	140.73	1.705		
9,000.0	5,643.0	9,361.0	5,739.3	78.8	77.5	113.66	4,085.9	297.4	239.8	95.6	144.23	1.663		
9,100.0	5,643.0	9,461.0	5,739.2	80.7	79.4	113.68	4,185.9	296.3	239.6	91.9	147.72	1.622		
9,200.0	5,643.0	9,561.0	5,739.2	82.6	81.2	113.70	4,285.9	295.2	239.4	88.2	151.22	1.583		
9,300.0	5,643.0	9,661.0	5,739.2	84.5	83.1	113.71	4,385.9	294.2	239.2	84.5	154.72	1.546		
9,400.0	5,643.0	9,761.0	5,739.2	86.4	85.0	113.73	4,485.9	293.1	239.1	80.8	158.23	1.511		
9,500.0	5,643.0	9,861.0	5,739.2	88.3	86.9	113.75	4,585.9	292.0	238.9	77.1	161.73	1.477 Level 3		
9,600.0	5,643.0	9,961.0	5,739.2	90.2	88.8	113.77	4,685.8	290.9	238.7	73.4	165.24	1.445 Level 3		
9,700.0	5,643.0	10,061.0	5,739.2	92.1	90.7	113.79	4,785.8	289.9	238.5	69.8	168.74	1.413 Level 3		
9,800.0	5,643.0	10,161.0	5,739.2	94.0	92.6	113.80	4,885.8	288.8	238.3	66.1	172.25	1.384 Level 3		
9,900.0	5,643.0	10,261.0	5,739.2	95.9	94.5	113.82	4,985.8	287.7	238.1	62.4	175.75	1.355 Level 3		
10,000.0	5,643.0	10,361.0	5,739.2	97.8	96.4	113.84	5,085.8	286.6	237.9	58.7	179.26	1.327 Level 3		
10,100.0	5,643.0	10,461.0	5,739.2	99.7	98.3	113.86	5,185.8	285.6	237.7	55.0	182.77	1.301 Level 3		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2804B - HZ - Plan #2												Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA 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)	Total Uncertainty Axis	Separation Factor	Warning
10,200.0	5,643.0	10,561.0	5,739.2	101.6	100.2	113.88	5,285.8	284.5	237.5	51.3	186.28	1.275 Level 3	
10,300.0	5,643.0	10,661.0	5,739.2	103.5	102.1	113.89	5,385.8	283.4	237.4	47.6	189.79	1.251 Level 3	
10,400.0	5,643.0	10,761.0	5,739.1	105.4	104.0	113.91	5,485.8	282.3	237.2	43.9	193.30	1.227 Level 2	
10,500.0	5,643.0	10,861.0	5,739.1	107.4	105.9	113.93	5,585.8	281.2	237.0	40.2	196.81	1.204 Level 2	
10,600.0	5,643.0	10,961.0	5,739.1	109.3	107.8	113.95	5,685.8	280.2	236.8	36.5	200.32	1.182 Level 2	
10,700.0	5,643.0	11,061.0	5,739.1	111.2	109.7	113.97	5,785.8	279.1	236.6	32.8	203.83	1.161 Level 2	
10,800.0	5,643.0	11,161.0	5,739.1	113.1	111.6	113.99	5,885.8	278.0	236.4	29.1	207.34	1.140 Level 2	
10,900.0	5,643.0	11,261.0	5,739.1	115.0	113.5	114.00	5,985.8	276.9	236.2	25.4	210.85	1.120 Level 2	
11,000.0	5,643.0	11,361.0	5,739.1	116.9	115.4	114.02	6,085.8	275.9	236.0	21.7	214.36	1.101 Level 2	
11,100.0	5,643.0	11,461.0	5,739.1	118.8	117.3	114.04	6,185.8	274.8	235.8	18.0	217.87	1.083 Level 2	
11,200.0	5,643.0	11,561.0	5,739.1	120.7	119.2	114.06	6,285.7	273.7	235.7	14.3	221.38	1.065 Level 2	
11,300.0	5,643.0	11,661.0	5,739.1	122.6	121.1	114.08	6,385.7	272.6	235.5	10.6	224.89	1.047 Level 2	
11,400.0	5,643.0	11,761.0	5,739.1	124.5	123.0	114.10	6,485.7	271.6	235.3	6.9	228.40	1.030 Level 2	
11,500.0	5,643.0	11,861.0	5,739.1	126.5	124.9	114.11	6,585.7	270.5	235.1	3.2	231.91	1.014 Level 2	
11,600.0	5,643.0	11,961.0	5,739.1	128.4	126.8	114.13	6,685.7	269.4	234.9	-0.5	235.42	0.998 Level 1	
11,700.0	5,643.0	12,061.0	5,739.0	130.3	128.7	114.15	6,785.7	268.3	234.7	-4.2	238.93	0.982 Level 1	
11,800.0	5,643.0	12,161.0	5,739.0	132.2	130.6	114.17	6,885.7	267.3	234.5	-7.9	242.44	0.967 Level 1	
11,900.0	5,643.0	12,261.0	5,739.0	134.1	132.6	114.19	6,985.7	266.2	234.3	-11.6	245.95	0.953 Level 1	
12,000.0	5,643.0	12,361.0	5,739.0	136.0	134.5	114.21	7,085.7	265.1	234.2	-15.3	249.45	0.939 Level 1	
12,100.0	5,643.0	12,461.0	5,739.0	137.9	136.4	114.23	7,185.7	264.0	234.0	-19.0	252.96	0.925 Level 1	
12,164.3	5,643.0	12,525.3	5,739.0	139.2	137.6	114.24	7,250.0	263.3	233.8	-21.4	255.22	0.916 Level 1	
12,179.0	5,643.0	12,538.8	5,739.0	139.5	137.9	114.24	7,263.5	263.2	233.8	-21.9	255.71	0.914 Level 1, ES, SF	

