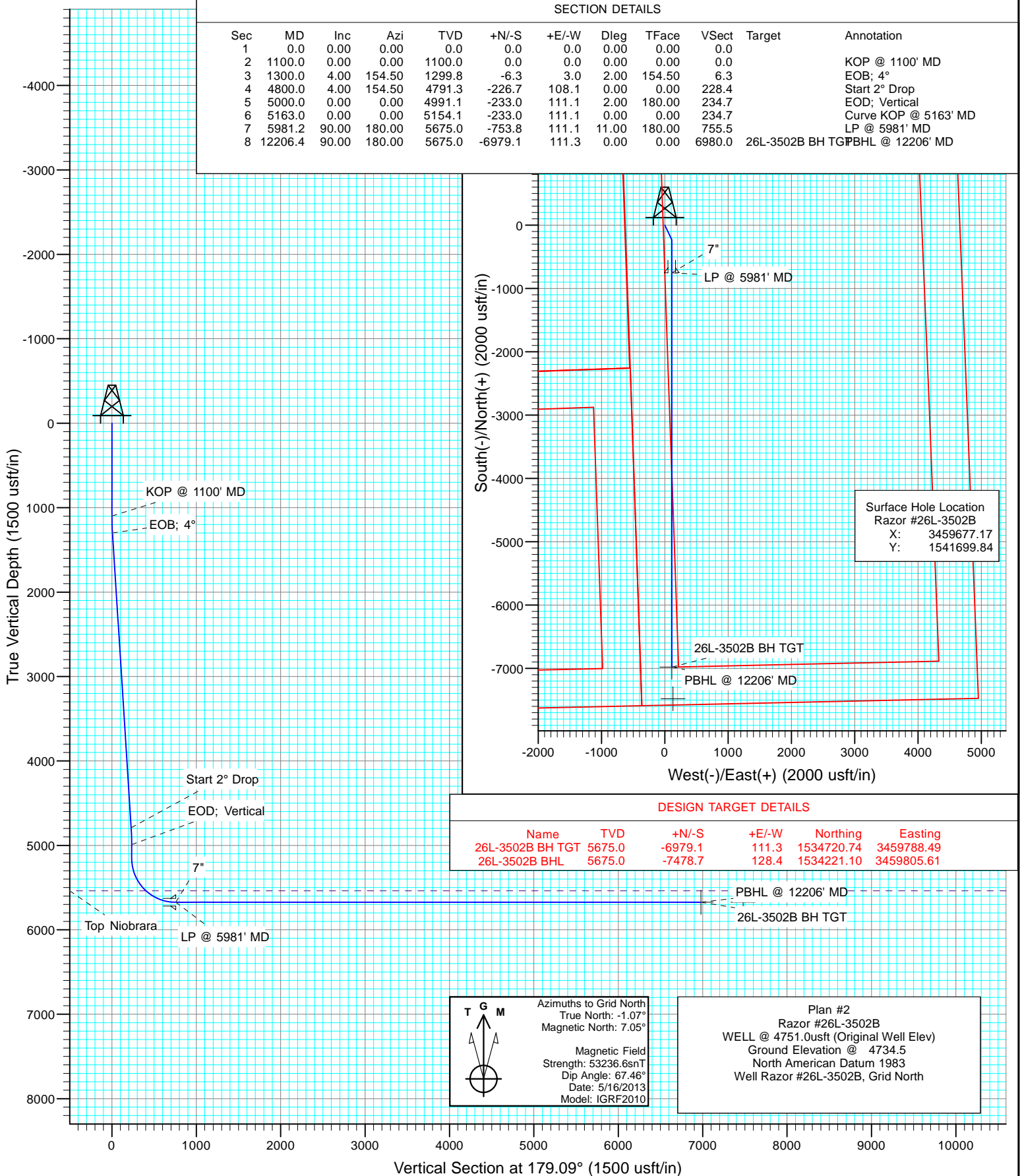


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target	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' MD
3	1300.0	4.00	154.50	1299.8	-6.3	3.0	2.00	154.50	6.3		EOB; 4°
4	4800.0	4.00	154.50	4791.3	-226.7	108.1	0.00	0.00	228.4		Start 2° Drop
5	5000.0	0.00	0.00	4991.1	-233.0	111.1	2.00	180.00	234.7		EOD; Vertical
6	5163.0	0.00	0.00	5154.1	-233.0	111.1	0.00	0.00	234.7		Curve KOP @ 5163' MD
7	5981.2	90.00	180.00	5675.0	-753.8	111.1	11.00	180.00	755.5		LP @ 5981' MD
8	12206.4	90.00	180.00	5675.0	-6979.1	111.3	0.00	0.00	6980.0	26L-3502B BH TGT	PBHL @ 12206' MD



Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Razor #26L-3502B
Company:	Whiting Petroleum Corporation	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site:	S26-T10N-R58W	North Reference:	Grid
Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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

Site		S26-T10N-R58W			
Site Position:		Northing:	1,541,774.28 usft	Latitude:	40° 48' 31.460 N
From:	Lat/Long	Easting:	3,459,642.55 usft	Longitude:	103° 50' 22.312 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.07 °

Well	Razor #26L-3502B					
Well Position	+N/-S	0.0 usft	Northing:	1,541,699.84 usft	Latitude:	40° 48' 30.719 N
	+E/-W	0.0 usft	Easting:	3,459,677.17 usft	Longitude:	103° 50' 21.880 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,734.5 usft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/16/2013	8.13	67.46	53,237

Design	Plan #2				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	179.09	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	4.00	154.50	1,299.8	-6.3	3.0	2.00	2.00	0.00	154.50	
4,800.0	4.00	154.50	4,791.3	-226.7	108.1	0.00	0.00	0.00	0.00	
5,000.0	0.00	0.00	4,991.1	-233.0	111.1	2.00	-2.00	0.00	180.00	
5,163.0	0.00	0.00	5,154.1	-233.0	111.1	0.00	0.00	0.00	0.00	
5,981.2	90.00	180.00	5,675.0	-753.8	111.1	11.00	11.00	0.00	180.00	
12,206.4	90.00	180.00	5,675.0	-6,979.1	111.3	0.00	0.00	0.00	0.00	26L-3502B BH TGT

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Razor #26L-3502B
Company:	Whiting Petroleum Corporation	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site:	S26-T10N-R58W	North Reference:	Grid
Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	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' MD
1,200.0	2.00	154.50	1,200.0	-1.6	0.8	1.6	2.00	2.00	
1,300.0	4.00	154.50	1,299.8	-6.3	3.0	6.3	2.00	2.00	EOB; 4°
1,400.0	4.00	154.50	1,399.6	-12.6	6.0	12.7	0.00	0.00	
1,500.0	4.00	154.50	1,499.3	-18.9	9.0	19.0	0.00	0.00	
1,600.0	4.00	154.50	1,599.1	-25.2	12.0	25.4	0.00	0.00	
1,700.0	4.00	154.50	1,698.9	-31.5	15.0	31.7	0.00	0.00	
1,800.0	4.00	154.50	1,798.6	-37.8	18.0	38.1	0.00	0.00	
1,900.0	4.00	154.50	1,898.4	-44.1	21.0	44.4	0.00	0.00	
2,000.0	4.00	154.50	1,998.1	-50.4	24.0	50.7	0.00	0.00	
2,100.0	4.00	154.50	2,097.9	-56.7	27.0	57.1	0.00	0.00	
2,200.0	4.00	154.50	2,197.6	-63.0	30.0	63.4	0.00	0.00	
2,300.0	4.00	154.50	2,297.4	-69.3	33.0	69.8	0.00	0.00	
2,400.0	4.00	154.50	2,397.2	-75.6	36.0	76.1	0.00	0.00	
2,500.0	4.00	154.50	2,496.9	-81.9	39.0	82.5	0.00	0.00	
2,600.0	4.00	154.50	2,596.7	-88.1	42.0	88.8	0.00	0.00	
2,700.0	4.00	154.50	2,696.4	-94.4	45.0	95.2	0.00	0.00	
2,800.0	4.00	154.50	2,796.2	-100.7	48.1	101.5	0.00	0.00	
2,900.0	4.00	154.50	2,895.9	-107.0	51.1	107.8	0.00	0.00	
3,000.0	4.00	154.50	2,995.7	-113.3	54.1	114.2	0.00	0.00	
3,100.0	4.00	154.50	3,095.4	-119.6	57.1	120.5	0.00	0.00	
3,200.0	4.00	154.50	3,195.2	-125.9	60.1	126.9	0.00	0.00	
3,300.0	4.00	154.50	3,295.0	-132.2	63.1	133.2	0.00	0.00	
3,400.0	4.00	154.50	3,394.7	-138.5	66.1	139.6	0.00	0.00	
3,500.0	4.00	154.50	3,494.5	-144.8	69.1	145.9	0.00	0.00	
3,600.0	4.00	154.50	3,594.2	-151.1	72.1	152.2	0.00	0.00	
3,700.0	4.00	154.50	3,694.0	-157.4	75.1	158.6	0.00	0.00	
3,800.0	4.00	154.50	3,793.7	-163.7	78.1	164.9	0.00	0.00	
3,900.0	4.00	154.50	3,893.5	-170.0	81.1	171.3	0.00	0.00	
4,000.0	4.00	154.50	3,993.3	-176.3	84.1	177.6	0.00	0.00	
4,100.0	4.00	154.50	4,093.0	-182.6	87.1	184.0	0.00	0.00	
4,200.0	4.00	154.50	4,192.8	-188.9	90.1	190.3	0.00	0.00	
4,300.0	4.00	154.50	4,292.5	-195.2	93.1	196.6	0.00	0.00	
4,400.0	4.00	154.50	4,392.3	-201.5	96.1	203.0	0.00	0.00	
4,500.0	4.00	154.50	4,492.0	-207.8	99.1	209.3	0.00	0.00	
4,600.0	4.00	154.50	4,591.8	-214.1	102.1	215.7	0.00	0.00	
4,700.0	4.00	154.50	4,691.5	-220.4	105.1	222.0	0.00	0.00	
4,800.0	4.00	154.50	4,791.3	-226.7	108.1	228.4	0.00	0.00	Start 2° Drop
4,900.0	2.00	154.50	4,891.2	-231.4	110.4	233.1	2.00	-2.00	
5,000.0	0.00	0.00	4,991.1	-233.0	111.1	234.7	2.00	-2.00	EOD; Vertical
5,100.0	0.00	0.00	5,091.1	-233.0	111.1	234.7	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Razor #26L-3502B
Company:	Whiting Petroleum Corporation	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site:	S26-T10N-R58W	North Reference:	Grid
Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,163.0	0.00	0.00	5,154.1	-233.0	111.1	234.7	0.00	0.00	Curve KOP @ 5163' MD
5,200.0	4.07	180.00	5,191.1	-234.3	111.1	236.0	11.01	11.01	
5,300.0	15.07	180.00	5,289.6	-250.9	111.1	252.6	11.00	11.00	
5,400.0	26.07	180.00	5,383.0	-286.0	111.1	287.7	11.00	11.00	Top Niobrara
5,500.0	37.07	180.00	5,468.1	-338.2	111.1	340.0	11.00	11.00	
5,597.5	47.80	180.00	5,540.0	-404.0	111.1	405.7	11.00	11.00	
5,600.0	48.07	180.00	5,541.6	-405.8	111.1	407.5	11.00	11.00	LP @ 5981' MD - 7"
5,700.0	59.07	180.00	5,600.9	-486.1	111.1	487.8	11.00	11.00	
5,800.0	70.07	180.00	5,643.8	-576.3	111.1	578.0	11.00	11.00	
5,900.0	81.07	180.00	5,668.7	-673.0	111.1	674.7	11.00	11.00	LP @ 5981' MD - 7"
5,981.2	90.00	180.00	5,675.0	-753.9	111.1	755.6	10.99	10.99	
6,000.0	90.00	180.00	5,675.0	-772.7	111.1	774.3	0.00	0.00	
6,100.0	90.00	180.00	5,675.0	-872.7	111.1	874.3	0.00	0.00	
6,200.0	90.00	180.00	5,675.0	-972.7	111.1	974.3	0.00	0.00	
6,300.0	90.00	180.00	5,675.0	-1,072.7	111.1	1,074.3	0.00	0.00	
6,400.0	90.00	180.00	5,675.0	-1,172.7	111.1	1,174.3	0.00	0.00	
6,500.0	90.00	180.00	5,675.0	-1,272.7	111.1	1,274.3	0.00	0.00	
6,600.0	90.00	180.00	5,675.0	-1,372.7	111.2	1,374.3	0.00	0.00	
6,700.0	90.00	180.00	5,675.0	-1,472.7	111.2	1,474.3	0.00	0.00	
6,800.0	90.00	180.00	5,675.0	-1,572.7	111.2	1,574.2	0.00	0.00	
6,900.0	90.00	180.00	5,675.0	-1,672.7	111.2	1,674.2	0.00	0.00	
7,000.0	90.00	180.00	5,675.0	-1,772.7	111.2	1,774.2	0.00	0.00	
7,100.0	90.00	180.00	5,675.0	-1,872.7	111.2	1,874.2	0.00	0.00	
7,200.0	90.00	180.00	5,675.0	-1,972.7	111.2	1,974.2	0.00	0.00	
7,300.0	90.00	180.00	5,675.0	-2,072.7	111.2	2,074.2	0.00	0.00	
7,400.0	90.00	180.00	5,675.0	-2,172.7	111.2	2,174.2	0.00	0.00	
7,500.0	90.00	180.00	5,675.0	-2,272.7	111.2	2,274.2	0.00	0.00	
7,600.0	90.00	180.00	5,675.0	-2,372.7	111.2	2,374.1	0.00	0.00	
7,700.0	90.00	180.00	5,675.0	-2,472.7	111.2	2,474.1	0.00	0.00	
7,800.0	90.00	180.00	5,675.0	-2,572.7	111.2	2,574.1	0.00	0.00	
7,900.0	90.00	180.00	5,675.0	-2,672.7	111.2	2,674.1	0.00	0.00	
8,000.0	90.00	180.00	5,675.0	-2,772.7	111.2	2,774.1	0.00	0.00	
8,100.0	90.00	180.00	5,675.0	-2,872.7	111.2	2,874.1	0.00	0.00	
8,200.0	90.00	180.00	5,675.0	-2,972.7	111.2	2,974.1	0.00	0.00	
8,300.0	90.00	180.00	5,675.0	-3,072.7	111.2	3,074.0	0.00	0.00	
8,400.0	90.00	180.00	5,675.0	-3,172.7	111.2	3,174.0	0.00	0.00	
8,500.0	90.00	180.00	5,675.0	-3,272.7	111.2	3,274.0	0.00	0.00	
8,600.0	90.00	180.00	5,675.0	-3,372.7	111.2	3,374.0	0.00	0.00	
8,700.0	90.00	180.00	5,675.0	-3,472.7	111.2	3,474.0	0.00	0.00	
8,800.0	90.00	180.00	5,675.0	-3,572.7	111.2	3,574.0	0.00	0.00	
8,900.0	90.00	180.00	5,675.0	-3,672.7	111.2	3,674.0	0.00	0.00	
9,000.0	90.00	180.00	5,675.0	-3,772.7	111.2	3,774.0	0.00	0.00	
9,100.0	90.00	180.00	5,675.0	-3,872.7	111.2	3,873.9	0.00	0.00	
9,200.0	90.00	180.00	5,675.0	-3,972.7	111.2	3,973.9	0.00	0.00	
9,300.0	90.00	180.00	5,675.0	-4,072.7	111.2	4,073.9	0.00	0.00	
9,400.0	90.00	180.00	5,675.0	-4,172.7	111.2	4,173.9	0.00	0.00	
9,500.0	90.00	180.00	5,675.0	-4,272.7	111.2	4,273.9	0.00	0.00	
9,600.0	90.00	180.00	5,675.0	-4,372.7	111.2	4,373.9	0.00	0.00	
9,700.0	90.00	180.00	5,675.0	-4,472.7	111.2	4,473.9	0.00	0.00	
9,800.0	90.00	180.00	5,675.0	-4,572.7	111.2	4,573.9	0.00	0.00	
9,900.0	90.00	180.00	5,675.0	-4,672.7	111.3	4,673.8	0.00	0.00	
10,000.0	90.00	180.00	5,675.0	-4,772.7	111.3	4,773.8	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Razor #26L-3502B
Company:	Whiting Petroleum Corporation	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Project:	Weld County, CO	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site:	S26-T10N-R58W	North Reference:	Grid
Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
10,100.0	90.00	180.00	5,675.0	-4,872.7	111.3	4,873.8	0.00	0.00	
10,200.0	90.00	180.00	5,675.0	-4,972.7	111.3	4,973.8	0.00	0.00	
10,300.0	90.00	180.00	5,675.0	-5,072.7	111.3	5,073.8	0.00	0.00	
10,400.0	90.00	180.00	5,675.0	-5,172.7	111.3	5,173.8	0.00	0.00	
10,500.0	90.00	180.00	5,675.0	-5,272.7	111.3	5,273.8	0.00	0.00	
10,600.0	90.00	180.00	5,675.0	-5,372.7	111.3	5,373.8	0.00	0.00	
10,700.0	90.00	180.00	5,675.0	-5,472.7	111.3	5,473.7	0.00	0.00	
10,800.0	90.00	180.00	5,675.0	-5,572.7	111.3	5,573.7	0.00	0.00	
10,900.0	90.00	180.00	5,675.0	-5,672.7	111.3	5,673.7	0.00	0.00	
11,000.0	90.00	180.00	5,675.0	-5,772.7	111.3	5,773.7	0.00	0.00	
11,100.0	90.00	180.00	5,675.0	-5,872.7	111.3	5,873.7	0.00	0.00	
11,200.0	90.00	180.00	5,675.0	-5,972.7	111.3	5,973.7	0.00	0.00	
11,300.0	90.00	180.00	5,675.0	-6,072.7	111.3	6,073.7	0.00	0.00	
11,400.0	90.00	180.00	5,675.0	-6,172.7	111.3	6,173.6	0.00	0.00	
11,500.0	90.00	180.00	5,675.0	-6,272.7	111.3	6,273.6	0.00	0.00	
11,600.0	90.00	180.00	5,675.0	-6,372.7	111.3	6,373.6	0.00	0.00	
11,700.0	90.00	180.00	5,675.0	-6,472.7	111.3	6,473.6	0.00	0.00	
11,800.0	90.00	180.00	5,675.0	-6,572.7	111.3	6,573.6	0.00	0.00	
11,900.0	90.00	180.00	5,675.0	-6,672.7	111.3	6,673.6	0.00	0.00	
12,000.0	90.00	180.00	5,675.0	-6,772.7	111.3	6,773.6	0.00	0.00	
12,100.0	90.00	180.00	5,675.0	-6,872.7	111.3	6,873.6	0.00	0.00	
12,200.0	90.00	180.00	5,675.0	-6,972.7	111.3	6,973.5	0.00	0.00	
12,206.4	90.00	180.00	5,675.0	-6,979.1	111.3	6,980.0	0.00	0.00	PBHL @ 12206' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
26L-3502B BH TGT - hit/miss target - Shape	0.00	0.00	5,675.0	-6,979.1	111.3	1,534,720.74	3,459,788.49	40° 47' 21.750 N	103° 50' 22.132 W
26L-3502B BHL - plan misses target center by 499.9usft at 12206.4usft MD (5675.0 TVD, -6979.1 N, 111.3 E) - Point	0.00	0.00	5,675.0	-7,478.7	128.4	1,534,221.10	3,459,805.61	40° 47' 16.811 N	103° 50' 22.031 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
5,981.2	5,675.0	7"	0	0	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,597.5	5,540.0	Top Niobrara		0.00	

