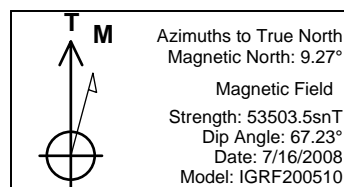
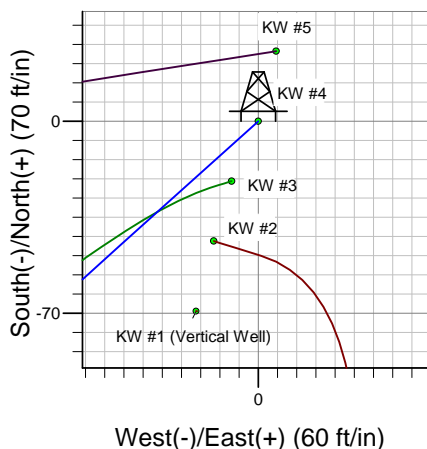
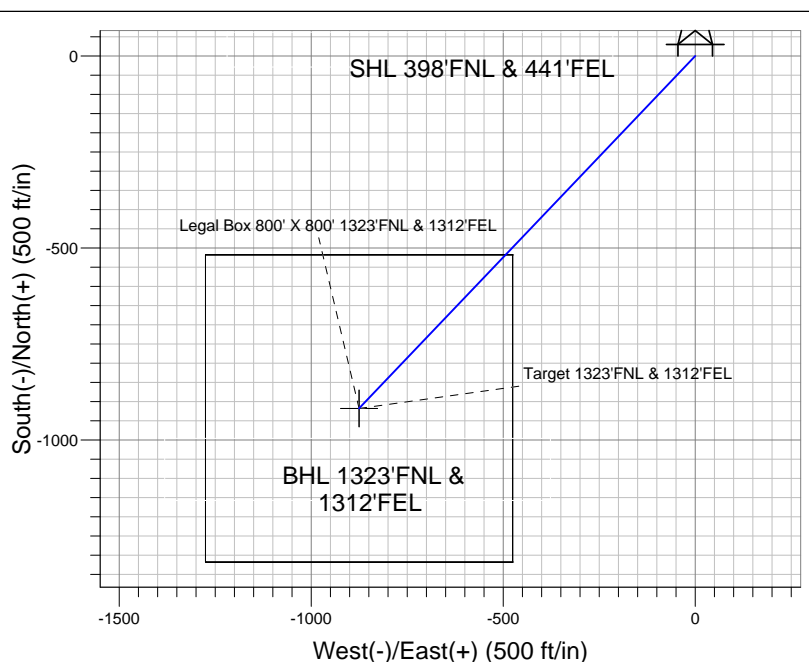
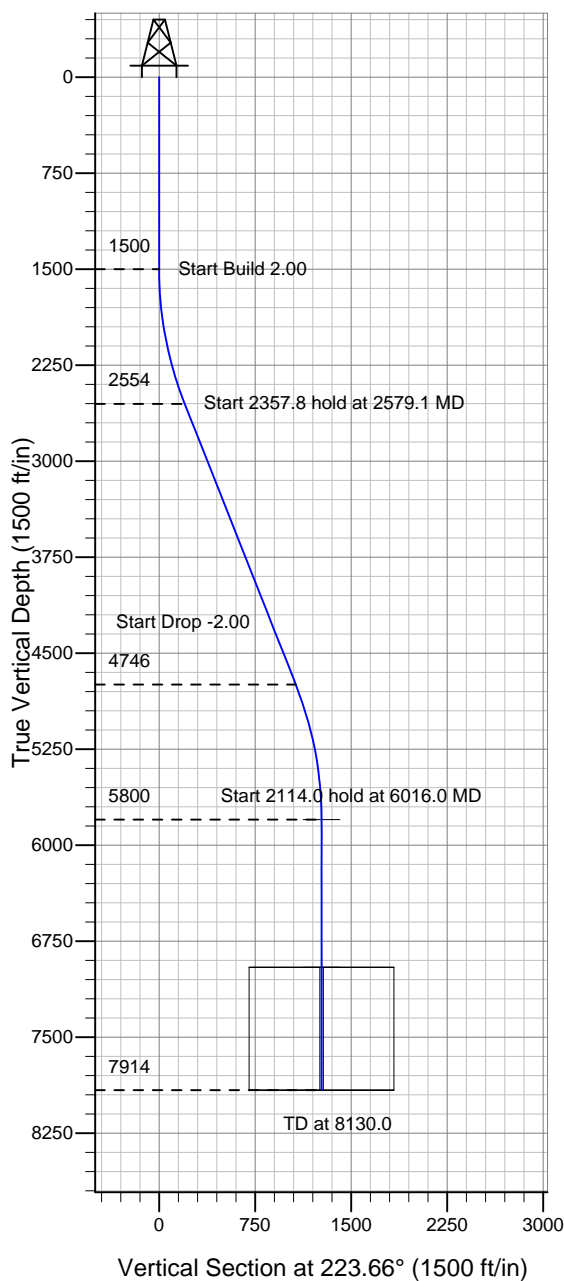