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2813H(EXISTING) - EXISTING - EXISTING													Offset Site Error:	0.0 ft
Survey Program: 195-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-80.9	80.9					
100.0	100.0	100.6	100.6	0.1	0.1	-89.76	0.3	-80.5	80.5	80.3	0.20	404.453		
200.0	200.0	201.1	201.1	0.3	0.2	-89.04	1.3	-79.4	79.4	78.9	0.54	148.233		
300.0	300.0	301.0	301.0	0.5	0.4	-88.02	2.7	-78.0	78.1	77.1	0.97	80.354		
400.0	400.0	401.3	401.3	0.8	0.6	-87.16	3.8	-76.5	76.6	75.2	1.40	54.615		
500.0	500.0	501.2	501.2	1.0	0.8	-86.40	4.7	-74.8	75.0	73.1	1.84	40.787		
600.0	600.0	601.0	601.0	1.2	1.1	-85.90	5.3	-73.4	73.6	71.3	2.27	32.428		
700.0	700.0	701.1	701.0	1.4	1.3	-85.56	5.6	-72.0	72.3	69.6	2.70	26.753		
800.0	800.0	801.1	801.0	1.7	1.5	-85.45	5.6	-70.6	70.9	67.7	3.14	22.582		
900.0	900.0	901.1	901.0	1.9	1.7	-85.41	5.6	-69.3	69.5	65.9	3.58	19.435		
1,000.0	1,000.0	1,001.2	1,001.1	2.1	1.9	-85.21	5.7	-67.8	68.0	64.0	4.01	16.974		
1,100.0	1,100.0	1,101.4	1,101.3	2.3	2.1	-85.02	5.7	-65.9	66.2	61.8	4.45	14.888		
1,200.0	1,200.0	1,201.4	1,201.2	2.6	2.3	-96.60	5.6	-64.0	64.5	59.6	4.89	13.190		
1,300.0	1,299.8	1,301.4	1,301.2	2.8	2.5	-101.35	5.5	-62.0	63.3	58.0	5.32	11.885		
1,352.6	1,352.2	1,353.9	1,353.7	2.9	2.7	-105.11	5.5	-60.8	63.0	57.5	5.56	11.348 CC		
1,400.0	1,399.5	1,401.1	1,400.9	3.0	2.8	-109.24	5.4	-59.7	63.3	57.5	5.76	10.980		
1,500.0	1,498.7	1,500.5	1,500.3	3.3	3.0	-119.91	5.0	-57.2	66.0	59.8	6.21	10.619		
1,600.0	1,597.7	1,599.4	1,599.1	3.5	3.2	-131.10	4.1	-54.2	72.0	65.3	6.67	10.791		
1,700.0	1,696.7	1,697.8	1,697.5	3.8	3.4	-140.24	3.0	-51.6	80.6	73.5	7.12	11.326		
1,800.0	1,795.7	1,796.7	1,796.4	4.1	3.6	-146.74	2.5	-50.1	91.3	83.7	7.55	12.082		
1,900.0	1,894.7	1,895.1	1,894.8	4.4	3.8	-151.62	2.1	-49.0	103.0	95.0	7.99	12.889		
2,000.0	1,993.7	1,993.2	1,992.9	4.7	4.0	-155.27	1.5	-48.6	116.0	107.5	8.43	13.755		
2,100.0	2,092.7	2,091.4	2,091.0	5.0	4.2	-158.02	0.4	-48.8	130.0	121.2	8.87	14.656		
2,200.0	2,191.7	2,190.3	2,189.9	5.3	4.4	-160.20	-0.7	-49.3	144.4	135.1	9.31	15.509		
2,300.0	2,290.7	2,288.4	2,288.0	5.6	4.6	-161.85	-2.0	-50.2	159.4	149.6	9.75	16.351		
2,400.0	2,389.7	2,389.1	2,388.7	5.9	4.8	-163.28	-3.0	-50.9	174.1	163.9	10.19	17.083		
2,500.0	2,488.7	2,489.4	2,489.0	6.2	5.0	-164.19	-2.4	-51.8	187.5	176.9	10.63	17.642		
2,600.0	2,587.7	2,588.1	2,587.7	6.6	5.2	-164.88	-1.9	-53.1	201.2	190.1	11.07	18.174		
2,700.0	2,686.7	2,687.5	2,687.1	6.9	5.4	-165.42	-1.0	-54.6	214.7	203.2	11.52	18.643		
2,800.0	2,785.7	2,786.9	2,786.5	7.2	5.6	-166.08	-0.5	-55.3	228.2	216.2	11.96	19.077		
2,900.0	2,884.7	2,888.2	2,887.8	7.5	5.9	-166.78	0.4	-55.5	241.2	228.8	12.41	19.436		
3,000.0	2,983.7	2,988.0	2,987.5	7.9	6.1	-167.39	2.1	-55.4	253.4	240.5	12.86	19.708		
3,100.0	3,082.7	3,087.5	3,087.0	8.2	6.3	-167.96	3.6	-55.2	265.7	252.4	13.30	19.973		
3,200.0	3,181.7	3,186.3	3,185.8	8.5	6.5	-168.45	5.4	-55.1	277.9	264.1	13.75	20.210		
3,300.0	3,280.7	3,284.0	3,283.6	8.9	6.7	-168.96	6.6	-54.8	290.5	276.3	14.20	20.461		
3,400.0	3,379.7	3,384.1	3,383.6	9.2	6.9	-169.47	7.6	-54.5	303.3	288.7	14.65	20.708		
3,500.0	3,478.7	3,484.9	3,484.4	9.5	7.1	-169.96	9.0	-53.9	315.7	300.6	15.10	20.910		
3,600.0	3,577.6	3,582.4	3,581.9	9.9	7.3	-170.40	10.5	-53.2	328.0	312.5	15.54	21.105		
3,700.0	3,676.6	3,683.5	3,683.0	10.2	7.5	-170.83	11.9	-52.6	340.4	324.4	15.99	21.287		
3,800.0	3,775.6	3,765.9	3,765.4	10.5	7.7	-170.96	11.9	-53.7	354.8	338.4	16.41	21.622		
3,900.0	3,874.6	3,857.6	3,856.9	10.9	7.9	-170.80	9.3	-57.8	372.8	356.0	16.85	22.130		
4,000.0	3,973.6	3,954.2	3,953.4	11.2	8.1	-170.70	5.7	-62.1	391.7	374.5	17.30	22.650		
4,100.0	4,072.6	4,054.9	4,054.0	11.5	8.3	-170.69	1.7	-66.0	410.6	392.8	17.75	23.130		
4,200.0	4,171.6	4,157.7	4,156.6	11.9	8.5	-170.82	-1.7	-68.7	428.5	410.3	18.21	23.537		
4,300.0	4,270.6	4,256.5	4,255.4	12.2	8.7	-170.95	-4.5	-71.0	445.9	427.2	18.65	23.907		
4,400.0	4,369.6	4,359.1	4,357.9	12.5	8.9	-171.08	-7.0	-73.1	462.8	443.6	19.10	24.224		
4,500.0	4,468.6	4,460.4	4,459.2	12.9	9.1	-171.28	-9.0	-74.4	479.0	459.4	19.56	24.491		
4,600.0	4,567.6	4,562.7	4,561.5	13.2	9.3	-171.40	-10.1	-76.1	494.5	474.5	20.01	24.711		
4,700.0	4,666.6	4,663.1	4,661.9	13.6	9.6	-171.45	-10.6	-78.0	509.5	489.0	20.46	24.898		
4,800.0	4,765.6	4,764.2	4,762.9	13.9	9.8	-171.50	-10.9	-79.9	524.4	503.4	20.92	25.067		
4,900.0	4,864.6	4,867.5	4,866.2	14.2	10.0	-171.53	-10.2	-81.6	538.2	516.8	21.38	25.176		
5,000.0	4,963.6	4,966.0	4,964.7	14.6	10.2	-171.54	-9.5	-83.3	552.0	530.2	21.83	25.288		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2813H(EXISTING) - EXISTING - EXISTING													Offset Site Error:	0.0 ft
Survey Program: 195-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
5,100.0	5,062.6	5,064.8	5,063.5	14.9	10.4	-171.55	-8.6	-85.1	565.7	543.5	22.28	25.393		
5,200.0	5,161.6	5,402.5	5,390.2	15.2	11.1	-169.60	58.1	-89.7	566.5	543.3	23.27	24.341		
5,300.0	5,259.8	5,829.8	5,686.2	15.6	13.5	-152.61	352.9	-89.9	510.2	485.1	25.02	20.386		
5,400.0	5,353.1	6,078.2	5,744.0	16.2	16.3	-134.15	592.6	-89.0	434.5	406.1	28.35	15.327		
5,500.0	5,437.9	6,136.6	5,743.0	17.1	17.1	-134.13	650.9	-90.3	360.8	332.1	28.69	12.574		
5,600.0	5,511.2	6,192.7	5,741.8	18.1	17.8	-132.55	706.9	-92.9	303.1	273.7	29.46	10.289		
5,700.0	5,570.1	6,274.6	5,741.6	19.3	18.9	-126.94	788.7	-98.1	265.6	233.5	32.10	8.274		
5,800.0	5,612.6	6,367.6	5,741.3	20.7	20.1	-120.78	881.6	-101.9	243.6	207.8	35.83	6.799		
5,900.0	5,637.0	6,465.8	5,741.0	22.2	21.6	-116.34	979.8	-103.9	233.1	193.4	39.66	5.876		
5,984.5	5,644.4	6,550.2	5,740.6	23.6	22.8	-114.71	1,064.1	-105.0	230.2	187.7	42.54	5.412		
6,000.0	5,643.0	6,565.3	5,740.5	23.8	23.1	-114.98	1,079.2	-105.4	230.9	188.0	42.90	5.383		
6,100.0	5,643.0	6,658.0	5,740.1	25.5	24.5	-114.59	1,171.9	-109.0	233.5	187.6	45.86	5.091		
6,200.0	5,643.0	6,755.9	5,739.5	27.1	26.1	-113.90	1,269.5	-115.5	238.5	189.4	49.10	4.857		
6,300.0	5,643.0	6,861.0	5,739.0	28.9	27.7	-113.28	1,374.5	-121.7	242.9	190.5	52.44	4.632		
6,400.0	5,643.0	6,965.0	5,734.9	30.6	29.5	-112.10	1,478.3	-125.9	244.3	188.3	56.09	4.356		
6,500.0	5,643.0	7,061.6	5,732.0	32.3	31.0	-111.17	1,574.8	-130.1	246.5	187.0	59.50	4.142		
6,600.0	5,643.0	7,173.0	5,731.1	34.1	32.8	-110.87	1,686.2	-132.4	247.4	184.3	63.04	3.924		
6,700.0	5,643.0	7,276.9	5,729.9	35.9	34.5	-110.81	1,790.0	-130.8	244.6	178.3	66.33	3.688		
6,800.0	5,643.0	7,381.9	5,730.4	37.7	36.2	-111.37	1,894.9	-126.5	240.2	170.8	69.40	3.461		
6,900.0	5,643.0	7,479.1	5,730.4	39.5	37.8	-111.78	1,992.1	-122.8	235.8	163.4	72.49	3.254		
6,987.2	5,643.0	7,556.0	5,730.7	41.1	39.1	-112.10	2,068.9	-120.6	233.0	158.0	75.04	3.105		
7,000.0	5,643.0	7,565.9	5,730.8	41.3	39.3	-112.12	2,078.8	-120.7	233.1	157.7	75.41	3.091		
7,100.0	5,643.0	7,667.0	5,730.3	43.2	41.0	-111.89	2,179.9	-123.0	234.2	155.3	78.89	2.969		
7,200.0	5,643.0	7,760.1	5,728.0	45.0	42.6	-111.14	2,272.9	-126.3	235.9	153.4	82.47	2.860		
7,300.0	5,643.0	7,860.7	5,727.9	46.9	44.3	-110.70	2,373.2	-132.1	240.4	154.3	86.07	2.793		
7,400.0	5,643.0	7,969.6	5,721.5	48.7	46.3	-108.95	2,481.8	-136.8	241.6	151.1	90.53	2.669		
7,500.0	5,643.0	8,071.3	5,713.0	50.6	48.1	-106.84	2,583.2	-140.4	241.5	146.6	94.95	2.544		
7,600.0	5,643.0	8,174.6	5,706.9	52.4	49.8	-105.42	2,686.2	-141.6	240.2	141.2	99.00	2.426		
7,700.0	5,643.0	8,274.9	5,707.1	54.3	51.4	-105.67	2,786.5	-139.4	237.3	135.0	102.33	2.319		
7,800.0	5,643.0	8,370.7	5,711.7	56.2	53.1	-106.90	2,882.2	-137.9	236.4	131.2	105.15	2.248		
7,898.9	5,643.0	8,469.0	5,713.3	58.0	54.8	-107.35	2,980.5	-137.7	235.8	127.4	108.39	2.175		
7,900.0	5,643.0	8,470.1	5,713.3	58.0	54.8	-107.35	2,981.5	-137.7	235.8	127.4	108.43	2.175		
8,000.0	5,643.0	8,566.5	5,714.2	59.9	56.5	-107.52	3,077.9	-138.8	236.3	124.6	111.74	2.115		
8,100.0	5,643.0	8,652.6	5,716.5	61.8	58.0	-107.90	3,163.9	-141.8	239.8	125.0	114.79	2.089		
8,200.0	5,643.0	8,745.8	5,721.0	63.7	59.7	-108.36	3,256.7	-150.0	248.8	130.9	117.93	2.110		
8,300.0	5,643.0	8,847.0	5,724.8	65.6	61.4	-108.58	3,357.4	-159.4	257.9	136.6	121.31	2.126		
8,400.0	5,643.0	8,959.0	5,726.9	67.4	63.5	-108.45	3,469.0	-168.3	265.3	140.2	125.11	2.120		
8,500.0	5,643.0	9,059.4	5,727.5	69.3	65.2	-108.25	3,569.2	-173.9	269.9	141.2	128.76	2.096		
8,600.0	5,643.0	9,168.7	5,729.3	71.2	67.2	-108.46	3,678.4	-177.3	272.6	140.3	132.27	2.061		
8,700.0	5,643.0	9,261.4	5,732.0	73.1	68.8	-108.92	3,771.0	-179.3	274.8	139.5	135.32	2.031		
8,800.0	5,643.0	9,365.7	5,736.0	75.0	70.6	-109.53	3,875.3	-182.5	278.1	139.7	138.46	2.009		
8,900.0	5,643.0	9,470.0	5,737.0	76.9	72.5	-109.68	3,979.6	-184.1	279.0	137.1	141.94	1.966		
9,000.0	5,643.0	9,572.0	5,735.2	78.8	74.3	-109.29	4,081.5	-185.6	279.0	133.2	145.78	1.914		
9,042.6	5,643.0	9,614.3	5,734.9	79.6	75.1	-109.23	4,123.8	-186.0	278.9	131.7	147.29	1.894		
9,100.0	5,643.0	9,660.7	5,735.0	80.7	75.9	-109.20	4,170.1	-187.1	279.9	130.8	149.12	1.877		
9,200.0	5,643.0	9,750.9	5,736.9	82.6	77.5	-109.20	4,260.1	-193.5	286.4	133.9	152.46	1.878		
9,300.0	5,643.0	9,862.7	5,737.1	84.5	79.5	-108.86	4,371.7	-200.3	291.3	134.8	156.47	1.862		
9,400.0	5,643.0	9,971.8	5,736.4	86.4	81.5	-108.62	4,480.8	-202.8	292.3	132.0	160.34	1.823		
9,500.0	5,643.0	10,061.8	5,734.9	88.3	83.0	-108.22	4,570.7	-205.7	294.1	130.1	164.00	1.793		
9,600.0	5,643.0	10,175.6	5,735.4	90.2	85.0	-108.20	4,684.5	-208.6	295.9	128.1	167.76	1.764		
9,700.0	5,643.0	10,273.0	5,737.2	92.1	86.7	-108.59	4,781.8	-208.3	295.4	124.5	170.89	1.728		
9,800.0	5,643.0	10,372.5	5,737.0	94.0	88.5	-108.58	4,881.3	-208.7	294.8	120.4	174.42	1.690		