Database: USA EDM 5000 Multi Users DB
Company: Whiting Petroleum Corporation
Project: Weld County, CO
Site: S26-T10N-R58W
Well: Razor #26L-3502B
Wellbore: HZ
Design: Plan #2

Local Co-ordinate Reference: Well Razor #26L-3502B
TVD Reference: WELL @ 4751.0usft (Original Well Elev)
MD Reference: WELL @ 4751.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,100.0	1,100.0	0.0	0.0	KOP @ 1100' MD
1,300.0	1,299.8	-6.3	3.0	EOB; 4°
4,800.0	4,791.3	-226.7	108.1	Start 2° Drop
5,000.0	4,991.1	-233.0	111.1	EOD; Vertical
5,163.0	5,154.1	-233.0	111.1	Curve KOP @ 5163' MD
5,981.2	5,675.0	-753.9	111.1	LP @ 5981' MD
12,206.4	5,675.0	-6,979.1	111.3	PBHL @ 12206' MD



WHITING PETROLEUM CORPORATION

Whiting Petroleum Corporation

Weld County, CO

S26-T10N-R58W

Razor #26L-3502B

HZ

Plan #2

Anticollision Report

18 June, 2013

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Reference	Plan #2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	Systematic Ellipse
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	6/18/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	12,206.4	Plan #2 (HZ)	ISCWSA MWD	MWD - ISCWSA

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S26-T10N-R58W						
Razor #26K-3505A - HZ - Plan #1						Out of range
Razor #26K-3507A - HZ - Plan #1						Out of range
Razor #26L-2301A - HZ - Plan #2	466.7	466.7	75.1	73.2	40.884	CC
Razor #26L-2301A - HZ - Plan #2	500.0	500.0	75.1	73.1	37.799	ES
Razor #26L-2301A - HZ - Plan #2	1,200.0	1,193.6	115.9	110.8	22.662	SF
Razor #26L-2302B - HZ - Plan #2	1,000.0	1,000.0	33.2	29.0	7.847	CC, ES
Razor #26L-2302B - HZ - Plan #2	1,200.0	1,199.0	36.6	31.5	7.182	SF
Razor #26L-2303A - HZ - Plan #2	966.7	966.7	100.0	96.0	24.498	CC
Razor #26L-2303A - HZ - Plan #2	1,000.0	1,000.0	100.0	95.8	23.631	ES
Razor #26L-2303A - HZ - Plan #2	1,300.0	1,293.8	113.9	108.4	20.693	SF
Razor #26L-2304B - HZ - Plan #1	566.7	566.7	32.9	30.7	14.414	CC
Razor #26L-2304B - HZ - Plan #1	600.0	600.0	32.9	30.5	13.527	ES
Razor #26L-2304B - HZ - Plan #1	900.0	898.2	41.8	38.1	11.059	SF
Razor #26L-3501A - HZ - Plan #2	1,164.7	1,166.9	75.0	70.2	15.425	CC, ES
Razor #26L-3501A - HZ - Plan #2	12,207.4	12,203.4	341.3	79.3	1.303	Level 3, SF
Razor #26L-3503A - HZ - Plan #1	950.0	950.8	78.2	74.3	19.783	CC
Razor #26L-3503A - HZ - Plan #1	1,000.0	1,000.7	78.3	74.1	18.730	ES
Razor #26L-3503A - HZ - Plan #1	12,207.4	12,275.5	358.1	95.1	1.362	Level 3, SF
Razor #26L-3504B - HZ - Plan #1	1,000.0	1,000.0	66.2	61.9	15.629	CC, ES
Razor #26L-3504B - HZ - Plan #1	12,207.4	12,450.4	677.1	408.2	2.518	SF
Razor 26-3524H (Existing) - Existing - SURVEYs						Out of range

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2301A - HZ - Plan #2													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-1.07	75.0	-1.4	75.1					
100.0	100.0	100.0	100.0	0.1	0.1	-1.07	75.0	-1.4	75.1	74.9	0.19	399.945		
200.0	200.0	200.0	200.0	0.3	0.3	-1.07	75.0	-1.4	75.1	74.4	0.64	117.797		
300.0	300.0	300.0	300.0	0.5	0.5	-1.07	75.0	-1.4	75.1	74.0	1.09	69.070		
400.0	400.0	400.0	400.0	0.8	0.8	-1.07	75.0	-1.4	75.1	73.5	1.54	48.860		
466.7	466.7	466.7	466.7	0.9	0.9	-1.07	75.0	-1.4	75.1	73.2	1.84	40.884 CC		
500.0	500.0	500.0	500.0	1.0	1.0	-1.07	75.0	-1.4	75.1	73.1	1.99	37.799 ES		
600.0	600.0	597.6	597.6	1.2	1.2	-1.60	76.5	-2.1	76.6	74.2	2.43	31.533		
700.0	700.0	695.1	694.9	1.4	1.4	-3.05	81.0	-4.3	81.3	78.4	2.88	28.254		
800.0	800.0	794.7	794.3	1.7	1.7	-4.82	87.3	-7.4	87.8	84.4	3.33	26.323		
900.0	900.0	894.4	893.8	1.9	1.9	-6.35	93.5	-10.4	94.3	90.5	3.79	24.866		
1,000.0	1,000.0	994.2	993.3	2.1	2.1	-7.68	99.8	-13.5	100.9	96.6	4.25	23.726		
1,100.0	1,100.0	1,094.0	1,092.8	2.3	2.4	-8.85	106.0	-16.5	107.5	102.8	4.71	22.814		
1,200.0	1,200.0	1,193.6	1,192.2	2.5	2.6	-164.57	112.3	-19.6	115.9	110.8	5.11	22.662 SF		
1,300.0	1,299.8	1,292.8	1,291.2	2.7	2.9	-165.99	118.5	-22.6	127.7	122.2	5.51	23.157		
1,400.0	1,399.6	1,391.8	1,390.0	2.9	3.1	-167.38	124.7	-25.6	141.2	135.3	5.92	23.848		
1,500.0	1,499.4	1,490.9	1,488.8	3.1	3.4	-168.53	130.9	-28.6	154.8	148.5	6.34	24.435		
1,600.0	1,599.1	1,589.9	1,587.6	3.3	3.6	-169.49	137.1	-31.7	168.5	161.7	6.76	24.939		
1,700.0	1,698.9	1,688.9	1,686.4	3.5	3.9	-170.31	143.3	-34.7	182.2	175.0	7.18	25.375		
1,800.0	1,798.6	1,788.0	1,785.1	3.8	4.1	-171.01	149.5	-37.7	195.9	188.3	7.61	25.753		
1,900.0	1,898.4	1,887.0	1,883.9	4.0	4.4	-171.62	155.7	-40.8	209.6	201.6	8.04	26.085		
2,000.0	1,998.1	1,986.0	1,982.7	4.2	4.6	-172.16	161.9	-43.8	223.4	215.0	8.47	26.377		
2,100.0	2,097.9	2,085.0	2,081.5	4.5	4.9	-172.63	168.2	-46.8	237.2	228.3	8.91	26.635		
2,200.0	2,197.6	2,184.1	2,180.3	4.7	5.2	-173.05	174.4	-49.8	251.0	241.7	9.34	26.866		
2,300.0	2,297.4	2,283.1	2,279.1	4.9	5.4	-173.43	180.6	-52.9	264.8	255.0	9.78	27.072		
2,400.0	2,397.2	2,382.1	2,377.9	5.2	5.7	-173.77	186.8	-55.9	278.7	268.4	10.22	27.258		
2,500.0	2,496.9	2,481.1	2,476.6	5.4	5.9	-174.08	193.0	-58.9	292.5	281.8	10.66	27.426		
2,600.0	2,596.7	2,580.2	2,575.4	5.7	6.2	-174.36	199.2	-62.0	306.3	295.2	11.11	27.578		
2,700.0	2,696.4	2,679.2	2,674.2	5.9	6.4	-174.61	205.4	-65.0	320.2	308.6	11.55	27.717		
2,800.0	2,796.2	2,778.2	2,773.0	6.2	6.7	-174.85	211.6	-68.0	334.0	322.0	12.00	27.844		
2,900.0	2,895.9	2,877.2	2,871.8	6.4	6.9	-175.06	217.8	-71.0	347.9	335.4	12.44	27.960		
3,000.0	2,995.7	2,976.3	2,970.6	6.7	7.2	-175.26	224.0	-74.1	361.8	348.9	12.89	28.068		
3,100.0	3,095.5	3,075.3	3,069.4	6.9	7.4	-175.45	230.2	-77.1	375.6	362.3	13.34	28.167		
3,200.0	3,195.2	3,174.3	3,168.1	7.2	7.7	-175.62	236.5	-80.1	389.5	375.7	13.78	28.258		
3,300.0	3,295.0	3,273.4	3,266.9	7.4	7.9	-175.78	242.7	-83.2	403.4	389.1	14.23	28.343		
3,400.0	3,394.7	3,372.4	3,365.7	7.7	8.2	-175.93	248.9	-86.2	417.2	402.6	14.68	28.422		
3,500.0	3,494.5	3,471.4	3,464.5	8.0	8.5	-176.07	255.1	-89.2	431.1	416.0	15.13	28.496		
3,600.0	3,594.2	3,570.4	3,563.3	8.2	8.7	-176.20	261.3	-92.2	445.0	429.4	15.58	28.565		
3,700.0	3,694.0	3,669.5	3,662.1	8.5	9.0	-176.32	267.5	-95.3	458.9	442.9	16.03	28.629		
3,800.0	3,793.7	3,768.5	3,760.9	8.7	9.2	-176.44	273.7	-98.3	472.8	456.3	16.48	28.689		
3,900.0	3,893.5	3,867.5	3,859.6	9.0	9.5	-176.54	279.9	-101.3	486.7	469.7	16.93	28.746		
4,000.0	3,993.3	3,966.5	3,958.4	9.2	9.7	-176.65	286.1	-104.4	500.6	483.2	17.38	28.800		
4,100.0	4,093.0	4,065.6	4,057.2	9.5	10.0	-176.74	292.3	-107.4	514.4	496.6	17.83	28.850		
4,200.0	4,192.8	4,164.6	4,156.0	9.8	10.2	-176.84	298.5	-110.4	528.3	510.1	18.28	28.898		
4,300.0	4,292.5	4,263.6	4,254.8	10.0	10.5	-176.92	304.7	-113.4	542.2	523.5	18.73	28.943		
4,400.0	4,392.3	4,362.6	4,353.6	10.3	10.7	-177.01	311.0	-116.5	556.1	536.9	19.19	28.985		
4,500.0	4,492.0	4,461.7	4,452.3	10.5	11.0	-177.09	317.2	-119.5	570.0	550.4	19.64	29.026		
4,600.0	4,591.8	4,560.7	4,551.1	10.8	11.3	-177.16	323.4	-122.5	583.9	563.8	20.09	29.064		
4,700.0	4,691.6	4,659.7	4,649.9	11.1	11.5	-177.23	329.6	-125.6	597.8	577.3	20.54	29.101		
4,800.0	4,791.3	4,758.8	4,748.7	11.3	11.8	-177.30	335.8	-128.6	611.7	590.7	21.00	29.136		
4,900.0	4,891.2	4,858.0	4,847.7	11.6	12.0	-177.37	342.0	-131.6	623.9	602.4	21.47	29.061		
5,000.0	4,991.1	4,957.6	4,947.1	11.7	12.3	-22.92	348.3	-134.7	632.6	610.2	22.35	28.305		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2301A - HZ - Plan #2													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,100.0	5,091.1	5,057.4	5,046.6	11.9	12.5	-22.96	354.5	-137.7	639.6	616.8	22.79	28.064		
5,163.0	5,154.1	5,113.4	5,102.5	12.0	12.7	-22.97	358.0	-139.4	644.0	620.9	23.04	27.948		
5,200.0	5,191.1	5,132.8	5,121.9	12.1	12.7	156.84	359.6	-140.2	648.5	625.9	22.66	28.618		
5,250.0	5,240.7	5,150.0	5,138.9	12.3	12.8	156.37	361.5	-141.1	660.3	637.7	22.60	29.213		
5,300.0	5,289.6	5,174.8	5,163.3	12.4	12.9	155.68	365.1	-142.9	678.2	655.7	22.42	30.251		
5,350.0	5,337.2	5,200.0	5,188.0	12.6	13.0	154.74	369.9	-145.2	701.8	679.7	22.10	31.754		
5,400.0	5,383.1	5,200.0	5,188.0	12.9	13.0	153.02	369.9	-145.2	730.7	709.0	21.64	33.763		
5,450.0	5,426.8	5,225.6	5,212.7	13.2	13.1	151.24	375.8	-148.1	763.8	742.6	21.20	36.034		
5,500.0	5,468.1	5,250.0	5,236.0	13.5	13.2	148.90	382.5	-151.3	801.4	780.6	20.80	38.527		
5,550.0	5,506.5	5,250.0	5,236.0	13.9	13.2	144.75	382.5	-151.3	841.8	821.1	20.68	40.715		
5,600.0	5,541.6	5,250.0	5,236.0	14.3	13.2	138.75	382.5	-151.3	885.3	864.1	21.16	41.831		
5,650.0	5,573.2	5,250.0	5,236.0	14.8	13.2	129.93	382.5	-151.3	930.9	908.2	22.66	41.072		
5,700.0	5,600.9	5,268.6	5,253.4	15.3	13.3	119.69	388.2	-154.1	977.5	952.6	24.91	39.238		