BLUE CHIP OIL - Weld County CO



WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Target 1323'FNL & 1312'FEL	5800.0	-918.1	-876.0	40° 30' 19.044 N	104° 50' 13.308 W	Point
Legal Box 800' X 800' 1323'FNL & 1312'FEL	6954.0	-918.1	-876.0	40° 30' 19.044 N	104° 50' 13.308 W	Rectangle (Sides: L800.0 W800.0)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	2579.1	21.58	223.66	2553.7	-145.3	-138.6	2.00	223.66	200.8	
4	4936.9	21.58	223.66	4746.3	-772.8	-737.3	0.00	0.00	1068.1	
5	6016.0	0.00	0.00	5800.0	-918.1	-876.0	2.00	180.00	1268.9	Target 1323'FNL & 1312'FEL
6	8130.0	0.00	0.00	7914.0	-918.1	-876.0	0.00	0.00	1268.9	



BLUE CHIP OIL - Weld County CO

SEC.12-T6N-R67W

KW Pad SEC.12-T6N-R67W

KW #4

KW #4

Plan: KW #4

Standard Planning Report

29 July, 2008

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Project	SEC.12-T6N-R67W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

KW Pad SEC.12-T6N-R67W					
Site Position:		Northing:	1,428,487.61 ft	Latitude:	40° 30' 27.684 N
From:	Lat/Long	Easting:	3,185,210.97 ft	Longitude:	104° 50' 2.148 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.43 °

Well	KW #4					
Well Position	+N-S	43.7 ft	Northing:	1,428,531.42 ft	Latitude:	40° 30' 28.116 N
	+E-W	13.9 ft	Easting:	3,185,224.54 ft	Longitude:	104° 50' 1.968 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,885.0 ft

Wellbore	KW #4				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	7/16/2008	9.27	67.23	53,504

Design	KW #4			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	223.66

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,579.1	21.58	223.66	2,553.7	-145.3	-138.6	2.00	2.00	0.00	223.66	
4,936.9	21.58	223.66	4,746.3	-772.8	-737.3	0.00	0.00	0.00	0.00	
6,016.0	0.00	0.00	5,800.0	-918.1	-876.0	2.00	-2.00	0.00	180.00	Target 1323'FNL &
8,130.0	0.00	0.00	7,914.0	-918.1	-876.0	0.00	0.00	0.00	0.00	