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



# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33M-2813H(EXISTING) - EXISTING - EXISTING													Offset Site Error:	0.0 ft
Survey Program: 195-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth 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)	Total Uncertainty Axis		Separation Factor	
9,805.8	5,643.0	10,378.0	5,736.9	94.1	88.6	-108.58	4,886.8	-208.7	294.8	120.2	174.63	1.688		
9,900.0	5,643.0	10,468.8	5,735.8	95.9	90.2	-108.29	4,977.6	-210.9	295.8	117.7	178.13	1.661		
10,000.0	5,643.0	10,567.8	5,736.2	97.8	92.0	-108.28	5,076.6	-213.0	297.0	115.4	181.62	1.636		
10,100.0	5,643.0	10,665.7	5,736.7	99.7	93.7	-108.24	5,174.4	-215.9	299.2	114.1	185.15	1.616		
10,200.0	5,643.0	10,764.2	5,737.5	101.6	95.5	-108.27	5,272.8	-218.8	301.5	112.9	188.63	1.598		
10,300.0	5,643.0	10,874.5	5,735.8	103.5	97.5	-107.87	5,383.1	-221.3	302.3	109.6	192.74	1.569		
10,334.4	5,643.0	10,906.8	5,734.5	104.2	98.0	-107.62	5,415.4	-221.9	302.2	108.0	194.15	1.556		
10,400.0	5,643.0	10,965.1	5,732.3	105.4	99.1	-107.14	5,473.6	-223.8	303.0	106.2	196.78	1.540		
10,500.0	5,643.0	11,065.5	5,728.8	107.4	100.9	-106.29	5,573.8	-228.8	305.8	104.7	201.13	1.521		
10,600.0	5,643.0	11,165.6	5,722.7	109.3	102.7	-104.99	5,673.6	-233.8	308.2	102.3	205.83	1.497 Level 3		
10,700.0	5,643.0	11,265.0	5,715.3	111.2	104.5	-103.46	5,772.6	-238.8	310.5	99.9	210.60	1.474 Level 3		
10,800.0	5,643.0	11,363.0	5,708.5	113.1	106.2	-102.06	5,870.2	-244.6	313.9	98.7	215.17	1.459 Level 3		
10,900.0	5,643.0	11,461.6	5,704.4	115.0	108.0	-101.16	5,968.5	-249.9	317.4	98.1	219.37	1.447 Level 3		
11,000.0	5,643.0	11,566.6	5,699.2	116.9	109.8	-100.09	6,073.2	-255.6	321.0	97.3	223.76	1.435 Level 3		
11,100.0	5,643.0	11,679.4	5,695.6	118.8	111.8	-99.43	6,186.0	-257.3	321.1	93.1	227.98	1.408 Level 3		
11,200.0	5,643.0	11,787.0	5,694.1	120.7	113.7	-99.24	6,293.5	-255.4	318.2	86.3	231.85	1.372 Level 3		
11,300.0	5,643.0	11,901.0	5,694.9	122.6	115.7	-99.62	6,407.4	-248.7	311.7	76.2	235.51	1.324 Level 3		
11,400.0	5,643.0	11,990.1	5,694.2	124.5	117.3	-99.69	6,496.3	-243.4	304.8	65.9	238.90	1.276 Level 3		
11,500.0	5,643.0	12,090.3	5,693.8	126.5	119.0	-99.78	6,596.3	-238.7	299.2	56.7	242.49	1.234 Level 2		
11,600.0	5,643.0	12,175.0	5,693.3	128.4	120.5	-99.84	6,681.0	-234.9	294.3	48.4	245.82	1.197 Level 2		
11,600.1	5,643.0	12,175.0	5,693.3	128.4	120.5	-99.84	6,681.0	-234.9	294.3	48.4	245.82	1.197 Level 2, ES, SF		
11,700.0	5,643.0	12,175.0	5,693.3	130.3	120.5	-99.84	6,681.0	-234.9	310.8	63.1	247.71	1.255 Level 3		
11,800.0	5,643.0	12,175.0	5,693.3	132.2	120.5	-99.84	6,681.0	-234.9	355.8	106.2	249.60	1.425 Level 3		
11,900.0	5,643.0	12,175.0	5,693.3	134.1	120.5	-99.84	6,681.0	-234.9	420.2	168.7	251.49	1.671		
12,000.0	5,643.0	12,175.0	5,693.3	136.0	120.5	-99.84	6,681.0	-234.9	496.5	243.1	253.38	1.960		
12,100.0	5,643.0	12,175.0	5,693.3	137.9	120.5	-99.84	6,681.0	-234.9	580.1	324.8	255.27	2.273		
12,179.0	5,643.0	12,175.0	5,693.3	139.5	120.5	-99.84	6,681.0	-234.9	649.4	392.6	256.76	2.529		