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2302B - HZ - Plan #2													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-91.05	-0.6	-33.2	33.2					
100.0	100.0	100.0	100.0	0.1	0.1	-91.05	-0.6	-33.2	33.2	33.0	0.19	177.003		
200.0	200.0	200.0	200.0	0.3	0.3	-91.05	-0.6	-33.2	33.2	32.6	0.64	52.133		
300.0	300.0	300.0	300.0	0.5	0.5	-91.05	-0.6	-33.2	33.2	32.1	1.09	30.568		
400.0	400.0	400.0	400.0	0.8	0.8	-91.05	-0.6	-33.2	33.2	31.7	1.54	21.624		
500.0	500.0	500.0	500.0	1.0	1.0	-91.05	-0.6	-33.2	33.2	31.2	1.99	16.729		
600.0	600.0	600.0	600.0	1.2	1.2	-91.05	-0.6	-33.2	33.2	30.8	2.44	13.641		
700.0	700.0	700.0	700.0	1.4	1.4	-91.05	-0.6	-33.2	33.2	30.3	2.88	11.515		
800.0	800.0	800.0	800.0	1.7	1.7	-91.05	-0.6	-33.2	33.2	29.9	3.33	9.963		
900.0	900.0	900.0	900.0	1.9	1.9	-91.05	-0.6	-33.2	33.2	29.4	3.78	8.779		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-91.05	-0.6	-33.2	33.2	29.0	4.23	7.847 CC, ES		
1,100.0	1,100.0	1,099.7	1,099.6	2.3	2.3	-88.20	1.1	-33.7	33.7	29.0	4.68	7.197		
1,200.0	1,200.0	1,199.0	1,198.8	2.5	2.6	127.44	6.0	-35.1	36.6	31.5	5.10	7.182 SF		
1,300.0	1,299.8	1,298.2	1,297.8	2.7	2.8	140.79	12.7	-36.9	44.3	38.8	5.50	8.045		
1,400.0	1,399.6	1,397.2	1,396.6	2.9	3.0	150.87	19.4	-38.8	55.1	49.2	5.91	9.322		
1,500.0	1,499.4	1,496.3	1,495.4	3.1	3.3	157.52	26.0	-40.6	67.0	60.7	6.32	10.602		
1,600.0	1,599.1	1,595.3	1,594.2	3.3	3.5	162.12	32.7	-42.4	79.6	72.9	6.74	11.809		
1,700.0	1,698.9	1,694.3	1,693.0	3.5	3.7	165.46	39.3	-44.3	92.6	85.4	7.17	12.919		
1,800.0	1,798.6	1,793.4	1,791.8	3.8	4.0	167.97	46.0	-46.1	105.7	98.2	7.59	13.930		
1,900.0	1,898.4	1,892.4	1,890.6	4.0	4.2	169.93	52.7	-48.0	119.1	111.1	8.02	14.846		
2,000.0	1,998.1	1,991.5	1,989.4	4.2	4.5	171.49	59.3	-49.8	132.5	124.1	8.45	15.678		
2,100.0	2,097.9	2,090.5	2,088.2	4.5	4.7	172.76	66.0	-51.7	146.0	137.2	8.89	16.433		
2,200.0	2,197.6	2,189.5	2,186.9	4.7	5.0	173.81	72.6	-53.5	159.6	150.3	9.32	17.120		
2,300.0	2,297.4	2,288.6	2,285.7	4.9	5.2	174.70	79.3	-55.4	173.3	163.5	9.76	17.747		
2,400.0	2,397.2	2,387.6	2,384.5	5.2	5.4	175.46	85.9	-57.2	186.9	176.7	10.20	18.321		
2,500.0	2,496.9	2,486.6	2,483.3	5.4	5.7	176.12	92.6	-59.1	200.6	190.0	10.64	18.848		
2,600.0	2,596.7	2,585.7	2,582.1	5.7	5.9	176.69	99.3	-60.9	214.3	203.2	11.09	19.332		
2,700.0	2,696.4	2,684.7	2,680.9	5.9	6.2	177.20	105.9	-62.8	228.0	216.5	11.53	19.780		
2,800.0	2,796.2	2,783.7	2,779.7	6.2	6.4	177.64	112.6	-64.6	241.8	229.8	11.97	20.193		
2,900.0	2,895.9	2,882.8	2,878.5	6.4	6.7	178.04	119.2	-66.4	255.6	243.1	12.42	20.577		
3,000.0	2,995.7	2,981.8	2,977.3	6.7	6.9	178.40	125.9	-68.3	269.3	256.5	12.87	20.934		
3,100.0	3,095.5	3,080.8	3,076.1	6.9	7.2	178.72	132.5	-70.1	283.1	269.8	13.31	21.266		
3,200.0	3,195.2	3,179.9	3,174.9	7.2	7.4	179.02	139.2	-72.0	296.9	283.1	13.76	21.577		
3,300.0	3,295.0	3,278.9	3,273.7	7.4	7.7	179.28	145.9	-73.8	310.7	296.5	14.21	21.867		
3,400.0	3,394.7	3,377.9	3,372.5	7.7	7.9	179.53	152.5	-75.7	324.5	309.8	14.66	22.140		
3,500.0	3,494.5	3,477.0	3,471.3	8.0	8.2	179.75	159.2	-77.5	338.3	323.2	15.10	22.396		
3,600.0	3,594.2	3,576.0	3,570.0	8.2	8.4	179.96	165.8	-79.4	352.1	336.5	15.55	22.637		
3,700.0	3,694.0	3,675.0	3,668.8	8.5	8.7	-179.85	172.5	-81.2	365.9	349.9	16.00	22.864		
3,800.0	3,793.7	3,774.1	3,767.6	8.7	9.0	-179.67	179.1	-83.1	379.7	363.3	16.45	23.078		
3,900.0	3,893.5	3,873.1	3,866.4	9.0	9.2	-179.51	185.8	-84.9	393.5	376.6	16.90	23.281		
4,000.0	3,993.3	3,972.1	3,965.2	9.2	9.5	-179.35	192.5	-86.8	407.4	390.0	17.36	23.472		
4,100.0	4,093.0	4,071.2	4,064.0	9.5	9.7	-179.21	199.1	-88.6	421.2	403.4	17.81	23.654		
4,200.0	4,192.8	4,170.2	4,162.8	9.8	10.0	-179.08	205.8	-90.4	435.0	416.8	18.26	23.827		
4,300.0	4,292.5	4,269.2	4,261.6	10.0	10.2	-178.95	212.4	-92.3	448.9	430.1	18.71	23.991		
4,400.0	4,392.3	4,368.3	4,360.4	10.3	10.5	-178.83	219.1	-94.1	462.7	443.5	19.16	24.148		
4,500.0	4,492.0	4,467.3	4,459.2	10.5	10.7	-178.72	225.7	-96.0	476.5	456.9	19.61	24.297		
4,600.0	4,591.8	4,566.3	4,558.0	10.8	11.0	-178.61	232.4	-97.8	490.4	470.3	20.06	24.439		
4,700.0	4,691.6	4,665.4	4,656.8	11.1	11.2	-178.51	239.1	-99.7	504.2	483.7	20.52	24.574		
4,800.0	4,791.3	4,764.4	4,755.6	11.3	11.5	-178.42	245.7	-101.5	518.0	497.1	20.97	24.704		
4,900.0	4,891.2	4,863.7	4,854.6	11.6	11.7	-178.33	252.4	-103.4	530.1	508.7	21.44	24.828		
5,000.0	4,991.1	4,963.3	4,953.9	11.7	12.0	-23.73	259.1	-105.2	538.8	516.5	22.32	24.143		
5,100.0	5,091.1	5,063.0	5,053.5	11.9	12.2	-23.63	265.8	-107.1	545.7	522.9	22.76	23.980		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2302B - HZ - Plan #2													Offset Site Error: 0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,163.0	5,154.1	5,125.9	5,116.1	12.0	12.4	-23.57	270.0	-108.3	550.0	527.0	23.03	23.888	
5,200.0	5,191.1	5,162.7	5,152.9	12.1	12.5	156.36	272.5	-108.9	553.8	531.1	22.69	24.407	
5,250.0	5,240.7	5,200.0	5,190.1	12.3	12.6	156.16	275.0	-109.6	562.8	540.1	22.69	24.808	
5,300.0	5,289.6	5,228.5	5,218.4	12.4	12.7	155.76	277.7	-110.4	577.5	555.0	22.52	25.648	
5,350.0	5,337.2	5,250.0	5,239.7	12.6	12.7	155.04	280.7	-111.2	598.3	576.1	22.19	26.957	
5,400.0	5,383.1	5,268.9	5,258.3	12.9	12.8	153.97	284.0	-112.1	624.7	602.9	21.77	28.698	
5,450.0	5,426.8	5,285.9	5,274.9	13.2	12.9	152.44	287.5	-113.1	656.1	634.8	21.29	30.823	
5,500.0	5,468.1	5,300.0	5,288.6	13.5	12.9	150.24	290.9	-114.0	691.9	671.1	20.84	33.202	
5,550.0	5,506.5	5,300.0	5,288.6	13.9	12.9	146.44	290.9	-114.0	731.6	711.0	20.64	35.450	
5,600.0	5,541.6	5,322.2	5,309.9	14.3	13.0	142.64	296.8	-115.7	773.9	753.1	20.74	37.307	
5,650.0	5,573.2	5,329.6	5,316.9	14.8	13.0	135.97	299.0	-116.3	818.7	797.0	21.71	37.713	
5,700.0	5,600.9	5,350.0	5,336.2	15.3	13.1	128.10	305.6	-118.1	865.7	842.3	23.43	36.948	
5,750.0	5,624.5	5,350.0	5,336.2	15.9	13.1	113.23	305.6	-118.1	913.3	886.6	26.69	34.223	
5,800.0	5,643.8	5,350.0	5,336.2	16.5	13.1	92.83	305.6	-118.1	961.7	932.3	29.38	32.737	