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,520.0	0.40	223.66	1,520.0	-0.1	0.0	0.1	2.00	2.00	0.00
1,560.0	1.20	223.66	1,560.0	-0.5	-0.4	0.6	2.00	2.00	0.00
1,600.0	2.00	223.66	1,600.0	-1.3	-1.2	1.7	2.00	2.00	0.00
1,640.0	2.80	223.66	1,639.9	-2.5	-2.4	3.4	2.00	2.00	0.00
1,680.0	3.60	223.66	1,679.9	-4.1	-3.9	5.7	2.00	2.00	0.00
1,720.0	4.40	223.66	1,719.8	-6.1	-5.8	8.4	2.00	2.00	0.00
1,760.0	5.20	223.66	1,759.6	-8.5	-8.1	11.8	2.00	2.00	0.00
1,800.0	6.00	223.66	1,799.5	-11.4	-10.8	15.7	2.00	2.00	0.00
1,840.0	6.80	223.66	1,839.2	-14.6	-13.9	20.2	2.00	2.00	0.00
1,880.0	7.60	223.66	1,878.9	-18.2	-17.4	25.2	2.00	2.00	0.00
1,920.0	8.40	223.66	1,918.5	-22.2	-21.2	30.7	2.00	2.00	0.00
1,960.0	9.20	223.66	1,958.0	-26.7	-25.4	36.9	2.00	2.00	0.00
2,000.0	10.00	223.66	1,997.5	-31.5	-30.0	43.5	2.00	2.00	0.00
2,040.0	10.80	223.66	2,036.8	-36.7	-35.0	50.7	2.00	2.00	0.00
2,080.0	11.60	223.66	2,076.0	-42.3	-40.4	58.5	2.00	2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,120.0	12.40	223.66	2,115.2	-48.4	-46.1	66.8	2.00	2.00	0.00
2,160.0	13.20	223.66	2,154.2	-54.8	-52.3	75.7	2.00	2.00	0.00
2,200.0	14.00	223.66	2,193.1	-61.6	-58.7	85.1	2.00	2.00	0.00
2,240.0	14.80	223.66	2,231.8	-68.8	-65.6	95.0	2.00	2.00	0.00
2,280.0	15.60	223.66	2,270.4	-76.4	-72.9	105.5	2.00	2.00	0.00
2,320.0	16.40	223.66	2,308.8	-84.3	-80.5	116.6	2.00	2.00	0.00
2,360.0	17.20	223.66	2,347.1	-92.7	-88.4	128.1	2.00	2.00	0.00
2,400.0	18.00	223.66	2,385.3	-101.4	-96.8	140.2	2.00	2.00	0.00
2,440.0	18.80	223.66	2,423.2	-110.6	-105.5	152.8	2.00	2.00	0.00
2,480.0	19.60	223.66	2,461.0	-120.1	-114.6	166.0	2.00	2.00	0.00
2,520.0	20.40	223.66	2,498.6	-130.0	-124.0	179.7	2.00	2.00	0.00
2,560.0	21.20	223.66	2,536.0	-140.3	-133.8	193.9	2.00	2.00	0.00
2,579.1	21.58	223.66	2,553.7	-145.3	-138.6	200.8	2.00	2.00	0.00
2,600.0	21.58	223.66	2,573.2	-150.9	-144.0	208.5	0.00	0.00	0.00
2,640.0	21.58	223.66	2,610.4	-161.5	-154.1	223.2	0.00	0.00	0.00
2,680.0	21.58	223.66	2,647.6	-172.2	-164.3	238.0	0.00	0.00	0.00
2,720.0	21.58	223.66	2,684.8	-182.8	-174.4	252.7	0.00	0.00	0.00
2,760.0	21.58	223.66	2,722.0	-193.5	-184.6	267.4	0.00	0.00	0.00
2,800.0	21.58	223.66	2,759.2	-204.1	-194.7	282.1	0.00	0.00	0.00
2,840.0	21.58	223.66	2,796.4	-214.7	-204.9	296.8	0.00	0.00	0.00
2,880.0	21.58	223.66	2,833.6	-225.4	-215.1	311.5	0.00	0.00	0.00