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2805A - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
0.0	0.0	0.0	0.0	0.0	0.0	93.61	-70.7	1,119.8	1,122.1					
100.0	100.0	94.0	94.0	0.1	0.1	93.61	-70.7	1,119.8	1,122.1	1,121.9	0.18	6,186.030		
200.0	200.0	194.0	194.0	0.3	0.3	93.61	-70.7	1,119.8	1,122.1	1,121.4	0.62	1,800.976		
300.0	300.0	294.0	294.0	0.5	0.5	93.61	-70.7	1,119.8	1,122.1	1,121.0	1.07	1,046.151		
400.0	400.0	394.0	394.0	0.8	0.8	93.61	-70.7	1,119.8	1,122.1	1,120.5	1.52	737.183		
500.0	500.0	494.0	494.0	1.0	1.0	93.61	-70.7	1,119.8	1,122.1	1,120.1	1.97	569.105		
600.0	600.0	594.0	594.0	1.2	1.2	93.61	-70.7	1,119.8	1,122.1	1,119.6	2.42	463.440		
700.0	700.0	694.0	694.0	1.4	1.4	93.61	-70.7	1,119.8	1,122.1	1,119.2	2.87	390.868		
800.0	800.0	794.0	794.0	1.7	1.7	93.61	-70.7	1,119.8	1,122.1	1,118.7	3.32	337.948		
900.0	900.0	894.0	894.0	1.9	1.9	93.61	-70.7	1,119.8	1,122.1	1,118.3	3.77	297.649		
1,000.0	1,000.0	994.0	994.0	2.1	2.1	93.61	-70.7	1,119.8	1,122.1	1,117.8	4.22	265.936		
1,100.0	1,100.0	1,094.0	1,094.0	2.3	2.3	93.61	-70.7	1,119.8	1,122.1	1,117.4	4.67	240.331		
1,200.0	1,200.0	1,194.0	1,194.0	2.6	2.6	83.65	-70.7	1,119.8	1,121.9	1,116.8	5.12	219.241		
1,300.0	1,299.8	1,316.4	1,316.4	2.8	2.8	83.90	-68.5	1,118.8	1,120.4	1,114.7	5.61	199.563		
1,400.0	1,399.5	1,432.5	1,432.2	3.0	3.1	84.19	-62.3	1,115.8	1,116.5	1,110.4	6.10	182.884		
1,500.0	1,498.7	1,532.2	1,531.7	3.3	3.3	84.60	-56.1	1,112.8	1,111.7	1,105.2	6.58	169.051		
1,600.0	1,597.7	1,631.7	1,631.0	3.5	3.5	85.02	-49.8	1,109.8	1,106.9	1,099.8	7.07	156.621		
1,700.0	1,696.7	1,731.3	1,730.3	3.8	3.8	85.44	-43.6	1,106.7	1,102.1	1,094.5	7.57	145.502		
1,800.0	1,795.7	1,830.8	1,829.6	4.1	4.0	85.86	-37.3	1,103.7	1,097.4	1,089.3	8.09	135.576		
1,900.0	1,894.7	1,930.4	1,928.9	4.4	4.3	86.29	-31.1	1,100.7	1,092.7	1,084.1	8.62	126.706		
2,000.0	1,993.7	2,030.0	2,028.3	4.7	4.5	86.72	-24.8	1,097.7	1,088.1	1,078.9	9.16	118.762		
2,100.0	2,092.7	2,129.5	2,127.6	5.0	4.7	87.15	-18.6	1,094.6	1,083.5	1,073.8	9.71	111.629		
2,200.0	2,191.7	2,229.1	2,226.9	5.3	5.0	87.59	-12.3	1,091.6	1,079.0	1,068.8	10.26	105.203		
2,300.0	2,290.7	2,328.6	2,326.2	5.6	5.2	88.03	-6.1	1,088.6	1,074.6	1,063.8	10.81	99.395		
2,400.0	2,389.7	2,428.2	2,425.5	5.9	5.5	88.48	0.2	1,085.6	1,070.2	1,058.9	11.37	94.129		
2,500.0	2,488.7	2,527.7	2,524.8	6.2	5.7	88.93	6.4	1,082.5	1,065.9	1,054.0	11.93	89.338		
2,600.0	2,587.7	2,627.3	2,624.1	6.6	6.0	89.38	12.7	1,079.5	1,061.7	1,049.2	12.50	84.965		
2,700.0	2,686.7	2,726.8	2,723.4	6.9	6.2	89.84	18.9	1,076.5	1,057.6	1,044.5	13.06	80.962		
2,800.0	2,785.7	2,826.4	2,822.8	7.2	6.5	90.30	25.2	1,073.5	1,053.5	1,039.8	13.63	77.287		
2,900.0	2,884.7	2,925.9	2,922.1	7.5	6.7	90.76	31.4	1,070.4	1,049.4	1,035.2	14.20	73.903		
3,000.0	2,983.7	3,025.5	3,021.4	7.9	7.0	91.23	37.7	1,067.4	1,045.5	1,030.7	14.77	70.780		
3,100.0	3,082.7	3,125.1	3,120.7	8.2	7.2	91.70	43.9	1,064.4	1,041.6	1,026.3	15.34	67.889		
3,200.0	3,181.7	3,224.6	3,220.0	8.5	7.5	92.17	50.2	1,061.4	1,037.8	1,021.9	15.92	65.208		
3,300.0	3,280.7	3,324.2	3,319.3	8.9	7.7	92.65	56.4	1,058.3	1,034.1	1,017.6	16.49	62.716		
3,400.0	3,379.7	3,423.7	3,418.6	9.2	8.0	93.13	62.7	1,055.3	1,030.4	1,013.3	17.06	60.394		
3,500.0	3,478.7	3,523.3	3,517.9	9.5	8.2	93.61	68.9	1,052.3	1,026.8	1,009.2	17.63	58.227		
3,600.0	3,577.6	3,622.8	3,617.3	9.9	8.5	94.10	75.2	1,049.3	1,023.3	1,005.1	18.21	56.200		
3,700.0	3,676.6	3,722.4	3,716.6	10.2	8.7	94.59	81.4	1,046.2	1,019.8	1,001.0	18.78	54.302		
3,800.0	3,775.6	3,821.9	3,815.9	10.5	9.0	95.08	87.7	1,043.2	1,016.5	997.1	19.35	52.521		
3,900.0	3,874.6	3,921.5	3,915.2	10.9	9.2	95.58	93.9	1,040.2	1,013.2	993.2	19.93	50.847		
4,000.0	3,973.6	4,021.0	4,014.5	11.2	9.5	96.08	100.2	1,037.2	1,009.9	989.4	20.50	49.272		
4,100.0	4,072.6	4,120.6	4,113.8	11.5	9.7	96.58	106.5	1,034.1	1,006.8	985.7	21.07	47.787		
4,200.0	4,171.6	4,220.2	4,213.1	11.9	10.0	97.09	112.7	1,031.1	1,003.7	982.1	21.64	46.386		
4,300.0	4,270.6	4,319.7	4,312.4	12.2	10.3	97.60	119.0	1,028.1	1,000.8	978.6	22.21	45.062		
4,400.0	4,369.6	4,419.3	4,411.7	12.5	10.5	98.11	125.2	1,025.1	997.9	975.1	22.78	43.810		
4,500.0	4,468.6	4,518.8	4,511.1	12.9	10.8	98.63	131.5	1,022.0	995.0	971.7	23.34	42.624		
4,600.0	4,567.6	4,618.4	4,610.4	13.2	11.0	99.15	137.7	1,019.0	992.3	968.4	23.91	41.499		
4,700.0	4,666.6	4,717.9	4,709.7	13.6	11.3	99.67	144.0	1,016.0	989.7	965.2	24.48	40.432		
4,800.0	4,765.6	4,817.5	4,809.0	13.9	11.5	100.19	150.2	1,013.0	987.1	962.0	25.04	39.419		
4,900.0	4,864.6	4,917.0	4,908.3	14.2	11.8	100.72	156.5	1,009.9	984.6	959.0	25.60	38.455		
5,000.0	4,963.6	5,018.8	5,009.2	14.6	12.1	101.25	162.8	1,006.8	981.3	955.5	26.17	37.500		
5,100.0	5,062.6	5,118.8	5,108.2	14.9	12.4	101.77	169.1	1,003.7	978.0	952.0	26.74	36.645		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2805A - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
5,200.0	5,161.6	6,100.0	5,639.2	15.2	22.1	64.43	781.0	714.6	820.7	782.0	38.71	21.199		
5,300.0	5,259.8	6,100.0	5,639.2	15.6	22.1	74.84	781.0	714.6	759.6	720.6	38.95	19.502		
5,400.0	5,353.1	6,136.8	5,639.2	16.2	22.7	81.26	815.5	701.6	703.5	663.5	39.96	17.602		
5,500.0	5,437.9	6,173.7	5,639.2	17.1	23.2	85.41	850.2	689.3	654.4	613.2	41.21	15.881		
5,600.0	5,511.2	6,222.2	5,639.2	18.1	24.0	87.46	896.3	674.1	613.0	570.1	42.96	14.269		
5,700.0	5,570.1	6,281.1	5,639.2	19.3	25.0	88.25	952.8	657.2	579.2	534.0	45.17	12.823		
5,800.0	5,612.6	6,348.6	5,639.2	20.7	26.1	88.56	1,018.0	640.0	551.9	504.2	47.72	11.567		
5,900.0	5,637.0	6,422.2	5,639.2	22.2	27.3	89.17	1,089.9	623.9	530.1	479.5	50.51	10.494		
6,000.0	5,643.0	6,500.0	5,639.2	23.8	28.5	90.25	1,166.3	609.9	512.7	459.3	53.47	9.590		
6,100.0	5,643.0	6,577.8	5,639.2	25.5	29.8	90.25	1,243.3	599.1	499.6	443.2	56.44	8.852		
6,200.0	5,643.0	6,656.9	5,639.2	27.1	31.1	90.26	1,322.0	591.3	490.6	431.1	59.46	8.250		
6,300.0	5,643.0	6,736.4	5,639.2	28.9	32.3	90.26	1,401.5	586.7	485.7	423.2	62.51	7.770		
6,367.1	5,643.0	6,789.9	5,639.2	30.0	33.2	90.26	1,454.9	585.5	484.8	420.2	64.54	7.512 CC		
6,400.0	5,643.0	6,818.6	5,639.2	30.6	33.7	90.26	1,483.6	585.4	485.0	419.3	65.61	7.391		
6,500.0	5,643.0	6,918.6	5,639.2	32.3	35.3	90.26	1,583.6	585.4	485.8	416.8	69.04	7.037		
6,600.0	5,643.0	7,018.6	5,639.2	34.1	36.9	90.26	1,683.6	585.4	486.7	414.2	72.51	6.712		
6,700.0	5,643.0	7,118.6	5,639.2	35.9	38.6	90.26	1,783.6	585.4	487.6	411.6	76.01	6.415		
6,800.0	5,643.0	7,218.6	5,639.2	37.7	40.2	90.26	1,883.6	585.4	488.4	408.9	79.54	6.141		
6,900.0	5,643.0	7,318.6	5,639.2	39.5	41.9	90.25	1,983.6	585.4	489.3	406.2	83.10	5.888		
7,000.0	5,643.0	7,418.6	5,639.2	41.3	43.6	90.25	2,083.6	585.4	490.2	403.5	86.69	5.655		
7,100.0	5,643.0	7,518.6	5,639.2	43.2	45.4	90.25	2,183.6	585.4	491.1	400.8	90.29	5.438		
7,200.0	5,643.0	7,618.6	5,639.2	45.0	47.1	90.25	2,283.6	585.4	491.9	398.0	93.92	5.238		
7,300.0	5,643.0	7,718.6	5,639.2	46.9	48.9	90.25	2,383.6	585.4	492.8	395.2	97.56	5.051		
7,400.0	5,643.0	7,818.6	5,639.2	48.7	50.7	90.25	2,483.6	585.4	493.7	392.4	101.22	4.877		
7,500.0	5,643.0	7,918.6	5,639.2	50.6	52.4	90.25	2,583.6	585.4	494.5	389.6	104.89	4.715		
7,600.0	5,643.0	8,018.6	5,639.2	52.4	54.2	90.25	2,683.6	585.4	495.4	386.8	108.57	4.563		
7,700.0	5,643.0	8,118.6	5,639.1	54.3	56.0	90.25	2,783.6	585.4	496.3	384.0	112.26	4.421		
7,800.0	5,643.0	8,218.5	5,639.1	56.2	57.8	90.25	2,883.6	585.3	497.1	381.2	115.96	4.287		
7,900.0	5,643.0	8,318.5	5,639.1	58.0	59.7	90.25	2,983.6	585.3	498.0	378.3	119.67	4.161		
8,000.0	5,643.0	8,418.5	5,639.1	59.9	61.5	90.25	3,083.6	585.3	498.9	375.5	123.39	4.043		
8,100.0	5,643.0	8,518.5	5,639.1	61.8	63.3	90.24	3,183.6	585.3	499.7	372.6	127.12	3.931		
8,200.0	5,643.0	8,618.5	5,639.1	63.7	65.1	90.24	3,283.6	585.3	500.6	369.8	130.85	3.826		
8,300.0	5,643.0	8,718.5	5,639.1	65.6	67.0	90.24	3,383.6	585.3	501.5	366.9	134.59	3.726		
8,400.0	5,643.0	8,818.5	5,639.1	67.4	68.8	90.24	3,483.5	585.3	502.4	364.0	138.33	3.631		
8,500.0	5,643.0	8,918.5	5,639.1	69.3	70.7	90.24	3,583.5	585.3	503.2	361.1	142.08	3.542		
8,600.0	5,643.0	9,018.5	5,639.1	71.2	72.5	90.24	3,683.5	585.3	504.1	358.3	145.84	3.457		
8,700.0	5,643.0	9,118.5	5,639.1	73.1	74.4	90.24	3,783.5	585.3	505.0	355.4	149.59	3.376		
8,800.0	5,643.0	9,218.5	5,639.1	75.0	76.2	90.24	3,883.5	585.3	505.8	352.5	153.36	3.298		
8,900.0	5,643.0	9,318.5	5,639.1	76.9	78.1	90.24	3,983.5	585.3	506.7	349.6	157.12	3.225		
9,000.0	5,643.0	9,418.5	5,639.1	78.8	79.9	90.24	4,083.5	585.3	507.6	346.7	160.89	3.155		
9,100.0	5,643.0	9,518.5	5,639.1	80.7	81.8	90.24	4,183.5	585.3	508.4	343.8	164.66	3.088		
9,200.0	5,643.0	9,618.5	5,639.1	82.6	83.7	90.24	4,283.5	585.3	509.3	340.9	168.44	3.024		
9,300.0	5,643.0	9,718.5	5,639.1	84.5	85.5	90.24	4,383.5	585.3	510.2	338.0	172.22	2.962		
9,400.0	5,643.0	9,818.5	5,639.1	86.4	87.4	90.23	4,483.5	585.3	511.1	335.1	176.00	2.904		
9,500.0	5,643.0	9,918.5	5,639.1	88.3	89.3	90.23	4,583.5	585.3	511.9	332.1	179.78	2.847		
9,600.0	5,643.0	10,018.5	5,639.1	90.2	91.2	90.23	4,683.5	585.3	512.8	329.2	183.57	2.794		
9,700.0	5,643.0	10,118.5	5,639.1	92.1	93.0	90.23	4,783.5	585.3	513.7	326.3	187.35	2.742		
9,800.0	5,643.0	10,218.5	5,639.1	94.0	94.9	90.23	4,883.5	585.3	514.5	323.4	191.14	2.692		
9,900.0	5,643.0	10,318.5	5,639.1	95.9	96.8	90.23	4,983.5	585.3	515.4	320.5	194.93	2.644		
10,000.0	5,643.0	10,418.5	5,639.1	97.8	98.7	90.23	5,083.5	585.3	516.3	317.5	198.73	2.598		
10,100.0	5,643.0	10,518.5	5,639.1	99.7	100.6	90.23	5,183.5	585.3	517.1	314.6	202.52	2.554		
10,200.0	5,643.0	10,618.5	5,639.1	101.6	102.5	90.23	5,283.5	585.3	518.0	311.7	206.32	2.511		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2805A - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis			
10,300.0	5,643.0	10,718.5	5,639.1	103.5	104.3	90.23	5,383.5	585.3	518.9	308.8	210.12	2.469		
10,400.0	5,643.0	10,818.5	5,639.1	105.4	106.2	90.23	5,483.5	585.3	519.8	305.8	213.92	2.430		
10,500.0	5,643.0	10,918.4	5,639.1	107.4	108.1	90.23	5,583.5	585.3	520.6	302.9	217.72	2.391		
10,600.0	5,643.0	11,018.4	5,639.1	109.3	110.0	90.23	5,683.5	585.3	521.5	300.0	221.52	2.354		
10,700.0	5,643.0	11,118.4	5,639.0	111.2	111.9	90.22	5,783.5	585.3	522.4	297.0	225.32	2.318		
10,800.0	5,643.0	11,218.4	5,639.0	113.1	113.8	90.22	5,883.5	585.3	523.2	294.1	229.13	2.284		
10,900.0	5,643.0	11,318.4	5,639.0	115.0	115.7	90.22	5,983.5	585.3	524.1	291.2	232.93	2.250		
11,000.0	5,643.0	11,418.4	5,639.0	116.9	117.6	90.22	6,083.4	585.3	525.0	288.2	236.74	2.217		
11,100.0	5,643.0	11,518.4	5,639.0	118.8	119.5	90.22	6,183.4	585.3	525.8	285.3	240.55	2.186		
11,200.0	5,643.0	11,618.4	5,639.0	120.7	121.4	90.22	6,283.4	585.2	526.7	282.4	244.36	2.156		
11,300.0	5,643.0	11,718.4	5,639.0	122.6	123.3	90.22	6,383.4	585.2	527.6	279.4	248.16	2.126		
11,400.0	5,643.0	11,818.4	5,639.0	124.5	125.2	90.22	6,483.4	585.2	528.4	276.5	251.97	2.097		
11,500.0	5,643.0	11,918.4	5,639.0	126.5	127.1	90.22	6,583.4	585.2	529.3	273.5	255.79	2.069		
11,600.0	5,643.0	12,018.4	5,639.0	128.4	129.0	90.22	6,683.4	585.2	530.2	270.6	259.60	2.042		
11,700.0	5,643.0	12,118.4	5,639.0	130.3	130.9	90.22	6,783.4	585.2	531.1	267.6	263.41	2.016		
11,800.0	5,643.0	12,218.4	5,639.0	132.2	132.8	90.22	6,883.4	585.2	531.9	264.7	267.22	1.991		
11,900.0	5,643.0	12,318.4	5,639.0	134.1	134.7	90.22	6,983.4	585.2	532.8	261.8	271.04	1.966		
12,000.0	5,643.0	12,418.4	5,639.0	136.0	136.6	90.22	7,083.4	585.2	533.7	258.8	274.85	1.942		
12,100.0	5,643.0	12,518.4	5,639.0	137.9	138.5	90.21	7,183.4	585.2	534.5	255.9	278.67	1.918		
12,179.0	5,643.0	12,597.4	5,639.0	139.5	140.0	90.21	7,262.4	585.2	535.2	253.5	281.68	1.900 ES, SF		