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2303A - HZ - Plan #2													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	40.33	76.3	64.7	100.0					
100.0	100.0	100.0	100.0	0.1	0.1	40.33	76.3	64.7	100.0	99.9	0.19	533.041		
200.0	200.0	200.0	200.0	0.3	0.3	40.33	76.3	64.7	100.0	99.4	0.64	156.998		
300.0	300.0	300.0	300.0	0.5	0.5	40.33	76.3	64.7	100.0	99.0	1.09	92.056		
400.0	400.0	400.0	400.0	0.8	0.8	40.33	76.3	64.7	100.0	98.5	1.54	65.119		
500.0	500.0	500.0	500.0	1.0	1.0	40.33	76.3	64.7	100.0	98.1	1.99	50.378		
600.0	600.0	600.0	600.0	1.2	1.2	40.33	76.3	64.7	100.0	97.6	2.44	41.079		
700.0	700.0	700.0	700.0	1.4	1.4	40.33	76.3	64.7	100.0	97.2	2.88	34.678		
800.0	800.0	800.0	800.0	1.7	1.7	40.33	76.3	64.7	100.0	96.7	3.33	30.003		
900.0	900.0	900.0	900.0	1.9	1.9	40.33	76.3	64.7	100.0	96.3	3.78	26.438		
966.7	966.7	966.7	966.7	2.0	2.0	40.33	76.3	64.7	100.0	96.0	4.08	24.498 CC		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	40.33	76.3	64.7	100.0	95.8	4.23	23.631 ES		
1,100.0	1,100.0	1,097.5	1,097.5	2.3	2.3	39.67	77.9	64.6	101.3	96.6	4.68	21.653		
1,200.0	1,200.0	1,194.7	1,194.5	2.5	2.6	-117.44	82.9	64.3	105.8	100.7	5.10	20.761		
1,300.0	1,299.8	1,293.8	1,293.4	2.7	2.8	-121.91	89.8	63.8	113.9	108.4	5.50	20.693 SF		
1,400.0	1,399.6	1,392.9	1,392.3	2.9	3.0	-126.56	96.6	63.3	123.6	117.7	5.92	20.886		
1,500.0	1,499.4	1,491.9	1,491.1	3.1	3.2	-130.51	103.5	62.8	134.0	127.7	6.34	21.138		
1,600.0	1,599.1	1,591.0	1,589.9	3.3	3.5	-133.88	110.4	62.4	145.0	138.2	6.77	21.423		
1,700.0	1,698.9	1,690.1	1,688.7	3.5	3.7	-136.77	117.3	61.9	156.3	149.1	7.20	21.722		
1,800.0	1,798.6	1,789.1	1,787.5	3.8	4.0	-139.27	124.2	61.4	168.1	160.4	7.63	22.024		
1,900.0	1,898.4	1,888.2	1,886.3	4.0	4.2	-141.44	131.1	60.9	180.1	172.0	8.07	22.322		
2,000.0	1,998.1	1,987.2	1,985.2	4.2	4.4	-143.33	138.0	60.4	192.3	183.8	8.50	22.611		
2,100.0	2,097.9	2,086.3	2,084.0	4.5	4.7	-145.00	144.9	59.9	204.7	195.8	8.94	22.888		
2,200.0	2,197.6	2,185.4	2,182.8	4.7	4.9	-146.48	151.8	59.5	217.3	207.9	9.38	23.151		
2,300.0	2,297.4	2,284.4	2,281.6	4.9	5.2	-147.80	158.7	59.0	230.0	220.1	9.83	23.401		
2,400.0	2,397.2	2,383.5	2,380.4	5.2	5.4	-148.97	165.6	58.5	242.8	232.5	10.27	23.638		
2,500.0	2,496.9	2,482.6	2,479.3	5.4	5.7	-150.03	172.5	58.0	255.6	244.9	10.71	23.861		
2,600.0	2,596.7	2,581.6	2,578.1	5.7	5.9	-150.99	179.4	57.5	268.6	257.4	11.16	24.072		
2,700.0	2,696.4	2,680.7	2,676.9	5.9	6.2	-151.86	186.3	57.1	281.6	270.0	11.60	24.270		
2,800.0	2,796.2	2,779.7	2,775.7	6.2	6.4	-152.65	193.2	56.6	294.7	282.7	12.05	24.458		
2,900.0	2,895.9	2,878.8	2,874.5	6.4	6.7	-153.38	200.0	56.1	307.9	295.4	12.50	24.634		
3,000.0	2,995.7	2,977.9	2,973.4	6.7	6.9	-154.05	206.9	55.6	321.1	308.1	12.95	24.801		
3,100.0	3,095.5	3,076.9	3,072.2	6.9	7.2	-154.66	213.8	55.1	334.3	320.9	13.39	24.958		
3,200.0	3,195.2	3,176.0	3,171.0	7.2	7.4	-155.23	220.7	54.6	347.5	333.7	13.84	25.107		
3,300.0	3,295.0	3,275.0	3,269.8	7.4	7.7	-155.75	227.6	54.2	360.8	346.5	14.29	25.247		
3,400.0	3,394.7	3,374.1	3,368.6	7.7	7.9	-156.24	234.5	53.7	374.1	359.4	14.74	25.381		
3,500.0	3,494.5	3,473.2	3,467.5	8.0	8.2	-156.69	241.4	53.2	387.5	372.3	15.19	25.507		
3,600.0	3,594.2	3,572.2	3,566.3	8.2	8.4	-157.12	248.3	52.7	400.9	385.2	15.64	25.627		
3,700.0	3,694.0	3,671.3	3,665.1	8.5	8.7	-157.51	255.2	52.2	414.2	398.1	16.09	25.740		
3,800.0	3,793.7	3,770.3	3,763.9	8.7	8.9	-157.88	262.1	51.8	427.6	411.1	16.54	25.849		
3,900.0	3,893.5	3,869.4	3,862.7	9.0	9.2	-158.23	269.0	51.3	441.1	424.1	17.00	25.951		
4,000.0	3,993.3	3,968.5	3,961.6	9.2	9.4	-158.56	275.9	50.8	454.5	437.1	17.45	26.049		
4,100.0	4,093.0	4,067.5	4,060.4	9.5	9.7	-158.87	282.8	50.3	467.9	450.0	17.90	26.143		
4,200.0	4,192.8	4,166.6	4,159.2	9.8	9.9	-159.16	289.7	49.8	481.4	463.1	18.35	26.232		
4,300.0	4,292.5	4,265.6	4,258.0	10.0	10.2	-159.44	296.6	49.3	494.9	476.1	18.80	26.317		
4,400.0	4,392.3	4,364.7	4,356.8	10.3	10.4	-159.70	303.4	48.9	508.4	489.1	19.26	26.399		
4,500.0	4,492.0	4,463.8	4,455.7	10.5	10.7	-159.95	310.3	48.4	521.9	502.2	19.71	26.477		
4,600.0	4,591.8	4,562.8	4,554.5	10.8	11.0	-160.19	317.2	47.9	535.4	515.2	20.16	26.551		
4,700.0	4,691.6	4,661.9	4,653.3	11.1	11.2	-160.41	324.1	47.4	548.9	528.3	20.62	26.623		
4,800.0	4,791.3	4,760.9	4,752.1	11.3	11.5	-160.62	331.0	46.9	562.4	541.3	21.07	26.691		
4,900.0	4,891.2	4,860.2	4,851.1	11.6	11.7	-160.85	337.9	46.4	574.3	552.8	21.54	26.665		
5,000.0	4,991.1	4,959.8	4,950.5	11.7	12.0	-6.43	344.9	46.0	582.9	560.5	22.41	26.006		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2303A - HZ - Plan #2													Offset Site Error: 0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,091.1	5,059.6	5,050.0	11.9	12.2	-6.40	351.8	45.5	589.9	567.0	22.85	25.812	
5,163.0	5,154.1	5,112.0	5,102.3	12.0	12.4	-6.39	355.4	45.2	594.4	571.3	23.10	25.734	
5,200.0	5,191.1	5,134.0	5,124.2	12.1	12.4	173.57	357.4	45.1	599.1	576.4	22.72	26.376	
5,250.0	5,240.7	5,150.0	5,140.1	12.3	12.5	173.43	359.5	44.9	611.7	589.0	22.62	27.041	
5,300.0	5,289.6	5,177.5	5,167.2	12.4	12.6	173.25	364.1	44.6	630.5	608.2	22.37	28.190	
5,350.0	5,337.2	5,200.0	5,189.2	12.6	12.6	172.98	368.9	44.3	655.5	633.6	21.92	29.910	
5,400.0	5,383.1	5,200.0	5,189.2	12.9	12.6	172.43	368.9	44.3	686.3	665.0	21.24	32.316	
5,450.0	5,426.8	5,229.2	5,217.4	13.2	12.8	171.94	376.6	43.7	721.1	700.6	20.46	35.246	
5,500.0	5,468.1	5,250.0	5,237.1	13.5	12.8	171.16	383.0	43.3	760.4	740.9	19.52	38.963	
5,550.0	5,506.5	5,250.0	5,237.1	13.9	12.8	169.68	383.0	43.3	802.9	784.4	18.44	43.538	
5,600.0	5,541.6	5,250.0	5,237.1	14.3	12.8	167.28	383.0	43.3	848.3	830.9	17.38	48.795	
5,650.0	5,573.2	5,266.4	5,252.5	14.8	12.9	163.93	388.7	42.9	895.4	878.8	16.55	54.097	
5,700.0	5,600.9	5,270.4	5,256.2	15.3	12.9	156.16	390.1	42.8	944.1	927.2	16.88	55.916	
5,750.0	5,624.5	5,272.4	5,258.1	15.9	12.9	133.33	390.8	42.8	993.6	971.2	22.42	44.310	

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2304B - HZ - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	88.95	0.6	32.9	32.9					
100.0	100.0	100.0	100.0	0.1	0.1	88.95	0.6	32.9	32.9	32.8	0.19	175.528		
200.0	200.0	200.0	200.0	0.3	0.3	88.95	0.6	32.9	32.9	32.3	0.64	51.699		
300.0	300.0	300.0	300.0	0.5	0.5	88.95	0.6	32.9	32.9	31.9	1.09	30.313		
400.0	400.0	400.0	400.0	0.8	0.8	88.95	0.6	32.9	32.9	31.4	1.54	21.443		
500.0	500.0	500.0	500.0	1.0	1.0	88.95	0.6	32.9	32.9	31.0	1.99	16.589		
566.7	566.7	566.7	566.7	1.1	1.1	88.95	0.6	32.9	32.9	30.7	2.29	14.414 CC		
600.0	600.0	600.0	600.0	1.2	1.2	88.95	0.6	32.9	32.9	30.5	2.44	13.527 ES		
700.0	700.0	699.4	699.4	1.4	1.4	86.45	2.1	33.8	33.9	31.0	2.88	11.755		
800.0	800.0	798.5	798.3	1.7	1.7	79.78	6.6	36.4	37.0	33.7	3.33	11.116		
900.0	900.0	898.2	897.8	1.9	1.9	72.48	12.6	39.9	41.8	38.1	3.78	11.059 SF		
1,000.0	1,000.0	998.0	997.4	2.1	2.1	66.76	18.6	43.3	47.2	43.0	4.24	11.131		
1,100.0	1,100.0	1,097.8	1,096.9	2.3	2.4	62.24	24.6	46.8	53.0	48.3	4.70	11.265		
1,200.0	1,200.0	1,197.4	1,196.3	2.5	2.6	-97.42	30.7	50.3	59.2	54.1	5.11	11.594		
1,300.0	1,299.8	1,296.8	1,295.5	2.7	2.9	-104.46	36.7	53.8	66.6	61.1	5.51	12.094		
1,400.0	1,399.6	1,396.1	1,394.5	2.9	3.1	-111.37	42.7	57.2	75.5	69.6	5.92	12.749		
1,500.0	1,499.4	1,495.3	1,493.5	3.1	3.4	-116.78	48.7	60.7	85.2	78.9	6.35	13.433		
1,600.0	1,599.1	1,594.5	1,592.4	3.3	3.6	-121.06	54.6	64.1	95.6	88.8	6.78	14.105		
1,700.0	1,698.9	1,693.8	1,691.4	3.5	3.9	-124.49	60.6	67.6	106.3	99.1	7.21	14.744		
1,800.0	1,798.6	1,793.0	1,790.4	3.8	4.1	-127.28	66.6	71.1	117.4	109.7	7.65	15.341		
1,900.0	1,898.4	1,892.3	1,889.4	4.0	4.4	-129.59	72.6	74.5	128.7	120.6	8.10	15.894		
2,000.0	1,998.1	1,991.5	1,988.4	4.2	4.6	-131.52	78.6	78.0	140.2	131.6	8.54	16.404		
2,100.0	2,097.9	2,090.7	2,087.4	4.5	4.9	-133.17	84.6	81.4	151.8	142.8	8.99	16.874		
2,200.0	2,197.6	2,190.0	2,186.4	4.7	5.1	-134.57	90.6	84.9	163.5	154.0	9.45	17.306		
2,300.0	2,297.4	2,289.2	2,285.4	4.9	5.4	-135.79	96.6	88.4	175.3	165.4	9.90	17.704		
2,400.0	2,397.2	2,388.4	2,384.4	5.2	5.6	-136.86	102.6	91.8	187.1	176.8	10.35	18.072		
2,500.0	2,496.9	2,487.7	2,483.4	5.4	5.9	-137.79	108.6	95.3	199.0	188.2	10.81	18.411		
2,600.0	2,596.7	2,586.9	2,582.4	5.7	6.1	-138.63	114.6	98.8	211.0	199.7	11.27	18.725		
2,700.0	2,696.4	2,686.2	2,681.4	5.9	6.4	-139.37	120.6	102.2	223.0	211.3	11.73	19.016		
2,800.0	2,796.2	2,785.4	2,780.4	6.2	6.6	-140.03	126.6	105.7	235.0	222.9	12.19	19.286		
2,900.0	2,895.9	2,884.6	2,879.4	6.4	6.9	-140.64	132.6	109.1	247.1	234.5	12.65	19.538		
3,000.0	2,995.7	2,983.9	2,978.4	6.7	7.1	-141.18	138.6	112.6	259.2	246.1	13.11	19.773		
3,100.0	3,095.5	3,083.1	3,077.4	6.9	7.4	-141.68	144.6	116.1	271.3	257.7	13.57	19.992		
3,200.0	3,195.2	3,182.4	3,176.4	7.2	7.6	-142.13	150.6	119.5	283.4	269.4	14.03	20.198		
3,300.0	3,295.0	3,281.6	3,275.4	7.4	7.9	-142.55	156.6	123.0	295.6	281.1	14.50	20.390		
3,400.0	3,394.7	3,380.8	3,374.4	7.7	8.1	-142.93	162.6	126.4	307.7	292.8	14.96	20.571		
3,500.0	3,494.5	3,480.1	3,473.4	8.0	8.4	-143.29	168.6	129.9	319.9	304.5	15.42	20.742		
3,600.0	3,594.2	3,579.3	3,572.4	8.2	8.7	-143.62	174.5	133.4	332.1	316.2	15.89	20.902		
3,700.0	3,694.0	3,678.5	3,671.4	8.5	8.9	-143.92	180.5	136.8	344.3	327.9	16.35	21.054		
3,800.0	3,793.7	3,777.8	3,770.4	8.7	9.2	-144.21	186.5	140.3	356.5	339.7	16.82	21.198		
3,900.0	3,893.5	3,877.0	3,869.4	9.0	9.4	-144.47	192.5	143.7	368.7	351.4	17.28	21.333		
4,000.0	3,993.3	3,976.3	3,968.4	9.2	9.7	-144.72	198.5	147.2	380.9	363.2	17.75	21.462		
4,100.0	4,093.0	4,075.5	4,067.4	9.5	9.9	-144.96	204.5	150.7	393.1	374.9	18.21	21.584		
4,200.0	4,192.8	4,174.7	4,166.3	9.8	10.2	-145.18	210.5	154.1	405.4	386.7	18.68	21.701		
4,300.0	4,292.5	4,274.0	4,265.3	10.0	10.4	-145.38	216.5	157.6	417.6	398.5	19.15	21.811		
4,400.0	4,392.3	4,373.2	4,364.3	10.3	10.7	-145.58	222.5	161.1	429.8	410.2	19.61	21.916		
4,500.0	4,492.0	4,472.4	4,463.3	10.5	10.9	-145.76	228.5	164.5	442.1	422.0	20.08	22.017		
4,600.0	4,591.8	4,571.7	4,562.3	10.8	11.2	-145.94	234.5	168.0	454.3	433.8	20.55	22.113		
4,700.0	4,691.6	4,670.9	4,661.3	11.1	11.4	-146.10	240.5	171.4	466.6	445.6	21.01	22.204		
4,800.0	4,791.3	4,770.2	4,760.3	11.3	11.7	-146.26	246.5	174.9	478.8	457.4	21.48	22.292		
4,900.0	4,891.2	4,882.6	4,872.6	11.6	12.0	-146.45	252.3	178.2	488.7	466.8	21.96	22.259		
5,000.0	4,991.1	5,001.2	4,991.1	11.7	12.2	7.98	254.3	179.4	492.1	469.3	22.76	21.616		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-2304B - HZ - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
5,100.0	5,091.1	5,101.2	5,091.1	11.9	12.3	7.98	254.3	179.4	492.1	468.9	23.15	21.254		
5,163.0	5,154.1	5,164.2	5,154.1	12.0	12.5	7.98	254.3	179.4	492.1	468.7	23.40	21.025		
5,200.0	5,191.1	5,183.2	5,173.2	12.1	12.5	-171.99	254.7	179.5	494.0	471.0	23.07	21.419		
5,250.0	5,240.7	5,200.0	5,189.9	12.3	12.6	-171.87	255.5	179.7	503.0	480.1	22.97	21.904		
5,300.0	5,289.6	5,232.4	5,222.2	12.4	12.6	-171.68	258.7	180.5	518.7	495.9	22.72	22.826		
5,350.0	5,337.2	5,250.0	5,239.5	12.6	12.7	-171.34	261.2	181.1	540.9	518.6	22.26	24.296		
5,400.0	5,383.1	5,274.8	5,263.9	12.9	12.8	-170.88	265.7	182.2	568.8	547.2	21.65	26.279		
5,450.0	5,426.8	5,300.0	5,288.4	13.2	12.9	-170.27	271.4	183.6	602.1	581.3	20.87	28.851		
5,500.0	5,468.1	5,300.0	5,288.4	13.5	12.9	-169.14	271.4	183.6	639.7	619.8	19.91	32.130		
5,550.0	5,506.5	5,319.9	5,307.5	13.9	13.0	-167.81	276.8	184.9	680.9	662.0	18.90	36.033		
5,600.0	5,541.6	5,329.7	5,316.9	14.3	13.0	-165.62	279.7	185.6	725.2	707.3	17.88	40.561		
5,650.0	5,573.2	5,350.0	5,336.0	14.8	13.1	-162.60	286.2	187.3	772.0	755.0	17.04	45.307		
5,700.0	5,600.9	5,350.0	5,336.0	15.3	13.1	-155.83	286.2	187.3	820.0	802.9	17.15	47.809		
5,750.0	5,624.5	5,350.0	5,336.0	15.9	13.1	-139.75	286.2	187.3	869.2	848.6	20.61	42.177		
5,800.0	5,643.8	5,350.0	5,336.0	16.5	13.1	-93.45	286.2	187.3	918.9	889.8	29.13	31.547		
5,850.0	5,658.6	5,350.0	5,336.0	17.2	13.1	-41.66	286.2	187.3	968.7	947.2	21.47	45.110		