2,920.0	21.58	223.66	2,870.8	-236.0	-225.2	326.2	0.00	0.00	0.00
2,960.0	21.58	223.66	2,908.0	-246.7	-235.4	340.9	0.00	0.00	0.00
3,000.0	21.58	223.66	2,945.2	-257.3	-245.5	355.7	0.00	0.00	0.00
3,040.0	21.58	223.66	2,982.4	-268.0	-255.7	370.4	0.00	0.00	0.00
3,080.0	21.58	223.66	3,019.5	-278.6	-265.8	385.1	0.00	0.00	0.00
3,120.0	21.58	223.66	3,056.7	-289.3	-276.0	399.8	0.00	0.00	0.00
3,160.0	21.58	223.66	3,093.9	-299.9	-286.1	414.5	0.00	0.00	0.00
3,200.0	21.58	223.66	3,131.1	-310.5	-296.3	429.2	0.00	0.00	0.00
3,240.0	21.58	223.66	3,168.3	-321.2	-306.5	443.9	0.00	0.00	0.00
3,280.0	21.58	223.66	3,205.5	-331.8	-316.6	458.7	0.00	0.00	0.00
3,320.0	21.58	223.66	3,242.7	-342.5	-326.8	473.4	0.00	0.00	0.00
3,360.0	21.58	223.66	3,279.9	-353.1	-336.9	488.1	0.00	0.00	0.00
3,400.0	21.58	223.66	3,317.1	-363.8	-347.1	502.8	0.00	0.00	0.00
3,440.0	21.58	223.66	3,354.3	-374.4	-357.2	517.5	0.00	0.00	0.00
3,480.0	21.58	223.66	3,391.5	-385.1	-367.4	532.2	0.00	0.00	0.00
3,520.0	21.58	223.66	3,428.7	-395.7	-377.6	546.9	0.00	0.00	0.00
3,560.0	21.58	223.66	3,465.9	-406.3	-387.7	561.6	0.00	0.00	0.00
3,600.0	21.58	223.66	3,503.1	-417.0	-397.9	576.4	0.00	0.00	0.00
3,640.0	21.58	223.66	3,540.3	-427.6	-408.0	591.1	0.00	0.00	0.00
3,680.0	21.58	223.66	3,577.5	-438.3	-418.2	605.8	0.00	0.00	0.00
3,720.0	21.58	223.66	3,614.7	-448.9	-428.3	620.5	0.00	0.00	0.00
3,742.9	21.58	223.66	3,636.0	-455.0	-434.2	628.9	0.00	0.00	0.00
Parkman									
3,760.0	21.58	223.66	3,651.9	-459.6	-438.5	635.2	0.00	0.00	0.00
3,800.0	21.58	223.66	3,689.1	-470.2	-448.7	649.9	0.00	0.00	0.00
3,840.0	21.58	223.66	3,726.3	-480.9	-458.8	664.6	0.00	0.00	0.00
3,880.0	21.58	223.66	3,763.5	-491.5	-469.0	679.3	0.00	0.00	0.00
3,920.0	21.58	223.66	3,800.7	-502.1	-479.1	694.1	0.00	0.00	0.00
3,960.0	21.58	223.66	3,837.9	-512.8	-489.3	708.8	0.00	0.00	0.00
4,000.0	21.58	223.66	3,875.1	-523.4	-499.4	723.5	0.00	0.00	0.00
4,040.0	21.58	223.66	3,912.2	-534.1	-509.6	738.2	0.00	0.00	0.00
4,080.0	21.58	223.66	3,949.4	-544.7	-519.8	752.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,120.0	21.58	223.66	3,986.6	-555.4	-529.9	767.6	0.00	0.00	0.00
4,160.0	21.58	223.66	4,023.8	-566.0	-540.1	782.3	0.00	0.00	0.00
4,200.0	21.58	223.66	4,061.0	-576.7	-550.2	797.0	0.00	0.00	0.00
4,240.0	21.58	223.66	4,098.2	-587.3	-560.4	811.8	0.00	0.00	0.00
4,280.0	21.58	223.66	4,135.4	-597.9	-570.5	826.5	0.00	0.00	0.00