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2806B - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	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)				
0.0	0.0	0.0	0.0	0.0	0.0	93.83	-76.9	1,149.2	1,151.8					
100.0	100.0	94.0	94.0	0.1	0.1	93.83	-76.9	1,149.2	1,151.8	1,151.6	0.18	6,349.733		
200.0	200.0	194.0	194.0	0.3	0.3	93.83	-76.9	1,149.2	1,151.8	1,151.1	0.62	1,848.636		
300.0	300.0	294.0	294.0	0.5	0.5	93.83	-76.9	1,149.2	1,151.8	1,150.7	1.07	1,073.836		
400.0	400.0	394.0	394.0	0.8	0.8	93.83	-76.9	1,149.2	1,151.8	1,150.2	1.52	756.692		
500.0	500.0	494.0	494.0	1.0	1.0	93.83	-76.9	1,149.2	1,151.8	1,149.8	1.97	584.165		
600.0	600.0	594.0	594.0	1.2	1.2	93.83	-76.9	1,149.2	1,151.8	1,149.3	2.42	475.705		
700.0	700.0	694.0	694.0	1.4	1.4	93.83	-76.9	1,149.2	1,151.8	1,148.9	2.87	401.212		
800.0	800.0	794.0	794.0	1.7	1.7	93.83	-76.9	1,149.2	1,151.8	1,148.4	3.32	346.891		
900.0	900.0	894.0	894.0	1.9	1.9	93.83	-76.9	1,149.2	1,151.8	1,148.0	3.77	305.525		
1,000.0	1,000.0	994.0	994.0	2.1	2.1	93.83	-76.9	1,149.2	1,151.8	1,147.5	4.22	272.974		
1,100.0	1,100.0	1,094.0	1,094.0	2.3	2.3	93.83	-76.9	1,149.2	1,151.8	1,147.1	4.67	246.691		
1,200.0	1,200.0	1,201.0	1,200.9	2.6	2.6	83.79	-75.1	1,149.0	1,151.3	1,146.2	5.13	224.342		
1,300.0	1,299.8	1,307.8	1,307.6	2.8	2.8	83.82	-69.4	1,148.4	1,149.8	1,144.2	5.60	205.489		
1,400.0	1,399.5	1,407.7	1,407.3	3.0	3.0	83.95	-62.5	1,147.7	1,147.7	1,141.6	6.05	189.576		
1,500.0	1,498.7	1,507.6	1,506.9	3.3	3.3	84.26	-55.5	1,146.9	1,145.2	1,138.6	6.53	175.362		
1,600.0	1,597.7	1,607.3	1,606.3	3.5	3.5	84.62	-48.6	1,146.2	1,142.5	1,135.5	7.03	162.596		
1,700.0	1,696.7	1,707.0	1,705.8	3.8	3.7	84.99	-41.7	1,145.5	1,139.9	1,132.4	7.54	151.194		
1,800.0	1,795.7	1,806.7	1,805.3	4.1	4.0	85.35	-34.8	1,144.7	1,137.3	1,129.3	8.06	141.029		
1,900.0	1,894.7	1,906.4	1,904.7	4.4	4.2	85.72	-27.9	1,144.0	1,134.8	1,126.2	8.60	131.956		
2,000.0	1,993.7	2,006.1	2,004.2	4.7	4.5	86.09	-20.9	1,143.3	1,132.3	1,123.2	9.14	123.839		
2,100.0	2,092.7	2,105.8	2,103.6	5.0	4.7	86.46	-14.0	1,142.5	1,129.9	1,120.2	9.69	116.556		
2,200.0	2,191.7	2,205.5	2,203.1	5.3	5.0	86.83	-7.1	1,141.8	1,127.6	1,117.3	10.25	110.000		
2,300.0	2,290.7	2,305.2	2,302.6	5.6	5.2	87.20	-0.2	1,141.1	1,125.2	1,114.4	10.81	104.078		
2,400.0	2,389.7	2,404.9	2,402.0	5.9	5.5	87.57	6.7	1,140.3	1,122.9	1,111.6	11.38	98.709		
2,500.0	2,488.7	2,504.6	2,501.5	6.2	5.7	87.95	13.6	1,139.6	1,120.7	1,108.8	11.94	93.827		
2,600.0	2,587.7	2,604.3	2,600.9	6.6	5.9	88.33	20.6	1,138.9	1,118.5	1,106.0	12.52	89.372		
2,700.0	2,686.7	2,704.0	2,700.4	6.9	6.2	88.71	27.5	1,138.1	1,116.4	1,103.3	13.09	85.294		
2,800.0	2,785.7	2,803.7	2,799.9	7.2	6.4	89.09	34.4	1,137.4	1,114.3	1,100.7	13.66	81.549		
2,900.0	2,884.7	2,903.4	2,899.3	7.5	6.7	89.47	41.3	1,136.7	1,112.3	1,098.0	14.24	78.102		
3,000.0	2,983.7	3,003.1	2,998.8	7.9	6.9	89.85	48.2	1,135.9	1,110.3	1,095.5	14.82	74.919		
3,100.0	3,082.7	3,102.8	3,098.2	8.2	7.2	90.23	55.1	1,135.2	1,108.4	1,093.0	15.40	71.973		
3,200.0	3,181.7	3,202.5	3,197.7	8.5	7.5	90.62	62.0	1,134.5	1,106.5	1,090.5	15.98	69.240		
3,300.0	3,280.7	3,302.2	3,297.2	8.9	7.7	91.01	69.0	1,133.7	1,104.6	1,088.1	16.56	66.698		
3,400.0	3,379.7	3,401.9	3,396.6	9.2	8.0	91.39	75.9	1,133.0	1,102.9	1,085.7	17.14	64.329		
3,500.0	3,478.7	3,501.6	3,496.1	9.5	8.2	91.78	82.8	1,132.3	1,101.1	1,083.4	17.73	62.117		
3,600.0	3,577.6	3,601.3	3,595.5	9.9	8.5	92.17	89.7	1,131.5	1,099.4	1,081.1	18.31	60.047		
3,700.0	3,676.6	3,701.0	3,695.0	10.2	8.7	92.56	96.6	1,130.8	1,097.8	1,078.9	18.89	58.107		
3,800.0	3,775.6	3,800.7	3,794.5	10.5	9.0	92.96	103.5	1,130.1	1,096.2	1,076.8	19.48	56.285		
3,900.0	3,874.6	3,900.4	3,893.9	10.9	9.2	93.35	110.5	1,129.3	1,094.7	1,074.7	20.06	54.572		
4,000.0	3,973.6	4,000.1	3,993.4	11.2	9.5	93.75	117.4	1,128.6	1,093.2	1,072.6	20.64	52.958		
4,100.0	4,072.6	4,099.8	4,092.8	11.5	9.7	94.14	124.3	1,127.9	1,091.8	1,070.6	21.23	51.435		
4,200.0	4,171.6	4,199.5	4,192.3	11.9	10.0	94.54	131.2	1,127.1	1,090.4	1,068.6	21.81	49.997		
4,300.0	4,270.6	4,299.2	4,291.8	12.2	10.2	94.94	138.1	1,126.4	1,089.1	1,066.7	22.39	48.637		
4,400.0	4,369.6	4,398.9	4,391.2	12.5	10.5	95.34	145.0	1,125.7	1,087.9	1,064.9	22.98	47.349		
4,500.0	4,468.6	4,498.6	4,490.7	12.9	10.7	95.74	152.0	1,124.9	1,086.7	1,063.1	23.56	46.128		
4,600.0	4,567.6	4,598.3	4,590.1	13.2	11.0	96.14	158.9	1,124.2	1,085.5	1,061.4	24.14	44.969		
4,700.0	4,666.6	4,698.0	4,689.6	13.6	11.2	96.54	165.8	1,123.5	1,084.4	1,059.7	24.72	43.867		
4,800.0	4,765.6	4,797.7	4,789.1	13.9	11.5	96.94	172.7	1,122.7	1,083.3	1,058.0	25.30	42.819		
4,900.0	4,864.6	4,897.4	4,888.5	14.2	11.8	97.34	179.6	1,122.0	1,082.4	1,056.5	25.88	41.821		
5,000.0	4,963.6	4,997.2	4,988.0	14.6	12.0	97.75	186.5	1,121.3	1,081.4	1,055.0	26.46	40.871		
5,100.0	5,062.6	5,096.9	5,087.4	14.9	12.3	98.15	193.5	1,120.5	1,080.5	1,053.5	27.04	39.964		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2806B - HZ - Plan #1												Offset Site Error: 0.0 ft	
Survey Program: 0-ISCWSA 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)	Total Uncertainty Axis		Separation Factor
5,200.0	5,161.6	5,196.6	5,186.9	15.2	12.5	98.56	200.4	1,119.8	1,079.7	1,052.1	27.62	39.098	
5,300.0	5,259.8	5,593.2	5,550.3	15.6	14.4	101.64	335.6	1,105.5	1,073.5	1,043.5	29.95	35.845	
5,400.0	5,353.1	5,949.2	5,716.5	16.2	18.4	95.02	640.8	1,073.1	1,041.3	1,006.2	35.07	29.691	
5,500.0	5,437.9	6,049.4	5,722.8	17.1	19.9	95.01	740.2	1,062.7	1,007.6	970.1	37.44	26.912	
5,600.0	5,511.2	6,100.0	5,722.8	18.1	20.6	96.22	790.6	1,058.5	982.1	943.0	39.15	25.088	
5,700.0	5,570.1	6,148.0	5,722.8	19.3	21.3	96.71	838.4	1,055.8	965.3	924.3	40.99	23.549	
5,800.0	5,612.6	6,217.4	5,722.8	20.7	22.3	96.15	907.9	1,053.8	956.3	912.9	43.42	22.023	
5,900.0	5,637.0	6,314.2	5,722.8	22.2	23.8	95.32	1,004.6	1,051.7	951.7	905.2	46.55	20.447	
6,000.0	5,643.0	6,413.9	5,722.8	23.8	25.4	95.18	1,104.3	1,049.5	949.7	899.9	49.78	19.077	
6,100.0	5,643.0	6,513.9	5,722.8	25.5	27.1	95.19	1,204.2	1,047.4	948.4	895.3	53.10	17.861	
6,200.0	5,643.0	6,613.9	5,722.8	27.1	28.8	95.20	1,304.2	1,045.2	947.1	890.6	56.49	16.767	
6,300.0	5,643.0	6,713.8	5,722.8	28.9	30.5	95.20	1,404.2	1,043.0	945.8	885.9	59.93	15.783	
6,400.0	5,643.0	6,813.8	5,722.8	30.6	32.3	95.21	1,504.1	1,040.8	944.5	881.1	63.41	14.894	
6,500.0	5,643.0	6,913.8	5,722.8	32.3	34.1	95.22	1,604.1	1,038.6	943.2	876.3	66.94	14.090	
6,600.0	5,643.0	7,013.8	5,722.8	34.1	35.9	95.23	1,704.1	1,036.4	941.9	871.4	70.50	13.360	
6,700.0	5,643.0	7,113.8	5,722.8	35.9	37.7	95.23	1,804.0	1,034.3	940.6	866.5	74.09	12.695	
6,800.0	5,643.0	7,213.8	5,722.8	37.7	39.5	95.24	1,904.0	1,032.1	939.3	861.6	77.70	12.088	
6,900.0	5,643.0	7,313.8	5,722.8	39.5	41.3	95.25	2,004.0	1,029.9	938.0	856.6	81.34	11.532	
7,000.0	5,643.0	7,413.8	5,722.8	41.3	43.1	95.26	2,104.0	1,027.7	936.7	851.7	84.99	11.021	
7,100.0	5,643.0	7,513.8	5,722.8	43.2	45.0	95.26	2,203.9	1,025.5	935.4	846.7	88.66	10.550	
7,200.0	5,643.0	7,613.8	5,722.8	45.0	46.8	95.27	2,303.9	1,023.3	934.1	841.7	92.34	10.115	
7,300.0	5,643.0	7,713.8	5,722.8	46.9	48.7	95.28	2,403.9	1,021.2	932.8	836.7	96.04	9.713	
7,400.0	5,643.0	7,813.8	5,722.8	48.7	50.5	95.29	2,503.8	1,019.0	931.5	831.7	99.74	9.339	
7,500.0	5,643.0	7,913.7	5,722.8	50.6	52.4	95.29	2,603.8	1,016.8	930.1	826.7	103.46	8.991	
7,600.0	5,643.0	8,013.7	5,722.8	52.4	54.3	95.30	2,703.8	1,014.6	928.8	821.7	107.18	8.666	
7,700.0	5,643.0	8,113.7	5,722.8	54.3	56.1	95.31	2,803.7	1,012.4	927.5	816.6	110.92	8.362	
7,800.0	5,643.0	8,213.7	5,722.8	56.2	58.0	95.32	2,903.7	1,010.2	926.2	811.6	114.66	8.078	
7,900.0	5,643.0	8,313.7	5,722.8	58.0	59.9	95.33	3,003.7	1,008.1	924.9	806.5	118.40	7.812	
8,000.0	5,643.0	8,413.7	5,722.8	59.9	61.8	95.33	3,103.6	1,005.9	923.6	801.5	122.15	7.561	
8,100.0	5,643.0	8,513.7	5,722.8	61.8	63.7	95.34	3,203.6	1,003.7	922.3	796.4	125.91	7.325	
8,200.0	5,643.0	8,613.7	5,722.9	63.7	65.6	95.35	3,303.6	1,001.5	921.0	791.3	129.67	7.102	
8,300.0	5,643.0	8,713.7	5,722.9	65.6	67.4	95.36	3,403.5	999.3	919.7	786.3	133.44	6.892	
8,400.0	5,643.0	8,813.7	5,722.9	67.4	69.3	95.36	3,503.5	997.1	918.4	781.2	137.21	6.693	
8,500.0	5,643.0	8,913.7	5,722.9	69.3	71.2	95.37	3,603.5	995.0	917.1	776.1	140.99	6.505	
8,600.0	5,643.0	9,013.7	5,722.9	71.2	73.1	95.38	3,703.4	992.8	915.8	771.0	144.76	6.326	
8,700.0	5,643.0	9,113.6	5,722.9	73.1	75.0	95.39	3,803.4	990.6	914.5	765.9	148.54	6.156	
8,800.0	5,643.0	9,213.6	5,722.9	75.0	76.9	95.40	3,903.4	988.4	913.2	760.9	152.33	5.995	
8,900.0	5,643.0	9,313.6	5,722.9	76.9	78.8	95.40	4,003.3	986.2	911.9	755.8	156.11	5.841	
9,000.0	5,643.0	9,413.6	5,722.9	78.8	80.7	95.41	4,103.3	984.0	910.6	750.7	159.90	5.694	
9,100.0	5,643.0	9,513.6	5,722.9	80.7	82.6	95.42	4,203.3	981.9	909.3	745.6	163.70	5.555	
9,200.0	5,643.0	9,613.6	5,722.9	82.6	84.5	95.43	4,303.2	979.7	908.0	740.5	167.49	5.421	
9,300.0	5,643.0	9,713.6	5,722.9	84.5	86.4	95.44	4,403.2	977.5	906.7	735.4	171.28	5.293	
9,400.0	5,643.0	9,813.6	5,722.9	86.4	88.3	95.44	4,503.2	975.3	905.3	730.3	175.08	5.171	
9,500.0	5,643.0	9,913.6	5,722.9	88.3	90.2	95.45	4,603.1	973.1	904.0	725.2	178.88	5.054	
9,600.0	5,643.0	10,013.6	5,722.9	90.2	92.1	95.46	4,703.1	970.9	902.7	720.1	182.68	4.942	
9,700.0	5,643.0	10,113.6	5,722.9	92.1	94.0	95.47	4,803.1	968.8	901.4	715.0	186.48	4.834	
9,800.0	5,643.0	10,213.5	5,722.9	94.0	96.0	95.48	4,903.0	966.6	900.1	709.8	190.29	4.730	
9,900.0	5,643.0	10,313.5	5,722.9	95.9	97.9	95.49	5,003.0	964.4	898.8	704.7	194.09	4.631	
10,000.0	5,643.0	10,413.5	5,722.9	97.8	99.8	95.49	5,103.0	962.2	897.5	699.6	197.90	4.535	
10,100.0	5,643.0	10,513.5	5,722.9	99.7	101.7	95.50	5,202.9	960.0	896.2	694.5	201.70	4.443	
10,200.0	5,643.0	10,613.5	5,722.9	101.6	103.6	95.51	5,302.9	957.8	894.9	689.4	205.51	4.355	
10,300.0	5,643.0	10,713.5	5,722.9	103.5	105.5	95.52	5,402.9	955.6	893.6	684.3	209.32	4.269	