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3501A - HZ - Plan #2													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.95	74.4	-34.6	82.1					
100.0	100.0	100.0	100.0	0.1	0.1	-24.95	74.4	-34.6	82.1	81.9	0.19	437.363		
200.0	200.0	200.0	200.0	0.3	0.3	-24.95	74.4	-34.6	82.1	81.4	0.64	128.818		
300.0	300.0	300.0	300.0	0.5	0.5	-24.95	74.4	-34.6	82.1	81.0	1.09	75.532		
400.0	400.0	400.0	400.0	0.8	0.8	-24.95	74.4	-34.6	82.1	80.5	1.54	53.431		
500.0	500.0	500.0	500.0	1.0	1.0	-24.95	74.4	-34.6	82.1	80.1	1.99	41.335		
600.0	600.0	600.0	600.0	1.2	1.2	-24.95	74.4	-34.6	82.1	79.6	2.44	33.705		
700.0	700.0	700.0	700.0	1.4	1.4	-24.95	74.4	-34.6	82.1	79.2	2.88	28.453		
800.0	800.0	800.0	800.0	1.7	1.7	-24.95	74.4	-34.6	82.1	78.7	3.33	24.617		
900.0	900.0	901.4	901.4	1.9	1.9	-26.03	72.9	-35.6	81.2	77.4	3.76	21.583		
1,000.0	1,000.0	1,002.6	1,002.4	2.1	2.1	-29.43	68.5	-38.7	78.7	74.5	4.18	18.849		
1,100.0	1,100.0	1,102.4	1,101.9	2.3	2.3	-34.15	62.8	-42.6	75.9	71.3	4.60	16.505		
1,164.7	1,164.7	1,166.9	1,166.3	2.5	2.4	168.24	59.0	-45.1	75.0	70.2	4.86	15.425	CC, ES	
1,200.0	1,200.0	1,202.2	1,201.5	2.5	2.5	166.62	57.0	-46.5	75.3	70.3	5.01	15.030		
1,300.0	1,299.8	1,302.0	1,301.1	2.7	2.7	162.61	51.3	-50.4	78.5	73.1	5.40	14.542		
1,400.0	1,399.6	1,401.7	1,400.6	2.9	2.9	159.39	45.5	-54.3	83.8	78.0	5.81	14.414		
1,500.0	1,499.4	1,501.5	1,500.1	3.1	3.2	156.55	39.8	-58.3	89.3	83.0	6.24	14.310		
1,600.0	1,599.1	1,601.2	1,599.6	3.3	3.4	154.04	34.0	-62.2	94.9	88.3	6.67	14.225		
1,700.0	1,698.9	1,701.0	1,699.1	3.5	3.6	151.82	28.3	-66.1	100.8	93.6	7.12	14.154		
1,800.0	1,798.6	1,800.7	1,798.6	3.8	3.9	149.84	22.5	-70.0	106.7	99.1	7.57	14.095		
1,900.0	1,898.4	1,900.5	1,898.1	4.0	4.1	148.08	16.8	-74.0	112.8	104.8	8.03	14.044		
2,000.0	1,998.1	2,000.3	1,997.7	4.2	4.4	146.50	11.0	-77.9	119.0	110.5	8.50	13.999		
2,100.0	2,097.9	2,100.0	2,097.2	4.5	4.6	145.07	5.3	-81.8	125.2	116.2	8.97	13.960		
2,200.0	2,197.6	2,199.8	2,196.7	4.7	4.9	143.78	-0.5	-85.7	131.5	122.1	9.45	13.925		
2,300.0	2,297.4	2,299.5	2,296.2	4.9	5.1	142.61	-6.2	-89.6	137.9	128.0	9.93	13.895		
2,400.0	2,397.2	2,399.3	2,395.7	5.2	5.4	141.54	-12.0	-93.6	144.4	134.0	10.41	13.868		
2,500.0	2,496.9	2,499.1	2,495.2	5.4	5.6	140.56	-17.7	-97.5	150.8	139.9	10.90	13.844		
2,600.0	2,596.7	2,598.8	2,594.8	5.7	5.9	139.67	-23.5	-101.4	157.4	146.0	11.38	13.823		
2,700.0	2,696.4	2,698.6	2,694.3	5.9	6.2	138.85	-29.2	-105.3	163.9	152.0	11.88	13.804		
2,800.0	2,796.2	2,798.3	2,793.8	6.2	6.4	138.09	-35.0	-109.2	170.5	158.1	12.37	13.787		
2,900.0	2,895.9	2,898.1	2,893.3	6.4	6.7	137.38	-40.7	-113.2	177.1	164.3	12.86	13.771		
3,000.0	2,995.7	2,997.8	2,992.8	6.7	6.9	136.73	-46.5	-117.1	183.8	170.4	13.36	13.757		
3,100.0	3,095.5	3,097.6	3,092.3	6.9	7.2	136.12	-52.2	-121.0	190.4	176.6	13.86	13.744		
3,200.0	3,195.2	3,197.4	3,191.8	7.2	7.4	135.55	-58.0	-124.9	197.1	182.8	14.35	13.732		
3,300.0	3,295.0	3,297.1	3,291.4	7.4	7.7	135.03	-63.7	-128.9	203.8	189.0	14.85	13.721		
3,400.0	3,394.7	3,396.9	3,390.9	7.7	8.0	134.53	-69.5	-132.8	210.5	195.2	15.35	13.711		
3,500.0	3,494.5	3,496.6	3,490.4	8.0	8.2	134.07	-75.2	-136.7	217.3	201.4	15.86	13.702		
3,600.0	3,594.2	3,596.4	3,589.9	8.2	8.5	133.63	-81.0	-140.6	224.0	207.6	16.36	13.694		
3,700.0	3,694.0	3,696.2	3,689.4	8.5	8.7	133.22	-86.7	-144.5	230.8	213.9	16.86	13.686		
3,800.0	3,793.7	3,795.9	3,788.9	8.7	9.0	132.83	-92.5	-148.5	237.5	220.2	17.37	13.679		
3,900.0	3,893.5	3,895.7	3,888.5	9.0	9.3	132.46	-98.2	-152.4	244.3	226.4	17.87	13.672		
4,000.0	3,993.3	3,995.4	3,988.0	9.2	9.5	132.12	-104.0	-156.3	251.1	232.7	18.37	13.666		
4,100.0	4,093.0	4,095.2	4,087.5	9.5	9.8	131.79	-109.7	-160.2	257.9	239.0	18.88	13.660		
4,200.0	4,192.8	4,194.9	4,187.0	9.8	10.0	131.48	-115.4	-164.1	264.7	245.3	19.39	13.654		
4,300.0	4,292.5	4,294.7	4,286.5	10.0	10.3	131.18	-121.2	-168.1	271.5	251.6	19.89	13.649		
4,400.0	4,392.3	4,394.5	4,386.0	10.3	10.6	130.90	-126.9	-172.0	278.3	257.9	20.40	13.644		
4,500.0	4,492.0	4,494.2	4,485.5	10.5	10.8	130.63	-132.7	-175.9	285.2	264.2	20.91	13.640		
4,600.0	4,591.8	4,594.0	4,585.1	10.8	11.1	130.38	-138.4	-179.8	292.0	270.6	21.41	13.636		
4,700.0	4,691.6	4,693.7	4,684.6	11.1	11.4	130.13	-144.2	-183.8	298.8	276.9	21.92	13.632		
4,800.0	4,791.3	4,797.0	4,787.6	11.3	11.6	130.18	-148.8	-186.9	305.1	282.7	22.40	13.624		
4,900.0	4,891.2	4,900.5	4,891.2	11.6	11.8	130.69	-150.3	-187.9	309.1	286.3	22.82	13.548		
5,000.0	4,991.1	5,000.5	4,991.1	11.7	12.0	-74.55	-150.3	-187.9	310.3	286.9	23.31	13.310		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3501A - HZ - Plan #2												Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,091.1	5,104.1	5,094.8	11.9	12.1	-74.69	-151.1	-188.0	310.1	286.4	23.69	13.091	
5,163.0	5,154.1	5,175.1	5,165.1	12.0	12.4	-76.27	-159.8	-188.4	308.6	284.5	24.02	12.847	
5,200.0	5,191.1	5,215.6	5,204.6	12.1	12.5	102.41	-169.0	-188.9	307.4	283.2	24.14	12.734	
5,250.0	5,240.7	5,269.3	5,255.6	12.3	12.7	100.54	-185.9	-189.9	306.2	281.7	24.52	12.490	
5,300.0	5,289.6	5,321.8	5,303.4	12.4	13.0	98.58	-207.4	-191.0	305.6	280.6	24.96	12.242	
5,328.4	5,316.8	5,351.2	5,329.1	12.6	13.2	97.43	-221.5	-191.8	305.5	280.2	25.25	12.100	
5,350.0	5,337.2	5,373.2	5,347.9	12.6	13.3	96.55	-233.0	-192.4	305.5	280.0	25.48	11.991	
5,400.0	5,383.1	5,423.5	5,388.8	12.9	13.6	94.49	-262.1	-194.0	306.1	280.0	26.08	11.738	
5,450.0	5,426.8	5,472.7	5,426.0	13.2	14.0	92.41	-294.4	-195.7	307.3	280.5	26.75	11.486	
5,500.0	5,468.1	5,521.0	5,459.3	13.5	14.4	90.35	-329.2	-197.6	309.0	281.5	27.50	11.236	
5,550.0	5,506.5	5,568.4	5,488.7	13.9	14.9	88.32	-366.3	-199.6	311.3	283.0	28.32	10.993	
5,600.0	5,541.6	5,614.9	5,514.2	14.3	15.4	86.34	-405.2	-201.7	314.1	284.9	29.20	10.757	
5,650.0	5,573.2	5,660.7	5,535.8	14.8	15.9	84.44	-445.5	-203.9	317.3	287.1	30.13	10.531	
5,700.0	5,600.9	5,705.8	5,553.5	15.3	16.4	82.63	-486.9	-206.2	320.8	289.7	31.10	10.316	
5,750.0	5,624.5	5,750.0	5,567.3	15.9	17.0	80.93	-528.8	-208.4	324.6	292.5	32.11	10.111	
5,800.0	5,643.8	5,794.2	5,577.6	16.5	17.6	79.32	-571.7	-210.8	328.7	295.5	33.16	9.912	
5,850.0	5,658.6	5,837.6	5,584.0	17.2	18.2	77.85	-614.6	-213.1	332.8	298.6	34.23	9.721	
5,900.0	5,668.7	5,880.6	5,586.9	17.9	18.8	76.50	-657.4	-215.4	337.0	301.6	35.33	9.537	
5,950.0	5,674.1	5,935.4	5,587.0	18.6	19.5	75.31	-712.1	-217.9	340.5	304.0	36.56	9.314	
5,981.2	5,675.0	5,973.0	5,587.0	19.0	20.0	75.07	-749.7	-218.7	341.4	304.0	37.43	9.122	
6,000.0	5,675.0	5,995.8	5,587.0	19.3	20.3	75.08	-772.5	-218.9	341.5	303.6	37.98	8.993	
6,100.0	5,675.0	6,096.0	5,587.0	20.8	21.8	75.08	-872.7	-218.9	341.5	300.6	40.96	8.338	
6,200.0	5,675.0	6,196.0	5,587.0	22.4	23.4	75.08	-972.7	-218.9	341.5	297.5	44.06	7.751	
6,300.0	5,675.0	6,296.0	5,587.0	24.0	25.1	75.08	-1,072.7	-218.9	341.5	294.3	47.25	7.228	
6,400.0	5,675.0	6,396.0	5,587.0	25.7	26.7	75.08	-1,172.7	-218.9	341.5	291.0	50.51	6.761	
6,500.0	5,675.0	6,496.0	5,587.0	27.4	28.5	75.07	-1,272.7	-218.9	341.5	287.7	53.84	6.344	
6,600.0	5,675.0	6,596.0	5,587.0	29.1	30.2	75.07	-1,372.7	-218.8	341.5	284.3	57.21	5.970	
6,700.0	5,675.0	6,696.0	5,587.0	30.8	31.9	75.07	-1,472.7	-218.8	341.5	280.9	60.62	5.633	
6,800.0	5,675.0	6,796.0	5,587.0	32.6	33.7	75.07	-1,572.7	-218.8	341.5	277.4	64.07	5.330	
6,900.0	5,675.0	6,896.0	5,587.0	34.4	35.5	75.07	-1,672.7	-218.8	341.5	274.0	67.55	5.056	
7,000.0	5,675.0	6,996.0	5,587.0	36.2	37.3	75.07	-1,772.7	-218.8	341.5	270.5	71.05	4.807	
7,100.0	5,675.0	7,096.0	5,587.0	38.0	39.1	75.07	-1,872.7	-218.8	341.5	266.9	74.57	4.579	
7,200.0	5,675.0	7,196.0	5,587.0	39.8	40.9	75.07	-1,972.7	-218.8	341.5	263.4	78.11	4.372	
7,300.0	5,675.0	7,296.0	5,587.0	41.6	42.8	75.07	-2,072.7	-218.8	341.5	259.8	81.67	4.181	
7,400.0	5,675.0	7,396.0	5,587.0	43.5	44.6	75.07	-2,172.7	-218.8	341.5	256.2	85.24	4.006	
7,500.0	5,675.0	7,496.0	5,587.0	45.3	46.4	75.07	-2,272.7	-218.8	341.5	252.6	88.83	3.844	
7,600.0	5,675.0	7,596.0	5,587.0	47.2	48.3	75.07	-2,372.7	-218.8	341.5	249.0	92.42	3.695	
7,700.0	5,675.0	7,696.0	5,587.0	49.0	50.1	75.07	-2,472.7	-218.8	341.5	245.4	96.03	3.556	
7,800.0	5,675.0	7,796.0	5,587.0	50.9	52.0	75.07	-2,572.7	-218.7	341.5	241.8	99.64	3.427	
7,900.0	5,675.0	7,896.0	5,587.0	52.7	53.9	75.07	-2,672.7	-218.7	341.5	238.2	103.26	3.307	
8,000.0	5,675.0	7,996.0	5,587.0	54.6	55.7	75.07	-2,772.7	-218.7	341.5	234.6	106.89	3.194	
8,100.0	5,675.0	8,096.0	5,587.0	56.5	57.6	75.07	-2,872.7	-218.7	341.5	230.9	110.53	3.089	
8,200.0	5,675.0	8,196.0	5,587.0	58.3	59.5	75.07	-2,972.7	-218.7	341.4	227.3	114.17	2.991	
8,300.0	5,675.0	8,296.0	5,587.0	60.2	61.3	75.07	-3,072.7	-218.7	341.4	223.6	117.81	2.898	
8,400.0	5,675.0	8,396.0	5,587.0	62.1	63.2	75.07	-3,172.7	-218.7	341.4	220.0	121.46	2.811	
8,500.0	5,675.0	8,496.0	5,587.0	64.0	65.1	75.07	-3,272.7	-218.7	341.4	216.3	125.12	2.729	
8,600.0	5,675.0	8,596.0	5,587.0	65.8	67.0	75.07	-3,372.7	-218.7	341.4	212.7	128.78	2.651	
8,700.0	5,675.0	8,696.0	5,587.0	67.7	68.9	75.07	-3,472.7	-218.7	341.4	209.0	132.44	2.578	
8,800.0	5,675.0	8,796.0	5,587.0	69.6	70.7	75.07	-3,572.7	-218.7	341.4	205.3	136.10	2.509	
8,900.0	5,675.0	8,896.0	5,587.0	71.5	72.6	75.07	-3,672.7	-218.7	341.4	201.6	139.77	2.443	
9,000.0	5,675.0	8,996.0	5,587.0	73.4	74.5	75.07	-3,772.7	-218.7	341.4	198.0	143.44	2.380	
9,100.0	5,675.0	9,096.0	5,587.0	75.3	76.4	75.07	-3,872.7	-218.6	341.4	194.3	147.12	2.321	