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2806B - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis			
10,400.0	5,643.0	10,813.5	5,722.9	105.4	107.4	95.53	5,502.8	953.5	892.3	679.2	213.13	4.187		
10,500.0	5,643.0	10,913.5	5,722.9	107.4	109.3	95.54	5,602.8	951.3	891.0	674.1	216.94	4.107		
10,600.0	5,643.0	11,013.5	5,722.9	109.3	111.2	95.54	5,702.8	949.1	889.7	668.9	220.75	4.030		
10,700.0	5,643.0	11,113.5	5,722.9	111.2	113.2	95.55	5,802.8	946.9	888.4	663.8	224.57	3.956		
10,800.0	5,643.0	11,213.5	5,722.9	113.1	115.1	95.56	5,902.7	944.7	887.1	658.7	228.38	3.884		
10,900.0	5,643.0	11,313.5	5,723.0	115.0	117.0	95.57	6,002.7	942.5	885.8	653.6	232.19	3.815		
11,000.0	5,643.0	11,413.4	5,723.0	116.9	118.9	95.58	6,102.7	940.4	884.5	648.5	236.01	3.748		
11,100.0	5,643.0	11,513.4	5,723.0	118.8	120.8	95.59	6,202.6	938.2	883.2	643.3	239.82	3.683		
11,200.0	5,643.0	11,613.4	5,723.0	120.7	122.7	95.59	6,302.6	936.0	881.9	638.2	243.64	3.620		
11,300.0	5,643.0	11,713.4	5,723.0	122.6	124.6	95.60	6,402.6	933.8	880.6	633.1	247.46	3.558		
11,400.0	5,643.0	11,813.4	5,723.0	124.5	126.6	95.61	6,502.5	931.6	879.3	628.0	251.27	3.499		
11,500.0	5,643.0	11,913.4	5,723.0	126.5	128.5	95.62	6,602.5	929.4	877.9	622.9	255.09	3.442		
11,600.0	5,643.0	12,013.4	5,723.0	128.4	130.4	95.63	6,702.5	927.3	876.6	617.7	258.91	3.386		
11,700.0	5,643.0	12,113.4	5,723.0	130.3	132.3	95.64	6,802.4	925.1	875.3	612.6	262.73	3.332		
11,800.0	5,643.0	12,213.4	5,723.0	132.2	134.2	95.65	6,902.4	922.9	874.0	607.5	266.55	3.279		
11,900.0	5,643.0	12,313.4	5,723.0	134.1	136.1	95.65	7,002.4	920.7	872.7	602.4	270.37	3.228		
12,000.0	5,643.0	12,413.4	5,723.0	136.0	138.1	95.66	7,102.3	918.5	871.4	597.2	274.19	3.178		
12,100.0	5,643.0	12,513.4	5,723.0	137.9	140.0	95.67	7,202.3	916.3	870.1	592.1	278.01	3.130		
12,173.6	5,643.0	12,575.6	5,723.0	139.4	141.2	95.68	7,264.6	915.0	869.2	588.6	280.59	3.098 CC		
12,179.0	5,643.0	12,575.6	5,723.0	139.5	141.2	95.68	7,264.6	915.0	869.3	588.6	280.69	3.097 ES, SF		

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2807A - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	94.03	-83.0	1,179.1	1,182.0					
100.0	100.0	94.0	94.0	0.1	0.1	94.03	-83.0	1,179.1	1,182.0	1,181.8	0.18	6,516.559		
200.0	200.0	194.0	194.0	0.3	0.3	94.03	-83.0	1,179.1	1,182.0	1,181.4	0.62	1,897.204		
300.0	300.0	294.0	294.0	0.5	0.5	94.03	-83.0	1,179.1	1,182.0	1,180.9	1.07	1,102.048		
400.0	400.0	394.0	394.0	0.8	0.8	94.03	-83.0	1,179.1	1,182.0	1,180.5	1.52	776.572		
500.0	500.0	494.0	494.0	1.0	1.0	94.03	-83.0	1,179.1	1,182.0	1,180.0	1.97	599.513		
600.0	600.0	594.0	594.0	1.2	1.2	94.03	-83.0	1,179.1	1,182.0	1,179.6	2.42	488.203		
700.0	700.0	694.0	694.0	1.4	1.4	94.03	-83.0	1,179.1	1,182.0	1,179.1	2.87	411.753		
800.0	800.0	794.0	794.0	1.7	1.7	94.03	-83.0	1,179.1	1,182.0	1,178.7	3.32	356.005		
900.0	900.0	894.0	894.0	1.9	1.9	94.03	-83.0	1,179.1	1,182.0	1,178.2	3.77	313.552		
1,000.0	1,000.0	994.0	994.0	2.1	2.1	94.03	-83.0	1,179.1	1,182.0	1,177.8	4.22	280.146		
1,100.0	1,100.0	1,093.8	1,093.7	2.3	2.3	93.95	-81.5	1,179.2	1,182.0	1,177.4	4.67	253.257		
1,200.0	1,200.0	1,193.4	1,193.2	2.6	2.6	83.75	-76.5	1,179.6	1,181.9	1,176.8	5.11	231.113		
1,300.0	1,299.8	1,293.3	1,292.9	2.8	2.8	83.67	-69.6	1,180.1	1,181.4	1,175.8	5.57	212.269		
1,400.0	1,399.5	1,393.3	1,392.7	3.0	3.0	83.77	-62.6	1,180.6	1,180.5	1,174.5	6.03	195.853		
1,500.0	1,498.7	1,493.2	1,492.3	3.3	3.2	84.05	-55.7	1,181.2	1,179.2	1,172.7	6.51	181.221		
1,600.0	1,597.7	1,592.9	1,591.8	3.5	3.5	84.39	-48.8	1,181.7	1,177.8	1,170.8	7.01	168.103		
1,700.0	1,696.7	1,692.6	1,691.3	3.8	3.7	84.74	-41.8	1,182.2	1,176.4	1,168.9	7.52	156.404		
1,800.0	1,795.7	1,792.4	1,790.8	4.1	4.0	85.09	-34.9	1,182.7	1,175.1	1,167.0	8.05	145.987		
1,900.0	1,894.7	1,892.1	1,890.3	4.4	4.2	85.43	-27.9	1,183.3	1,173.8	1,165.2	8.59	136.697		
2,000.0	1,993.7	1,991.8	1,989.8	4.7	4.5	85.78	-21.0	1,183.8	1,172.6	1,163.4	9.13	128.392		
2,100.0	2,092.7	2,091.6	2,089.2	5.0	4.7	86.13	-14.1	1,184.3	1,171.3	1,161.7	9.69	120.944		
2,200.0	2,191.7	2,191.3	2,188.7	5.3	5.0	86.48	-7.1	1,184.8	1,170.2	1,159.9	10.24	114.242		
2,300.0	2,290.7	2,291.1	2,288.2	5.6	5.2	86.83	-0.2	1,185.4	1,169.1	1,158.3	10.81	108.189		
2,400.0	2,389.7	2,390.8	2,387.7	5.9	5.4	87.18	6.7	1,185.9	1,168.0	1,156.6	11.37	102.705		
2,500.0	2,488.7	2,490.5	2,487.2	6.2	5.7	87.53	13.7	1,186.4	1,167.0	1,155.0	11.94	97.717		
2,600.0	2,587.7	2,590.3	2,586.7	6.6	5.9	87.88	20.6	1,186.9	1,166.0	1,153.5	12.52	93.166		
2,700.0	2,686.7	2,690.0	2,686.2	6.9	6.2	88.24	27.6	1,187.5	1,165.0	1,151.9	13.09	89.001		
2,800.0	2,785.7	2,789.7	2,785.7	7.2	6.4	88.59	34.5	1,188.0	1,164.1	1,150.5	13.67	85.176		
2,900.0	2,884.7	2,889.5	2,885.2	7.5	6.7	88.94	41.4	1,188.5	1,163.3	1,149.0	14.25	81.655		
3,000.0	2,983.7	2,989.2	2,984.7	7.9	7.0	89.30	48.4	1,189.0	1,162.5	1,147.6	14.83	78.404		
3,100.0	3,082.7	3,088.9	3,084.2	8.2	7.2	89.65	55.3	1,189.6	1,161.7	1,146.3	15.41	75.394		
3,200.0	3,181.7	3,188.7	3,183.7	8.5	7.5	90.01	62.2	1,190.1	1,161.0	1,145.0	15.99	72.601		
3,300.0	3,280.7	3,288.4	3,283.2	8.9	7.7	90.36	69.2	1,190.6	1,160.3	1,143.7	16.58	70.004		
3,400.0	3,379.7	3,388.2	3,382.7	9.2	8.0	90.72	76.1	1,191.1	1,159.7	1,142.5	17.16	67.583		
3,500.0	3,478.7	3,487.9	3,482.2	9.5	8.2	91.08	83.1	1,191.7	1,159.1	1,141.4	17.74	65.321		
3,600.0	3,577.6	3,587.6	3,581.7	9.9	8.5	91.43	90.0	1,192.2	1,158.6	1,140.2	18.33	63.205		
3,700.0	3,676.6	3,687.4	3,681.1	10.2	8.7	91.79	96.9	1,192.7	1,158.1	1,139.2	18.92	61.220		
3,800.0	3,775.6	3,787.1	3,780.6	10.5	9.0	92.15	103.9	1,193.2	1,157.6	1,138.1	19.50	59.357		
3,900.0	3,874.6	3,886.8	3,880.1	10.9	9.2	92.50	110.8	1,193.8	1,157.2	1,137.1	20.09	57.603		
4,000.0	3,973.6	3,986.6	3,979.6	11.2	9.5	92.86	117.7	1,194.3	1,156.9	1,136.2	20.68	55.952		
4,100.0	4,072.6	4,086.3	4,079.1	11.5	9.7	93.22	124.7	1,194.8	1,156.5	1,135.3	21.26	54.393		
4,200.0	4,171.6	4,186.0	4,178.6	11.9	10.0	93.58	131.6	1,195.3	1,156.3	1,134.4	21.85	52.920		
4,300.0	4,270.6	4,285.8	4,278.1	12.2	10.2	93.94	138.6	1,195.9	1,156.1	1,133.6	22.44	51.526		
4,400.0	4,369.6	4,385.5	4,377.6	12.5	10.5	94.29	145.5	1,196.4	1,155.9	1,132.9	23.02	50.206		
4,500.0	4,468.6	4,485.3	4,477.1	12.9	10.7	94.65	152.4	1,196.9	1,155.8	1,132.1	23.61	48.953		
4,600.0	4,567.6	4,585.0	4,576.6	13.2	11.0	95.01	159.4	1,197.4	1,155.7	1,131.5	24.20	47.764		
4,700.0	4,666.6	4,684.7	4,676.1	13.6	11.3	95.37	166.3	1,198.0	1,155.6	1,130.8	24.78	46.633		
4,737.2	4,703.4	4,721.8	4,713.0	13.7	11.3	95.50	168.9	1,198.2	1,155.6	1,130.6	25.00	46.227		
4,800.0	4,765.6	4,784.5	4,775.6	13.9	11.5	95.73	173.2	1,198.5	1,155.6	1,130.3	25.37	45.557		
4,900.0	4,864.6	4,884.2	4,875.1	14.2	11.8	96.09	180.2	1,199.0	1,155.7	1,129.7	25.95	44.533		
5,000.0	4,963.6	4,983.9	4,974.6	14.6	12.0	96.45	187.1	1,199.5	1,155.8	1,129.2	26.54	43.555		

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



# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design S33-T10N-R58W - Razor #33N-2807A - HZ - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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)	Uncertainty Axis			
5,100.0	5,062.6	5,083.7	5,074.1	14.9	12.3	96.80	194.1	1,200.1	1,155.9	1,128.8	27.12	42.622		
5,200.0	5,161.6	5,202.3	5,192.3	15.2	12.6	97.16	203.7	1,200.8	1,156.0	1,128.2	27.76	41.637		
5,300.0	5,259.8	5,393.1	5,372.0	15.6	13.4	101.20	264.4	1,205.4	1,151.8	1,122.8	29.01	39.701		
5,400.0	5,353.1	5,562.4	5,503.9	16.2	14.7	101.52	369.0	1,213.3	1,146.3	1,115.4	30.86	37.147		
5,500.0	5,437.9	5,706.9	5,584.9	17.1	16.2	99.97	487.8	1,222.3	1,141.7	1,108.5	33.17	34.417		
5,600.0	5,511.2	5,830.3	5,626.0	18.1	17.8	97.78	603.6	1,231.0	1,139.4	1,103.6	35.78	31.840		
5,622.4	5,525.7	5,855.7	5,630.9	18.4	18.1	97.24	628.3	1,232.9	1,139.3	1,102.9	36.37	31.326 CC		
5,700.0	5,570.1	5,937.8	5,638.7	19.3	19.3	95.26	709.8	1,239.1	1,140.3	1,101.8	38.55	29.583		
5,800.0	5,612.6	6,115.4	5,638.7	20.7	21.8	91.51	887.2	1,245.1	1,140.7	1,098.2	42.55	26.810		
5,863.9	5,630.4	6,176.7	5,638.7	21.7	22.8	90.74	948.5	1,245.1	1,140.5	1,096.0	44.46	25.654		
5,900.0	5,637.0	6,212.2	5,638.7	22.2	23.3	90.42	984.0	1,245.1	1,140.5	1,094.9	45.60	25.014		
6,000.0	5,643.0	6,311.9	5,638.7	23.8	25.0	90.09	1,083.7	1,245.1	1,141.2	1,092.4	48.81	23.383		
6,100.0	5,643.0	6,411.9	5,638.7	25.5	26.6	90.09	1,183.7	1,245.1	1,142.1	1,090.0	52.11	21.916		
6,200.0	5,643.0	6,511.8	5,638.7	27.1	28.3	90.09	1,283.7	1,245.1	1,142.9	1,087.5	55.48	20.599		
6,300.0	5,643.0	6,611.8	5,638.7	28.9	30.0	90.09	1,383.7	1,245.1	1,143.8	1,084.9	58.92	19.414		
6,400.0	5,643.0	6,711.8	5,638.7	30.6	31.8	90.09	1,483.7	1,245.1	1,144.7	1,082.3	62.39	18.346		
6,500.0	5,643.0	6,811.8	5,638.8	32.3	33.6	90.09	1,583.6	1,245.1	1,145.6	1,079.6	65.91	17.380		
6,600.0	5,643.0	6,911.8	5,638.8	34.1	35.3	90.09	1,683.6	1,245.1	1,146.4	1,077.0	69.47	16.503		
6,700.0	5,643.0	7,011.8	5,638.8	35.9	37.1	90.09	1,783.6	1,245.1	1,147.3	1,074.2	73.05	15.706		
6,800.0	5,643.0	7,111.8	5,638.8	37.7	38.9	90.09	1,883.6	1,245.1	1,148.2	1,071.5	76.65	14.979		
6,900.0	5,643.0	7,211.8	5,638.8	39.5	40.8	90.09	1,983.6	1,245.1	1,149.0	1,068.7	80.28	14.313		
7,000.0	5,643.0	7,311.8	5,638.8	41.3	42.6	90.09	2,083.6	1,245.1	1,149.9	1,066.0	83.93	13.701		
7,100.0	5,643.0	7,411.8	5,638.8	43.2	44.4	90.09	2,183.6	1,245.1	1,150.8	1,063.2	87.59	13.138		
7,200.0	5,643.0	7,511.8	5,638.8	45.0	46.3	90.09	2,283.6	1,245.1	1,151.6	1,060.4	91.27	12.618		
7,300.0	5,643.0	7,611.8	5,638.8	46.9	48.1	90.09	2,383.6	1,245.1	1,152.5	1,057.5	94.96	12.137		
7,400.0	5,643.0	7,711.8	5,638.8	48.7	50.0	90.09	2,483.6	1,245.1	1,153.4	1,054.7	98.66	11.691		
7,500.0	5,643.0	7,811.8	5,638.8	50.6	51.8	90.09	2,583.6	1,245.1	1,154.2	1,051.9	102.37	11.275		
7,600.0	5,643.0	7,911.8	5,638.8	52.4	53.7	90.09	2,683.6	1,245.1	1,155.1	1,049.0	106.09	10.888		
7,700.0	5,643.0	8,011.8	5,638.8	54.3	55.5	90.09	2,783.6	1,245.1	1,156.0	1,046.2	109.82	10.526		
7,800.0	5,643.0	8,111.8	5,638.8	56.2	57.4	90.09	2,883.6	1,245.1	1,156.9	1,043.3	113.55	10.188		
7,900.0	5,643.0	8,211.8	5,638.8	58.0	59.3	90.09	2,983.6	1,245.1	1,157.7	1,040.4	117.30	9.870		
8,000.0	5,643.0	8,311.8	5,638.8	59.9	61.2	90.09	3,083.6	1,245.1	1,158.6	1,037.5	121.04	9.572		
8,100.0	5,643.0	8,411.8	5,638.8	61.8	63.0	90.09	3,183.6	1,245.1	1,159.5	1,034.7	124.80	9.291		
8,200.0	5,643.0	8,511.8	5,638.8	63.7	64.9	90.09	3,283.6	1,245.0	1,160.3	1,031.8	128.56	9.026		
8,300.0	5,643.0	8,611.8	5,638.8	65.6	66.8	90.09	3,383.6	1,245.0	1,161.2	1,028.9	132.32	8.776		
8,400.0	5,643.0	8,711.8	5,638.8	67.4	68.7	90.09	3,483.6	1,245.0	1,162.1	1,026.0	136.09	8.539		
8,500.0	5,643.0	8,811.8	5,638.8	69.3	70.6	90.09	3,583.6	1,245.0	1,162.9	1,023.1	139.86	8.315		
8,600.0	5,643.0	8,911.8	5,638.8	71.2	72.5	90.09	3,683.6	1,245.0	1,163.8	1,020.2	143.64	8.102		
8,700.0	5,643.0	9,011.8	5,638.8	73.1	74.4	90.09	3,783.6	1,245.0	1,164.7	1,017.2	147.43	7.900		
8,800.0	5,643.0	9,111.8	5,638.9	75.0	76.3	90.09	3,883.6	1,245.0	1,165.5	1,014.3	151.21	7.708		
8,900.0	5,643.0	9,211.7	5,638.9	76.9	78.1	90.09	3,983.6	1,245.0	1,166.4	1,011.4	155.00	7.525		
9,000.0	5,643.0	9,311.7	5,638.9	78.8	80.0	90.09	4,083.6	1,245.0	1,167.3	1,008.5	158.79	7.351		
9,100.0	5,643.0	9,411.7	5,638.9	80.7	81.9	90.09	4,183.5	1,245.0	1,168.1	1,005.6	162.59	7.185		
9,200.0	5,643.0	9,511.7	5,638.9	82.6	83.8	90.09	4,283.5	1,245.0	1,169.0	1,002.6	166.38	7.026		
9,300.0	5,643.0	9,611.7	5,638.9	84.5	85.7	90.09	4,383.5	1,245.0	1,169.9	999.7	170.18	6.874		
9,400.0	5,643.0	9,711.7	5,638.9	86.4	87.6	90.09	4,483.5	1,245.0	1,170.8	996.8	173.98	6.729		
9,500.0	5,643.0	9,811.7	5,638.9	88.3	89.5	90.09	4,583.5	1,245.0	1,171.6	993.8	177.79	6.590		
9,600.0	5,643.0	9,911.7	5,638.9	90.2	91.4	90.09	4,683.5	1,245.0	1,172.5	990.9	181.59	6.457		
9,700.0	5,643.0	10,011.7	5,638.9	92.1	93.3	90.09	4,783.5	1,245.0	1,173.4	988.0	185.40	6.329		
9,800.0	5,643.0	10,111.7	5,638.9	94.0	95.2	90.09	4,883.5	1,245.0	1,174.2	985.0	189.20	6.206		
9,900.0	5,643.0	10,211.7	5,638.9	95.9	97.1	90.09	4,983.5	1,245.0	1,175.1	982.1	193.01	6.088		
10,000.0	5,643.0	10,311.7	5,638.9	97.8	99.0	90.09	5,083.5	1,245.0	1,176.0	979.1	196.82	5.975		