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3501A - HZ - Plan #2													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
9,200.0	5,675.0	9,196.0	5,587.0	77.2	78.3	75.07	-3,972.7	-218.6	341.4	190.6	150.79	2.264		
9,300.0	5,675.0	9,296.0	5,587.0	79.1	80.2	75.07	-4,072.7	-218.6	341.4	186.9	154.47	2.210		
9,400.0	5,675.0	9,396.0	5,587.0	81.0	82.1	75.07	-4,172.7	-218.6	341.4	183.2	158.15	2.159		
9,500.0	5,675.0	9,496.0	5,587.0	82.9	84.0	75.07	-4,272.7	-218.6	341.4	179.6	161.83	2.109		
9,600.0	5,675.0	9,596.0	5,587.0	84.7	85.9	75.07	-4,372.7	-218.6	341.4	175.9	165.52	2.063		
9,700.0	5,675.0	9,696.0	5,587.0	86.6	87.8	75.06	-4,472.7	-218.6	341.4	172.2	169.20	2.018		
9,800.0	5,675.0	9,796.0	5,587.0	88.5	89.7	75.06	-4,572.7	-218.6	341.4	168.5	172.89	1.974		
9,900.0	5,675.0	9,896.0	5,587.0	90.4	91.6	75.06	-4,672.7	-218.6	341.4	164.8	176.58	1.933		
10,000.0	5,675.0	9,996.0	5,587.0	92.3	93.5	75.06	-4,772.7	-218.6	341.4	161.1	180.27	1.894		
10,100.0	5,675.0	10,096.0	5,587.0	94.2	95.4	75.06	-4,872.7	-218.6	341.4	157.4	183.96	1.856		
10,200.0	5,675.0	10,196.0	5,587.0	96.1	97.3	75.06	-4,972.7	-218.6	341.4	153.7	187.65	1.819		
10,300.0	5,675.0	10,296.0	5,587.0	98.0	99.2	75.06	-5,072.7	-218.6	341.4	150.0	191.35	1.784		
10,400.0	5,675.0	10,396.0	5,587.0	99.9	101.1	75.06	-5,172.7	-218.5	341.3	146.3	195.04	1.750		
10,500.0	5,675.0	10,496.0	5,587.0	101.8	103.0	75.06	-5,272.7	-218.5	341.3	142.6	198.74	1.718		
10,600.0	5,675.0	10,596.0	5,587.0	103.7	104.9	75.06	-5,372.7	-218.5	341.3	138.9	202.44	1.686		
10,700.0	5,675.0	10,696.0	5,587.0	105.7	106.8	75.06	-5,472.7	-218.5	341.3	135.2	206.13	1.656		
10,800.0	5,675.0	10,796.0	5,587.0	107.6	108.7	75.06	-5,572.7	-218.5	341.3	131.5	209.83	1.627		
10,900.0	5,675.0	10,896.0	5,587.0	109.5	110.6	75.06	-5,672.7	-218.5	341.3	127.8	213.53	1.598		
11,000.0	5,675.0	10,996.0	5,587.0	111.4	112.5	75.06	-5,772.7	-218.5	341.3	124.1	217.23	1.571		
11,100.0	5,675.0	11,096.0	5,587.0	113.3	114.4	75.06	-5,872.7	-218.5	341.3	120.4	220.93	1.545		
11,200.0	5,675.0	11,196.0	5,587.0	115.2	116.3	75.06	-5,972.7	-218.5	341.3	116.7	224.64	1.519		
11,300.0	5,675.0	11,296.0	5,587.0	117.1	118.2	75.06	-6,072.7	-218.5	341.3	113.0	228.34	1.495 Level 3		
11,400.0	5,675.0	11,396.0	5,587.0	119.0	120.1	75.06	-6,172.7	-218.5	341.3	109.3	232.04	1.471 Level 3		
11,500.0	5,675.0	11,496.0	5,587.0	120.9	122.0	75.06	-6,272.7	-218.5	341.3	105.6	235.75	1.448 Level 3		
11,600.0	5,675.0	11,596.0	5,587.0	122.8	123.9	75.06	-6,372.7	-218.4	341.3	101.8	239.45	1.425 Level 3		
11,700.0	5,675.0	11,696.0	5,587.0	124.7	125.8	75.06	-6,472.7	-218.4	341.3	98.1	243.15	1.404 Level 3		
11,800.0	5,675.0	11,796.0	5,587.0	126.6	127.7	75.06	-6,572.7	-218.4	341.3	94.4	246.86	1.382 Level 3		
11,900.0	5,675.0	11,896.0	5,587.0	128.5	129.7	75.06	-6,672.7	-218.4	341.3	90.7	250.57	1.362 Level 3		
12,000.0	5,675.0	11,996.0	5,587.0	130.4	131.6	75.06	-6,772.7	-218.4	341.3	87.0	254.27	1.342 Level 3		
12,100.0	5,675.0	12,096.0	5,587.0	132.3	133.5	75.06	-6,872.7	-218.4	341.3	83.3	257.98	1.323 Level 3		
12,206.4	5,675.0	12,202.4	5,587.0	134.4	135.5	75.06	-6,979.1	-218.4	341.3	79.3	261.92	1.303 Level 3		
12,207.4	5,675.0	12,203.4	5,587.0	134.4	135.5	75.06	-6,980.1	-218.4	341.3	79.3	261.96	1.303 Level 3, SF		

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3503A - HZ - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	22.63	75.7	31.5	82.0					
100.0	100.0	100.0	100.0	0.1	0.1	22.63	75.7	31.5	82.0	81.8	0.19	436.710		
200.0	200.0	200.0	200.0	0.3	0.3	22.63	75.7	31.5	82.0	81.3	0.64	128.625		
300.0	300.0	300.0	300.0	0.5	0.5	22.63	75.7	31.5	82.0	80.9	1.09	75.419		
400.0	400.0	400.0	400.0	0.8	0.8	22.63	75.7	31.5	82.0	80.4	1.54	53.351		
500.0	500.0	500.0	500.0	1.0	1.0	22.63	75.7	31.5	82.0	80.0	1.99	41.274		
600.0	600.0	600.8	600.8	1.2	1.2	23.82	74.5	32.9	81.5	79.0	2.42	33.723		
700.0	700.0	701.4	701.2	1.4	1.4	27.46	71.1	37.0	80.1	77.3	2.84	28.238		
800.0	800.0	801.1	800.7	1.7	1.6	32.40	66.6	42.3	78.9	75.6	3.28	24.079		
900.0	900.0	900.9	900.2	1.9	1.8	37.45	62.2	47.6	78.3	74.6	3.73	21.011		
950.0	950.0	950.8	950.0	2.0	2.0	40.00	59.9	50.3	78.2	74.3	3.95	19.783 CC		
1,000.0	1,000.0	1,000.7	999.8	2.1	2.1	42.54	57.7	52.9	78.3	74.1	4.18	18.730 ES		
1,100.0	1,100.0	1,100.4	1,099.3	2.3	2.3	47.60	53.2	58.3	78.9	74.3	4.64	17.025		
1,200.0	1,200.0	1,200.3	1,198.9	2.5	2.6	-103.14	48.7	63.6	80.5	75.4	5.11	15.749		
1,300.0	1,299.8	1,300.2	1,298.6	2.7	2.8	-101.89	44.3	69.0	83.1	77.6	5.54	15.003		
1,400.0	1,399.6	1,400.2	1,398.3	2.9	3.1	-101.90	39.8	74.3	86.1	80.1	5.98	14.389		
1,500.0	1,499.4	1,500.1	1,498.0	3.1	3.3	-101.91	35.3	79.6	89.0	82.6	6.44	13.833		
1,600.0	1,599.1	1,600.1	1,597.7	3.3	3.6	-101.92	30.8	85.0	92.0	85.1	6.90	13.332		
1,700.0	1,698.9	1,700.0	1,697.4	3.5	3.8	-101.93	26.3	90.3	94.9	87.6	7.37	12.879		
1,800.0	1,798.6	1,800.0	1,797.1	3.8	4.1	-101.94	21.8	95.7	97.9	90.1	7.85	12.470		
1,900.0	1,898.4	1,899.9	1,896.9	4.0	4.4	-101.95	17.4	101.0	100.9	92.5	8.34	12.101		
2,000.0	1,998.1	1,999.9	1,996.6	4.2	4.6	-101.95	12.9	106.3	103.8	95.0	8.82	11.766		
2,100.0	2,097.9	2,099.9	2,096.3	4.5	4.9	-101.96	8.4	111.7	106.8	97.5	9.32	11.461		
2,200.0	2,197.6	2,199.8	2,196.0	4.7	5.1	-101.97	3.9	117.0	109.7	99.9	9.81	11.183		
2,300.0	2,297.4	2,299.8	2,295.7	4.9	5.4	-101.97	-0.6	122.4	112.7	102.4	10.31	10.929		
2,400.0	2,397.2	2,399.7	2,395.4	5.2	5.6	-101.98	-5.0	127.7	115.7	104.8	10.81	10.696		
2,500.0	2,496.9	2,499.7	2,495.1	5.4	5.9	-101.99	-9.5	133.0	118.6	107.3	11.32	10.482		
2,600.0	2,596.7	2,599.6	2,594.8	5.7	6.2	-101.99	-14.0	138.4	121.6	109.8	11.82	10.284		
2,700.0	2,696.4	2,699.6	2,694.6	5.9	6.4	-102.00	-18.5	143.7	124.5	112.2	12.33	10.102		
2,800.0	2,796.2	2,799.5	2,794.3	6.2	6.7	-102.00	-23.0	149.1	127.5	114.7	12.84	9.932		
2,900.0	2,895.9	2,899.5	2,894.0	6.4	7.0	-102.01	-27.5	154.4	130.5	117.1	13.35	9.773		
3,000.0	2,995.7	2,999.5	2,993.7	6.7	7.2	-102.01	-31.9	159.8	133.4	119.6	13.86	9.626		
3,100.0	3,095.5	3,099.4	3,093.4	6.9	7.5	-102.02	-36.4	165.1	136.4	122.0	14.37	9.488		
3,200.0	3,195.2	3,199.4	3,193.1	7.2	7.7	-102.02	-40.9	170.4	139.3	124.5	14.89	9.360		
3,300.0	3,295.0	3,299.3	3,292.8	7.4	8.0	-102.03	-45.4	175.8	142.3	126.9	15.40	9.239		
3,400.0	3,394.7	3,399.3	3,392.5	7.7	8.3	-102.03	-49.9	181.1	145.3	129.3	15.92	9.126		
3,500.0	3,494.5	3,499.2	3,492.3	8.0	8.5	-102.03	-54.3	186.5	148.2	131.8	16.43	9.020		
3,600.0	3,594.2	3,599.2	3,592.0	8.2	8.8	-102.04	-58.8	191.8	151.2	134.2	16.95	8.919		
3,700.0	3,694.0	3,699.2	3,691.7	8.5	9.1	-102.04	-63.3	197.1	154.1	136.7	17.47	8.825		
3,800.0	3,793.7	3,799.1	3,791.4	8.7	9.3	-102.04	-67.8	202.5	157.1	139.1	17.98	8.735		
3,900.0	3,893.5	3,899.1	3,891.1	9.0	9.6	-102.05	-72.3	207.8	160.1	141.6	18.50	8.651		
4,000.0	3,993.3	3,999.0	3,990.8	9.2	9.8	-102.05	-76.8	213.2	163.0	144.0	19.02	8.571		
4,100.0	4,093.0	4,099.0	4,090.5	9.5	10.1	-102.05	-81.2	218.5	166.0	146.4	19.54	8.495		
4,200.0	4,192.8	4,198.9	4,190.2	9.8	10.4	-102.06	-85.7	223.8	168.9	148.9	20.06	8.422		
4,300.0	4,292.5	4,298.9	4,290.0	10.0	10.6	-102.06	-90.2	229.2	171.9	151.3	20.58	8.353		
4,400.0	4,392.3	4,398.8	4,389.7	10.3	10.9	-102.06	-94.7	234.5	174.9	153.8	21.10	8.288		
4,500.0	4,492.0	4,498.8	4,489.4	10.5	11.2	-102.06	-99.2	239.9	177.8	156.2	21.62	8.225		
4,600.0	4,591.8	4,600.1	4,590.5	10.8	11.4	-102.61	-102.6	243.9	180.4	158.3	22.10	8.165		
4,700.0	4,691.6	4,701.1	4,691.6	11.1	11.6	-104.24	-103.7	245.3	182.4	159.8	22.53	8.094		
4,800.0	4,791.3	4,800.9	4,791.3	11.3	11.7	-106.34	-103.7	245.3	184.2	161.3	22.96	8.024		
4,900.0	4,891.2	4,900.8	4,891.2	11.6	11.9	-107.91	-103.7	245.3	185.8	162.4	23.34	7.960		
5,000.0	4,991.1	5,000.7	4,991.1	11.7	12.1	46.07	-103.7	245.3	186.3	162.6	23.74	7.847		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3503A - HZ - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)					
5,100.0	5,091.1	5,105.8	5,096.2	11.9	12.3	46.30	-104.5	245.5	186.0	161.8	24.12	7.710	
5,163.0	5,154.1	5,180.2	5,169.9	12.0	12.5	48.97	-113.8	248.1	182.3	157.8	24.46	7.452	
5,200.0	5,191.1	5,222.5	5,211.0	12.1	12.6	-128.69	-123.5	250.9	179.4	154.8	24.65	7.281	
5,250.0	5,240.7	5,278.4	5,263.7	12.3	12.9	-125.03	-141.2	255.9	176.9	151.9	24.95	7.090	
5,297.5	5,287.2	5,330.0	5,310.4	12.4	13.2	-121.12	-162.3	261.8	176.0	150.8	25.26	6.968	
5,300.0	5,289.6	5,332.6	5,312.8	12.4	13.2	-120.91	-163.5	262.1	176.0	150.7	25.28	6.963	
5,350.0	5,337.2	5,385.3	5,357.8	12.6	13.5	-116.46	-189.7	269.5	177.1	151.4	25.69	6.894	
5,400.0	5,383.1	5,436.5	5,398.8	12.9	13.9	-111.84	-219.3	277.9	180.3	154.1	26.21	6.879	
5,450.0	5,426.8	5,486.3	5,435.5	13.2	14.3	-107.18	-251.5	287.0	185.5	158.7	26.83	6.915	
5,500.0	5,468.1	5,534.7	5,468.0	13.5	14.7	-102.62	-286.0	296.7	192.8	165.2	27.56	6.995	
5,550.0	5,506.5	5,581.8	5,496.3	13.9	15.2	-98.25	-322.3	306.9	201.9	173.5	28.38	7.113	
5,600.0	5,541.6	5,627.8	5,520.5	14.3	15.7	-94.13	-359.9	317.5	212.5	183.3	29.25	7.264	
5,650.0	5,573.2	5,672.7	5,540.7	14.8	16.2	-90.32	-398.5	328.4	224.5	194.3	30.17	7.440	
5,700.0	5,600.9	5,716.8	5,557.2	15.3	16.8	-86.81	-437.8	339.5	237.5	206.4	31.12	7.633	
5,750.0	5,624.5	5,760.0	5,569.9	15.9	17.4	-83.62	-477.6	350.7	251.3	219.2	32.09	7.833	
5,800.0	5,643.8	5,800.0	5,578.6	16.5	17.9	-80.80	-515.2	361.3	265.7	232.6	33.05	8.039	
5,850.0	5,658.6	5,844.4	5,584.6	17.2	18.6	-78.15	-557.5	373.3	280.4	246.3	34.11	8.220	
5,900.0	5,668.7	5,885.8	5,586.9	17.9	19.2	-75.83	-597.2	384.5	295.2	260.0	35.18	8.391	
5,950.0	5,674.1	5,939.4	5,587.0	18.6	19.9	-73.98	-649.0	398.5	309.2	272.7	36.44	8.485	
5,981.2	5,675.0	5,975.3	5,587.0	19.0	20.4	-73.44	-683.8	407.1	316.6	279.2	37.36	8.475	
6,000.0	5,675.0	5,997.2	5,587.0	19.3	20.6	-73.70	-705.1	412.0	320.7	282.7	37.95	8.449	
6,100.0	5,675.0	6,115.0	5,587.0	20.8	22.3	-74.77	-820.8	434.2	338.9	297.6	41.24	8.217	
6,200.0	5,675.0	6,235.2	5,587.0	22.4	24.0	-75.42	-940.0	449.5	351.2	306.5	44.65	7.866	
6,300.0	5,675.0	6,356.9	5,587.0	24.0	25.7	-75.74	-1,061.4	457.4	357.4	309.3	48.12	7.428	
6,400.0	5,675.0	6,468.1	5,587.0	25.7	27.4	-75.78	-1,172.7	458.4	358.2	306.7	51.46	6.961	
6,500.0	5,675.0	6,568.1	5,587.0	27.4	29.0	-75.78	-1,272.7	458.4	358.2	303.5	54.74	6.544	
6,600.0	5,675.0	6,668.1	5,587.0	29.1	30.7	-75.78	-1,372.7	458.4	358.2	300.1	58.08	6.167	
6,700.0	5,675.0	6,768.1	5,587.0	30.8	32.3	-75.78	-1,472.7	458.4	358.2	296.7	61.47	5.827	
6,800.0	5,675.0	6,868.1	5,587.0	32.6	34.0	-75.78	-1,572.7	458.4	358.2	293.3	64.89	5.520	
6,900.0	5,675.0	6,968.1	5,587.0	34.4	35.8	-75.78	-1,672.7	458.4	358.2	289.8	68.35	5.240	
7,000.0	5,675.0	7,068.1	5,587.0	36.2	37.5	-75.78	-1,772.7	458.4	358.2	286.4	71.84	4.986	
7,100.0	5,675.0	7,168.1	5,587.0	38.0	39.2	-75.78	-1,872.7	458.4	358.2	282.8	75.35	4.754	
7,200.0	5,675.0	7,268.1	5,587.0	39.8	41.0	-75.78	-1,972.7	458.4	358.2	279.3	78.88	4.541	
7,300.0	5,675.0	7,368.1	5,587.0	41.6	42.8	-75.78	-2,072.7	458.4	358.2	275.8	82.43	4.345	
7,400.0	5,675.0	7,468.1	5,587.0	43.5	44.6	-75.78	-2,172.7	458.4	358.2	272.2	86.00	4.165	
7,500.0	5,675.0	7,568.1	5,587.0	45.3	46.4	-75.78	-2,272.7	458.4	358.2	268.6	89.58	3.999	
7,600.0	5,675.0	7,668.1	5,587.0	47.2	48.2	-75.78	-2,372.7	458.4	358.2	265.0	93.17	3.844	
7,700.0	5,675.0	7,768.1	5,587.0	49.0	50.0	-75.78	-2,472.7	458.4	358.2	261.4	96.77	3.701	
7,800.0	5,675.0	7,868.1	5,587.0	50.9	51.9	-75.78	-2,572.7	458.4	358.2	257.8	100.38	3.568	
7,900.0	5,675.0	7,968.1	5,587.0	52.7	53.7	-75.78	-2,672.7	458.4	358.2	254.2	104.01	3.444	
8,000.0	5,675.0	8,068.1	5,587.0	54.6	55.5	-75.78	-2,772.7	458.4	358.2	250.5	107.63	3.328	
8,100.0	5,675.0	8,168.1	5,587.0	56.5	57.4	-75.78	-2,872.7	458.4	358.2	246.9	111.27	3.219	
8,200.0	5,675.0	8,268.1	5,587.0	58.3	59.2	-75.78	-2,972.7	458.4	358.2	243.3	114.91	3.117	
8,300.0	5,675.0	8,368.1	5,587.0	60.2	61.1	-75.78	-3,072.7	458.4	358.2	239.6	118.56	3.021	
8,400.0	5,675.0	8,468.1	5,587.0	62.1	62.9	-75.78	-3,172.7	458.4	358.2	236.0	122.21	2.931	
8,500.0	5,675.0	8,568.1	5,587.0	64.0	64.8	-75.78	-3,272.7	458.4	358.2	232.3	125.87	2.846	
8,600.0	5,675.0	8,668.1	5,587.0	65.8	66.7	-75.78	-3,372.7	458.4	358.2	228.6	129.53	2.765	
8,700.0	5,675.0	8,768.1	5,587.0	67.7	68.5	-75.78	-3,472.7	458.4	358.2	225.0	133.20	2.689	
8,800.0	5,675.0	8,868.1	5,587.0	69.6	70.4	-75.78	-3,572.7	458.4	358.2	221.3	136.87	2.617	
8,900.0	5,675.0	8,968.1	5,587.0	71.5	72.3	-75.78	-3,672.7	458.4	358.2	217.6	140.54	2.548	
9,000.0	5,675.0	9,068.1	5,587.0	73.4	74.1	-75.78	-3,772.7	458.4	358.2	213.9	144.22	2.483	
9,100.0	5,675.0	9,168.1	5,587.0	75.3	76.0	-75.78	-3,872.7	458.4	358.2	210.3	147.90	2.422	