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

# Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

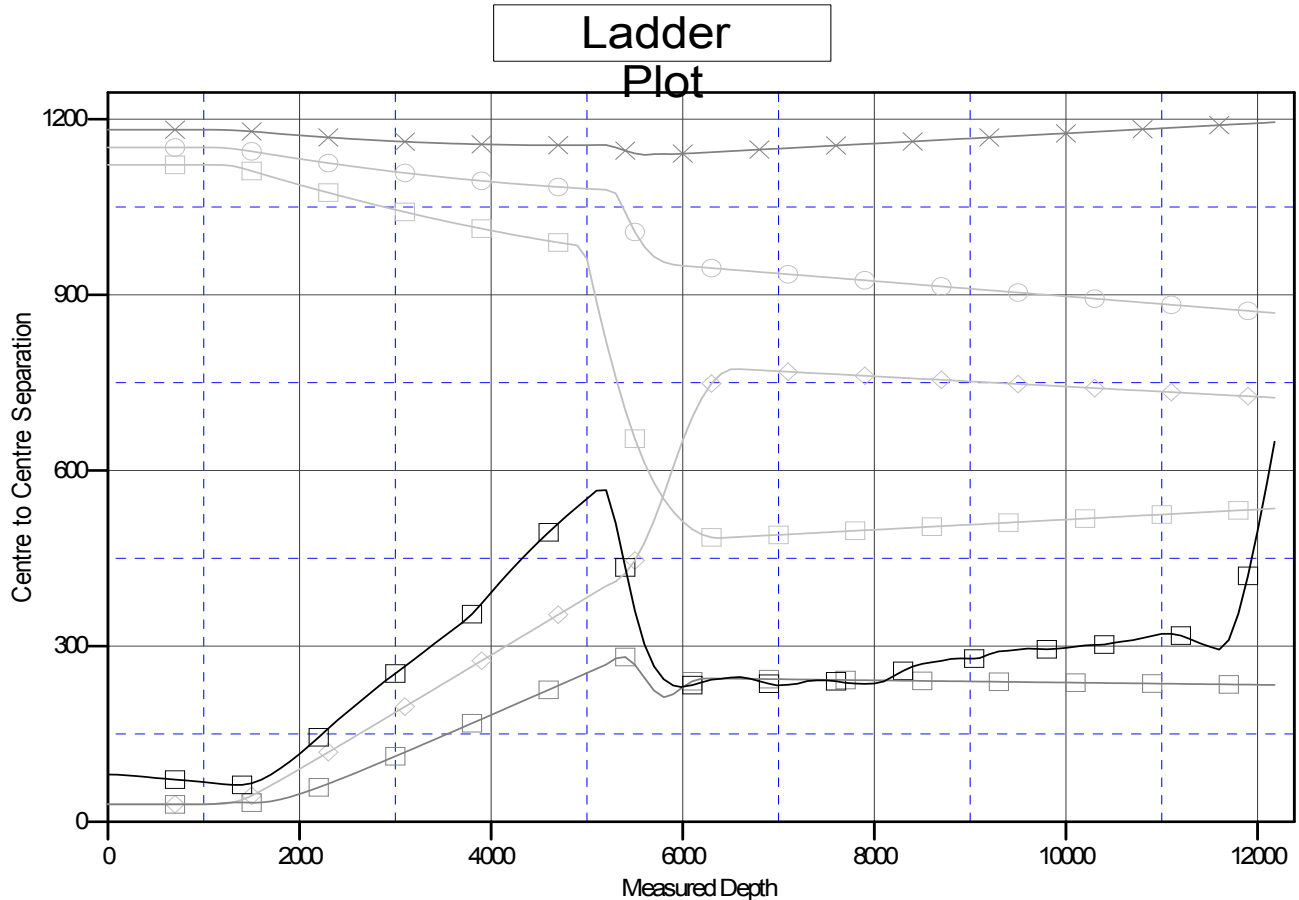
Offset Design S33-T10N-R58W - Razor #33N-2807A - HZ - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
10,100.0	5,643.0	10,411.7	5,638.9	99.7	101.0	90.09	5,183.5	1,245.0	1,176.8	976.2	200.63	5.866		
10,200.0	5,643.0	10,511.7	5,638.9	101.6	102.9	90.09	5,283.5	1,245.0	1,177.7	973.3	204.44	5.761		
10,300.0	5,643.0	10,611.7	5,638.9	103.5	104.8	90.09	5,383.5	1,245.0	1,178.6	970.3	208.26	5.659		
10,400.0	5,643.0	10,711.7	5,638.9	105.4	106.7	90.09	5,483.5	1,245.0	1,179.4	967.4	212.07	5.562		
10,500.0	5,643.0	10,811.7	5,638.9	107.4	108.6	90.09	5,583.5	1,245.0	1,180.3	964.4	215.89	5.467		
10,600.0	5,643.0	10,911.7	5,638.9	109.3	110.5	90.09	5,683.5	1,245.0	1,181.2	961.5	219.70	5.376		
10,700.0	5,643.0	11,011.7	5,638.9	111.2	112.4	90.09	5,783.5	1,245.0	1,182.1	958.5	223.52	5.288		
10,800.0	5,643.0	11,111.7	5,638.9	113.1	114.3	90.09	5,883.5	1,245.0	1,182.9	955.6	227.34	5.203		
10,900.0	5,643.0	11,211.7	5,638.9	115.0	116.2	90.09	5,983.5	1,245.0	1,183.8	952.6	231.16	5.121		
11,000.0	5,643.0	11,311.7	5,638.9	116.9	118.1	90.09	6,083.5	1,244.9	1,184.7	949.7	234.98	5.042		
11,100.0	5,643.0	11,411.7	5,639.0	118.8	120.0	90.09	6,183.5	1,244.9	1,185.5	946.7	238.80	4.965		
11,200.0	5,643.0	11,511.7	5,639.0	120.7	121.9	90.09	6,283.5	1,244.9	1,186.4	943.8	242.62	4.890		
11,300.0	5,643.0	11,611.7	5,639.0	122.6	123.8	90.09	6,383.5	1,244.9	1,187.3	940.8	246.44	4.818		
11,400.0	5,643.0	11,711.7	5,639.0	124.5	125.8	90.09	6,483.5	1,244.9	1,188.1	937.9	250.27	4.748		
11,500.0	5,643.0	11,811.6	5,639.0	126.5	127.7	90.09	6,583.5	1,244.9	1,189.0	934.9	254.09	4.679		
11,600.0	5,643.0	11,911.6	5,639.0	128.4	129.6	90.10	6,683.5	1,244.9	1,189.9	932.0	257.91	4.613		
11,700.0	5,643.0	12,011.6	5,639.0	130.3	131.5	90.10	6,783.5	1,244.9	1,190.7	929.0	261.74	4.549		
11,800.0	5,643.0	12,111.6	5,639.0	132.2	133.4	90.10	6,883.4	1,244.9	1,191.6	926.1	265.56	4.487		
11,900.0	5,643.0	12,211.6	5,639.0	134.1	135.3	90.10	6,983.4	1,244.9	1,192.5	923.1	269.39	4.427		
12,000.0	5,643.0	12,311.6	5,639.0	136.0	137.2	90.10	7,083.4	1,244.9	1,193.4	920.1	273.21	4.368		
12,100.0	5,643.0	12,411.6	5,639.0	137.9	139.1	90.10	7,183.4	1,244.9	1,194.2	917.2	277.04	4.311		
12,179.0	5,643.0	12,490.6	5,639.0	139.5	140.6	90.10	7,262.4	1,244.9	1,194.9	914.8	280.06	4.267 ES, SF		

## Anticollision Report

<b>Company:</b>	Whiting Petroleum Corporation	<b>Local Co-ordinate Reference:</b>	Well Razor #33M-2803A
<b>Project:</b>	Weld County, CO	<b>TVD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Reference Site:</b>	S33-T10N-R58W	<b>MD Reference:</b>	WELL @ 4746.2ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Razor #33M-2803A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	HZ	<b>Database:</b>	USA EDM 5000 Multi Users DB
<b>Reference Design:</b>	Plan #3	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4746.2ft (Original Well Elev)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000 °

Coordinates are relative to: Razor #33M-2803A  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 1.05°



### LEGEND

33M-2801A, HZ, Plan #2 V0  
 33M-2804B, HZ, Plan #2 V0

—■— Razor #33M-2813H(EXISTING), EXISTING, EXISTING V0  
 - - - ■ - - - Razor #33N-2805A, HZ, Plan #1 V0

—○— Razor #33N-2806B, HZ, Plan #1 V0  
 - - - x - - - Razor #33N-2807A, HZ, Plan #1 V0