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3503A - HZ - Plan #1													Offset Site Error: 0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
9,200.0	5,675.0	9,268.1	5,587.0	77.2	77.9	-75.78	-3,972.7	458.4	358.2	206.6	151.58	2.363	
9,300.0	5,675.0	9,368.1	5,587.0	79.1	79.8	-75.78	-4,072.7	458.4	358.1	202.9	155.26	2.307	
9,400.0	5,675.0	9,468.1	5,587.0	81.0	81.7	-75.78	-4,172.7	458.4	358.1	199.2	158.95	2.253	
9,500.0	5,675.0	9,568.1	5,587.0	82.9	83.5	-75.78	-4,272.7	458.4	358.1	195.5	162.64	2.202	
9,600.0	5,675.0	9,668.1	5,587.0	84.7	85.4	-75.78	-4,372.7	458.4	358.1	191.8	166.33	2.153	
9,700.0	5,675.0	9,768.1	5,587.0	86.6	87.3	-75.78	-4,472.7	458.4	358.1	188.1	170.02	2.106	
9,800.0	5,675.0	9,868.1	5,587.0	88.5	89.2	-75.78	-4,572.7	458.4	358.1	184.4	173.72	2.062	
9,900.0	5,675.0	9,968.1	5,587.0	90.4	91.1	-75.78	-4,672.7	458.4	358.1	180.7	177.41	2.019	
10,000.0	5,675.0	10,068.1	5,587.0	92.3	93.0	-75.78	-4,772.7	458.4	358.1	177.0	181.11	1.977	
10,100.0	5,675.0	10,168.1	5,587.0	94.2	94.9	-75.78	-4,872.7	458.4	358.1	173.3	184.81	1.938	
10,200.0	5,675.0	10,268.1	5,587.0	96.1	96.8	-75.78	-4,972.7	458.4	358.1	169.6	188.51	1.900	
10,300.0	5,675.0	10,368.1	5,587.0	98.0	98.7	-75.78	-5,072.7	458.4	358.1	165.9	192.21	1.863	
10,400.0	5,675.0	10,468.1	5,587.0	99.9	100.5	-75.78	-5,172.7	458.4	358.1	162.2	195.92	1.828	
10,500.0	5,675.0	10,568.1	5,587.0	101.8	102.4	-75.78	-5,272.7	458.4	358.1	158.5	199.62	1.794	
10,600.0	5,675.0	10,668.1	5,587.0	103.7	104.3	-75.78	-5,372.7	458.4	358.1	154.8	203.33	1.761	
10,700.0	5,675.0	10,768.1	5,587.0	105.7	106.2	-75.78	-5,472.7	458.4	358.1	151.1	207.03	1.730	
10,800.0	5,675.0	10,868.1	5,587.0	107.6	108.1	-75.78	-5,572.7	458.4	358.1	147.4	210.74	1.699	
10,900.0	5,675.0	10,968.1	5,587.0	109.5	110.0	-75.78	-5,672.7	458.4	358.1	143.7	214.45	1.670	
11,000.0	5,675.0	11,068.1	5,587.0	111.4	111.9	-75.78	-5,772.7	458.4	358.1	140.0	218.16	1.642	
11,100.0	5,675.0	11,168.1	5,587.0	113.3	113.8	-75.78	-5,872.7	458.4	358.1	136.2	221.87	1.614	
11,200.0	5,675.0	11,268.1	5,587.0	115.2	115.7	-75.77	-5,972.7	458.4	358.1	132.5	225.58	1.588	
11,300.0	5,675.0	11,368.1	5,587.0	117.1	117.6	-75.77	-6,072.7	458.4	358.1	128.8	229.29	1.562	
11,400.0	5,675.0	11,468.1	5,587.0	119.0	119.5	-75.77	-6,172.7	458.4	358.1	125.1	233.00	1.537	
11,500.0	5,675.0	11,568.1	5,587.0	120.9	121.4	-75.77	-6,272.7	458.4	358.1	121.4	236.72	1.513	
11,600.0	5,675.0	11,668.1	5,587.0	122.8	123.3	-75.77	-6,372.7	458.4	358.1	117.7	240.43	1.489	Level 3
11,700.0	5,675.0	11,768.1	5,587.0	124.7	125.2	-75.77	-6,472.7	458.4	358.1	114.0	244.14	1.467	Level 3
11,800.0	5,675.0	11,868.1	5,587.0	126.6	127.1	-75.77	-6,572.7	458.4	358.1	110.2	247.86	1.445	Level 3
11,900.0	5,675.0	11,968.1	5,587.0	128.5	129.0	-75.77	-6,672.7	458.4	358.1	106.5	251.57	1.423	Level 3
12,000.0	5,675.0	12,068.1	5,587.0	130.4	130.9	-75.77	-6,772.7	458.4	358.1	102.8	255.29	1.403	Level 3
12,100.0	5,675.0	12,168.1	5,587.0	132.3	132.8	-75.77	-6,872.7	458.4	358.1	99.1	259.01	1.383	Level 3
12,206.4	5,675.0	12,274.5	5,587.0	134.4	134.9	-75.77	-6,979.1	458.4	358.1	95.1	262.96	1.362	Level 3
12,207.4	5,675.0	12,275.5	5,587.0	134.4	134.9	-75.77	-6,980.1	458.4	358.1	95.1	263.00	1.362	Level 3, SF

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3504B - HZ - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	88.95	1.2	66.2	66.2					
100.0	100.0	100.0	100.0	0.1	0.1	88.95	1.2	66.2	66.2	66.0	0.19	352.530		
200.0	200.0	200.0	200.0	0.3	0.3	88.95	1.2	66.2	66.2	65.5	0.64	103.832		
300.0	300.0	300.0	300.0	0.5	0.5	88.95	1.2	66.2	66.2	65.1	1.09	60.882		
400.0	400.0	400.0	400.0	0.8	0.8	88.95	1.2	66.2	66.2	64.6	1.54	43.067		
500.0	500.0	500.0	500.0	1.0	1.0	88.95	1.2	66.2	66.2	64.2	1.99	33.318		
600.0	600.0	600.0	600.0	1.2	1.2	88.95	1.2	66.2	66.2	63.7	2.44	27.168		
700.0	700.0	700.0	700.0	1.4	1.4	88.95	1.2	66.2	66.2	63.3	2.88	22.934		
800.0	800.0	800.0	800.0	1.7	1.7	88.95	1.2	66.2	66.2	62.8	3.33	19.842		
900.0	900.0	900.0	900.0	1.9	1.9	88.95	1.2	66.2	66.2	62.4	3.78	17.485		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	88.95	1.2	66.2	66.2	61.9	4.23	15.629 CC, ES		
1,100.0	1,100.0	1,097.8	1,097.8	2.3	2.3	89.46	0.6	67.7	67.8	63.1	4.66	14.538		
1,200.0	1,200.0	1,195.5	1,195.4	2.5	2.5	-64.80	-1.1	72.4	71.8	66.8	5.05	14.232		
1,300.0	1,299.8	1,295.3	1,294.9	2.7	2.7	-66.46	-3.4	79.0	76.2	70.7	5.42	14.051		
1,400.0	1,399.6	1,395.2	1,394.5	2.9	2.9	-69.17	-5.8	85.5	79.9	74.1	5.82	13.748		
1,500.0	1,499.4	1,495.0	1,494.1	3.1	3.2	-71.64	-8.2	92.0	83.9	77.7	6.23	13.473		
1,600.0	1,599.1	1,594.9	1,593.8	3.3	3.4	-73.87	-10.6	98.6	88.0	81.3	6.65	13.224		
1,700.0	1,698.9	1,694.8	1,693.4	3.5	3.6	-75.91	-13.0	105.1	92.2	85.1	7.09	13.000		
1,800.0	1,798.6	1,794.6	1,793.0	3.8	3.9	-77.76	-15.4	111.7	96.5	88.9	7.54	12.799		
1,900.0	1,898.4	1,894.5	1,892.6	4.0	4.1	-79.46	-17.7	118.2	100.9	92.9	7.99	12.618		
2,000.0	1,998.1	1,994.3	1,992.2	4.2	4.3	-81.01	-20.1	124.8	105.4	96.9	8.46	12.455		
2,100.0	2,097.9	2,094.2	2,091.9	4.5	4.6	-82.44	-22.5	131.3	109.9	101.0	8.93	12.308		
2,200.0	2,197.6	2,194.1	2,191.5	4.7	4.8	-83.75	-24.9	137.9	114.5	105.1	9.41	12.175		
2,300.0	2,297.4	2,293.9	2,291.1	4.9	5.1	-84.96	-27.3	144.4	119.2	109.3	9.89	12.055		
2,400.0	2,397.2	2,393.8	2,390.7	5.2	5.3	-86.07	-29.7	151.0	123.9	113.5	10.37	11.946		
2,500.0	2,496.9	2,493.6	2,490.3	5.4	5.6	-87.11	-32.0	157.5	128.7	117.8	10.86	11.848		
2,600.0	2,596.7	2,593.5	2,589.9	5.7	5.8	-88.07	-34.4	164.1	133.5	122.1	11.35	11.758		
2,700.0	2,696.4	2,693.4	2,689.6	5.9	6.1	-88.96	-36.8	170.6	138.3	126.5	11.85	11.676		
2,800.0	2,796.2	2,793.2	2,789.2	6.2	6.3	-89.80	-39.2	177.1	143.2	130.8	12.34	11.601		
2,900.0	2,895.9	2,893.1	2,888.8	6.4	6.6	-90.58	-41.6	183.7	148.1	135.2	12.84	11.532		
3,000.0	2,995.7	2,992.9	2,988.4	6.7	6.8	-91.31	-43.9	190.2	153.0	139.7	13.34	11.469		
3,100.0	3,095.5	3,092.8	3,088.0	6.9	7.1	-91.99	-46.3	196.8	158.0	144.1	13.84	11.410		
3,200.0	3,195.2	3,192.7	3,187.6	7.2	7.4	-92.63	-48.7	203.3	162.9	148.6	14.35	11.357		
3,300.0	3,295.0	3,292.5	3,287.3	7.4	7.6	-93.23	-51.1	209.9	167.9	153.1	14.85	11.307		
3,400.0	3,394.7	3,392.4	3,386.9	7.7	7.9	-93.80	-53.5	216.4	172.9	157.6	15.36	11.261		
3,500.0	3,494.5	3,492.2	3,486.5	8.0	8.1	-94.34	-55.9	223.0	177.9	162.1	15.86	11.218		
3,600.0	3,594.2	3,592.1	3,586.1	8.2	8.4	-94.85	-58.2	229.5	183.0	166.6	16.37	11.178		
3,700.0	3,694.0	3,692.0	3,685.7	8.5	8.6	-95.33	-60.6	236.1	188.0	171.1	16.88	11.141		
3,800.0	3,793.7	3,791.8	3,785.3	8.7	8.9	-95.78	-63.0	242.6	193.1	175.7	17.38	11.106		
3,900.0	3,893.5	3,891.7	3,885.0	9.0	9.2	-96.21	-65.4	249.1	198.1	180.2	17.89	11.073		
4,000.0	3,993.3	3,991.5	3,984.6	9.2	9.4	-96.62	-67.8	255.7	203.2	184.8	18.40	11.043		
4,100.0	4,093.0	4,091.4	4,084.2	9.5	9.7	-97.01	-70.2	262.2	208.3	189.4	18.91	11.014		
4,200.0	4,192.8	4,191.3	4,183.8	9.8	9.9	-97.38	-72.5	268.8	213.4	194.0	19.42	10.987		
4,300.0	4,292.5	4,291.1	4,283.4	10.0	10.2	-97.74	-74.9	275.3	218.5	198.6	19.94	10.962		
4,400.0	4,392.3	4,391.0	4,383.0	10.3	10.4	-98.08	-77.3	281.9	223.6	203.2	20.45	10.938		
4,500.0	4,492.0	4,490.8	4,482.7	10.5	10.7	-98.40	-79.7	288.4	228.8	207.8	20.96	10.915		
4,600.0	4,591.8	4,590.7	4,582.3	10.8	11.0	-98.71	-82.1	295.0	233.9	212.4	21.47	10.894		
4,700.0	4,691.6	4,690.6	4,681.9	11.1	11.2	-99.00	-84.4	301.5	239.0	217.1	21.98	10.873		
4,800.0	4,791.3	4,790.4	4,781.5	11.3	11.5	-99.29	-86.8	308.1	244.2	221.7	22.50	10.854		
4,900.0	4,891.2	4,890.0	4,886.0	11.6	11.7	-99.53	-88.8	313.4	248.2	225.2	22.95	10.814		
5,000.0	4,991.1	5,000.2	4,991.1	11.7	11.9	54.89	-89.4	315.2	249.5	226.1	23.47	10.634		
5,100.0	5,091.1	5,100.2	5,091.1	11.9	12.1	54.89	-89.4	315.2	249.5	225.7	23.84	10.468		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3504B - HZ - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
5,163.0	5,154.1	5,163.2	5,154.1	12.0	12.2	54.89	-89.4	315.2	249.5	225.5	24.06	10.369		
5,163.0	5,154.1	5,163.2	5,154.1	12.0	12.2	54.89	-89.4	315.2	249.5	225.5	24.06	10.369		
5,200.0	5,191.1	5,202.5	5,193.4	12.1	12.3	-124.98	-90.8	315.9	250.1	226.0	24.07	10.391		
5,250.0	5,240.7	5,255.4	5,245.8	12.3	12.4	-124.41	-96.6	319.1	252.8	228.5	24.25	10.423		
5,300.0	5,289.6	5,307.9	5,296.9	12.4	12.6	-123.40	-107.0	324.7	257.6	233.2	24.44	10.541		
5,350.0	5,337.2	5,359.9	5,346.1	12.6	12.8	-121.99	-121.8	332.6	264.5	239.9	24.64	10.735		
5,400.0	5,383.1	5,411.1	5,392.8	12.9	13.1	-120.24	-140.5	342.6	273.6	248.7	24.90	10.990		
5,450.0	5,426.8	5,461.6	5,436.4	13.2	13.4	-118.20	-162.7	354.5	284.7	259.5	25.22	11.288		
5,500.0	5,468.1	5,511.1	5,476.7	13.5	13.7	-115.93	-188.1	368.1	297.8	272.1	25.65	11.611		
5,550.0	5,506.5	5,559.7	5,513.4	13.9	14.0	-113.47	-216.2	383.2	312.8	286.6	26.19	11.940		
5,600.0	5,541.6	5,607.4	5,546.4	14.3	14.4	-110.88	-246.5	399.5	329.4	302.6	26.87	12.262		
5,650.0	5,573.2	5,654.2	5,575.6	14.8	14.9	-108.17	-278.7	416.7	347.7	320.0	27.71	12.549		
5,700.0	5,600.9	5,700.2	5,600.9	15.3	15.4	-105.40	-312.6	434.9	367.3	338.7	28.68	12.808		
5,750.0	5,624.5	5,745.5	5,622.5	15.9	15.9	-102.59	-347.6	453.7	388.2	358.4	29.77	13.040		
5,800.0	5,643.8	5,790.2	5,640.3	16.5	16.4	-99.77	-383.8	473.1	410.0	379.0	30.95	13.248		
5,850.0	5,658.6	5,834.5	5,654.4	17.2	17.0	-96.96	-420.7	492.9	432.5	400.3	32.20	13.433		
5,900.0	5,668.7	5,878.5	5,664.8	17.9	17.6	-94.20	-458.4	513.1	455.7	422.2	33.51	13.598		
5,950.0	5,674.1	5,922.3	5,671.6	18.6	18.3	-91.50	-496.5	533.5	479.1	444.3	34.86	13.743		
5,981.2	5,675.0	5,949.6	5,674.0	19.0	18.7	-89.87	-520.5	546.4	493.8	458.1	35.72	13.824		
6,000.0	5,675.0	5,966.2	5,674.8	19.3	18.9	-89.97	-535.1	554.2	502.7	466.5	36.23	13.877		
6,100.0	5,675.0	6,083.7	5,675.0	20.8	20.6	-90.00	-639.9	607.3	548.0	508.7	39.33	13.935		
6,200.0	5,675.0	6,214.6	5,675.0	22.4	22.5	-90.00	-760.2	658.8	587.4	544.6	42.81	13.721		
6,300.0	5,675.0	6,352.8	5,675.0	24.0	24.6	-90.00	-890.7	704.1	620.2	573.6	46.61	13.305		
6,400.0	5,675.0	6,497.4	5,675.0	25.7	26.9	-90.00	-1,030.5	741.2	645.9	595.2	50.66	12.749		
6,500.0	5,675.0	6,647.1	5,675.0	27.4	29.2	-90.00	-1,177.6	768.4	664.1	609.2	54.89	12.098		
6,600.0	5,675.0	6,800.2	5,675.0	29.1	31.5	-90.00	-1,329.9	784.2	674.4	615.2	59.22	11.389		
6,700.0	5,675.0	6,943.0	5,675.0	30.8	33.7	-90.00	-1,472.6	788.1	676.9	613.6	63.36	10.684		
6,800.0	5,675.0	7,043.0	5,675.0	32.6	35.2	-90.00	-1,572.6	788.1	676.9	610.2	66.78	10.137		
6,900.0	5,675.0	7,143.0	5,675.0	34.4	36.8	-90.00	-1,672.6	788.1	676.9	606.7	70.23	9.638		
7,000.0	5,675.0	7,243.0	5,675.0	36.2	38.4	-90.00	-1,772.6	788.1	676.9	603.2	73.73	9.181		
7,100.0	5,675.0	7,343.0	5,675.0	38.0	40.0	-90.00	-1,872.6	788.1	676.9	599.7	77.26	8.762		
7,200.0	5,675.0	7,443.0	5,675.0	39.8	41.6	-90.00	-1,972.6	788.1	676.9	596.1	80.81	8.377		
7,300.0	5,675.0	7,543.0	5,675.0	41.6	43.3	-90.00	-2,072.6	788.1	676.9	592.5	84.39	8.021		
7,400.0	5,675.0	7,643.0	5,675.0	43.5	45.0	-90.00	-2,172.6	788.1	676.9	588.9	88.00	7.693		
7,500.0	5,675.0	7,743.0	5,675.0	45.3	46.7	-90.00	-2,272.6	788.1	676.9	585.3	91.62	7.389		
7,600.0	5,675.0	7,843.0	5,675.0	47.2	48.4	-90.00	-2,372.6	788.1	676.9	581.7	95.26	7.106		
7,700.0	5,675.0	7,943.0	5,675.0	49.0	50.1	-90.00	-2,472.6	788.1	677.0	578.0	98.91	6.844		
7,800.0	5,675.0	8,043.0	5,675.0	50.9	51.9	-90.00	-2,572.6	788.1	677.0	574.4	102.58	6.599		
7,900.0	5,675.0	8,143.0	5,675.0	52.7	53.6	-90.00	-2,672.6	788.1	677.0	570.7	106.26	6.371		
8,000.0	5,675.0	8,243.0	5,675.0	54.6	55.4	-90.00	-2,772.6	788.2	677.0	567.0	109.95	6.157		
8,100.0	5,675.0	8,343.0	5,675.0	56.5	57.2	-90.00	-2,872.6	788.2	677.0	563.3	113.65	5.957		
8,200.0	5,675.0	8,443.0	5,675.0	58.3	59.0	-90.00	-2,972.6	788.2	677.0	559.6	117.36	5.768		
8,300.0	5,675.0	8,543.0	5,675.0	60.2	60.8	-90.00	-3,072.6	788.2	677.0	555.9	121.07	5.591		
8,400.0	5,675.0	8,643.0	5,675.0	62.1	62.6	-90.00	-3,172.6	788.2	677.0	552.2	124.80	5.425		
8,500.0	5,675.0	8,743.0	5,675.0	64.0	64.4	-90.00	-3,272.6	788.2	677.0	548.4	128.53	5.267		
8,600.0	5,675.0	8,843.0	5,675.0	65.8	66.2	-90.00	-3,372.6	788.2	677.0	544.7	132.26	5.118		
8,700.0	5,675.0	8,943.0	5,675.0	67.7	68.0	-90.00	-3,472.6	788.2	677.0	541.0	136.00	4.978		
8,800.0	5,675.0	9,043.0	5,675.0	69.6	69.8	-90.00	-3,572.6	788.2	677.0	537.2	139.75	4.844		
8,900.0	5,675.0	9,143.0	5,675.0	71.5	71.6	-90.00	-3,672.6	788.2	677.0	533.5	143.50	4.718		
9,000.0	5,675.0	9,243.0	5,675.0	73.4	73.5	-90.00	-3,772.6	788.2	677.0	529.7	147.26	4.597		
9,100.0	5,675.0	9,343.0	5,675.0	75.3	75.3	-90.00	-3,872.6	788.2	677.0	526.0	151.02	4.483		
9,200.0	5,675.0	9,443.0	5,675.0	77.2	77.2	-90.00	-3,972.6	788.2	677.0	522.2	154.78	4.374		

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

Company:	Whiting Petroleum Corporation	Local Co-ordinate Reference:	Well Razor #26L-3502B
Project:	Weld County, CO	TVD Reference:	WELL @ 4751.0usft (Original Well Elev)
Reference Site:	S26-T10N-R58W	MD Reference:	WELL @ 4751.0usft (Original Well Elev)
Site Error:	0.0usft	North Reference:	Grid
Reference Well:	Razor #26L-3502B	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Offset Design S26-T10N-R58W - Razor #26L-3504B - HZ - Plan #1												Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD												Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
9,300.0	5,675.0	9,543.0	5,675.0	79.1	79.0	-90.00	-4,072.6	788.2	677.0	518.5	158.55	4.270	
9,400.0	5,675.0	9,643.0	5,675.0	81.0	80.8	-90.00	-4,172.6	788.2	677.0	514.7	162.32	4.171	
9,500.0	5,675.0	9,743.0	5,675.0	82.9	82.7	-90.00	-4,272.6	788.2	677.0	510.9	166.09	4.076	
9,600.0	5,675.0	9,843.0	5,675.0	84.7	84.6	-90.00	-4,372.6	788.3	677.0	507.1	169.87	3.986	
9,700.0	5,675.0	9,943.0	5,675.0	86.6	86.4	-90.00	-4,472.6	788.3	677.0	503.4	173.64	3.899	
9,800.0	5,675.0	10,043.0	5,675.0	88.5	88.3	-90.00	-4,572.6	788.3	677.0	499.6	177.42	3.816	
9,900.0	5,675.0	10,143.0	5,675.0	90.4	90.1	-90.00	-4,672.6	788.3	677.0	495.8	181.21	3.736	
10,000.0	5,675.0	10,243.0	5,675.0	92.3	92.0	-90.00	-4,772.6	788.3	677.0	492.0	184.99	3.660	
10,100.0	5,675.0	10,343.0	5,675.0	94.2	93.9	-90.00	-4,872.6	788.3	677.0	488.2	188.78	3.586	
10,200.0	5,675.0	10,443.0	5,675.0	96.1	95.7	-90.00	-4,972.6	788.3	677.0	484.5	192.57	3.516	
10,300.0	5,675.0	10,543.0	5,675.0	98.0	97.6	-90.00	-5,072.6	788.3	677.0	480.7	196.36	3.448	
10,400.0	5,675.0	10,643.0	5,675.0	99.9	99.5	-90.00	-5,172.6	788.3	677.0	476.9	200.15	3.383	
10,500.0	5,675.0	10,743.0	5,675.0	101.8	101.3	-90.00	-5,272.6	788.3	677.0	473.1	203.94	3.320	
10,600.0	5,675.0	10,843.0	5,675.0	103.7	103.2	-90.00	-5,372.6	788.3	677.0	469.3	207.74	3.259	
10,700.0	5,675.0	10,943.0	5,675.0	105.7	105.1	-90.00	-5,472.6	788.3	677.0	465.5	211.54	3.201	
10,800.0	5,675.0	11,043.0	5,675.0	107.6	107.0	-90.00	-5,572.6	788.3	677.0	461.7	215.33	3.144	
10,900.0	5,675.0	11,143.0	5,675.0	109.5	108.9	-90.00	-5,672.6	788.3	677.0	457.9	219.13	3.090	
11,000.0	5,675.0	11,243.0	5,675.0	111.4	110.7	-90.00	-5,772.6	788.3	677.0	454.1	222.93	3.037	
11,100.0	5,675.0	11,343.0	5,675.0	113.3	112.6	-90.00	-5,872.6	788.3	677.0	450.3	226.73	2.986	
11,200.0	5,675.0	11,443.0	5,675.0	115.2	114.5	-90.00	-5,972.6	788.3	677.1	446.5	230.54	2.937	
11,300.0	5,675.0	11,543.0	5,675.0	117.1	116.4	-90.00	-6,072.6	788.4	677.1	442.7	234.34	2.889	
11,400.0	5,675.0	11,643.0	5,675.0	119.0	118.3	-90.00	-6,172.6	788.4	677.1	438.9	238.15	2.843	
11,500.0	5,675.0	11,743.0	5,675.0	120.9	120.2	-90.00	-6,272.6	788.4	677.1	435.1	241.95	2.798	
11,600.0	5,675.0	11,843.0	5,675.0	122.8	122.0	-90.00	-6,372.6	788.4	677.1	431.3	245.76	2.755	
11,700.0	5,675.0	11,943.0	5,675.0	124.7	123.9	-90.00	-6,472.6	788.4	677.1	427.5	249.57	2.713	
11,800.0	5,675.0	12,043.0	5,675.0	126.6	125.8	-90.00	-6,572.6	788.4	677.1	423.7	253.37	2.672	
11,900.0	5,675.0	12,143.0	5,675.0	128.5	127.7	-90.00	-6,672.6	788.4	677.1	419.9	257.18	2.633	
12,000.0	5,675.0	12,243.0	5,675.0	130.4	129.6	-90.00	-6,772.6	788.4	677.1	416.1	260.99	2.594	
12,100.0	5,675.0	12,343.0	5,675.0	132.3	131.5	-90.00	-6,872.6	788.4	677.1	412.3	264.80	2.557	
12,206.4	5,675.0	12,449.4	5,675.0	134.4	133.5	-90.00	-6,979.1	788.4	677.1	408.2	268.86	2.518	
12,207.4	5,675.0	12,450.4	5,675.0	134.4	133.5	-90.00	-6,980.0	788.4	677.1	408.2	268.89	2.518 SF	

Company: Whiting Petroleum Corporation
Project: Weld County, CO
Reference Site: S26-T10N-R58W
Site Error: 0.0usft
Reference Well: Razor #26L-3502B
Well Error: 0.0usft
Reference Wellbore: HZ
Reference Design: Plan #2

Local Co-ordinate Reference: Well Razor #26L-3502B
TVD Reference: WELL @ 4751.0usft (Original Well Elev)
MD Reference: WELL @ 4751.0usft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to WELL @ 4751.0usft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W °

Coordinates are relative to: Razor #26L-3502B
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 1.07°