4,320.0	21.58	223.66	4,172.6	-608.6	-580.7	841.2	0.00	0.00	0.00
4,360.0	21.58	223.66	4,209.8	-619.2	-590.9	855.9	0.00	0.00	0.00
4,400.0	21.58	223.66	4,247.0	-629.9	-601.0	870.6	0.00	0.00	0.00
4,440.0	21.58	223.66	4,284.2	-640.5	-611.2	885.3	0.00	0.00	0.00
4,480.0	21.58	223.66	4,321.4	-651.2	-621.3	900.0	0.00	0.00	0.00
4,520.0	21.58	223.66	4,358.6	-661.8	-631.5	914.7	0.00	0.00	0.00
4,521.5	21.58	223.66	4,360.0	-662.2	-631.9	915.3	0.00	0.00	0.00
Sussex									
4,560.0	21.58	223.66	4,395.8	-672.5	-641.6	929.5	0.00	0.00	0.00
4,600.0	21.58	223.66	4,433.0	-683.1	-651.8	944.2	0.00	0.00	0.00
4,640.0	21.58	223.66	4,470.2	-693.7	-661.9	958.9	0.00	0.00	0.00
4,680.0	21.58	223.66	4,507.4	-704.4	-672.1	973.6	0.00	0.00	0.00
4,720.0	21.58	223.66	4,544.6	-715.0	-682.3	988.3	0.00	0.00	0.00
4,760.0	21.58	223.66	4,581.8	-725.7	-692.4	1,003.0	0.00	0.00	0.00
4,800.0	21.58	223.66	4,619.0	-736.3	-702.6	1,017.7	0.00	0.00	0.00
4,840.0	21.58	223.66	4,656.2	-747.0	-712.7	1,032.5	0.00	0.00	0.00
4,880.0	21.58	223.66	4,693.4	-757.6	-722.9	1,047.2	0.00	0.00	0.00
4,920.0	21.58	223.66	4,730.6	-768.3	-733.0	1,061.9	0.00	0.00	0.00
4,936.9	21.58	223.66	4,746.3	-772.8	-737.3	1,068.1	0.00	0.00	0.00
4,940.9	21.50	223.66	4,750.0	-773.8	-738.4	1,069.6	2.00	-2.00	0.00
Shannon									
4,960.0	21.12	223.66	4,767.8	-778.8	-743.1	1,076.5	2.00	-2.00	0.00
5,000.0	20.32	223.66	4,805.2	-789.1	-752.9	1,090.7	2.00	-2.00	0.00
5,040.0	19.52	223.66	4,842.8	-798.9	-762.3	1,104.3	2.00	-2.00	0.00
5,080.0	18.72	223.66	4,880.6	-808.4	-771.4	1,117.4	2.00	-2.00	0.00
5,120.0	17.92	223.66	4,918.6	-817.5	-780.0	1,130.0	2.00	-2.00	0.00
5,160.0	17.12	223.66	4,956.7	-826.2	-788.4	1,142.0	2.00	-2.00	0.00
5,200.0	16.32	223.66	4,995.0	-834.6	-796.3	1,153.5	2.00	-2.00	0.00
5,240.0	15.52	223.66	5,033.5	-842.5	-803.9	1,164.5	2.00	-2.00	0.00
5,280.0	14.72	223.66	5,072.1	-850.0	-811.1	1,174.9	2.00	-2.00	0.00
5,320.0	13.92	223.66	5,110.9	-857.2	-817.9	1,184.8	2.00	-2.00	0.00
5,360.0	13.12	223.66	5,149.8	-864.0	-824.4	1,194.2	2.00	-2.00	0.00
5,400.0	12.32	223.66	5,188.8	-870.3	-830.4	1,203.0	2.00	-2.00	0.00
5,440.0	11.52	223.66	5,227.9	-876.3	-836.1	1,211.2	2.00	-2.00	0.00
5,480.0	10.72	223.66	5,267.2	-881.9	-841.5	1,218.9	2.00	-2.00	0.00
5,520.0	9.92	223.66	5,306.5	-887.1	-846.4	1,226.1	2.00	-2.00	0.00
5,560.0	9.12	223.66	5,346.0	-891.9	-851.0	1,232.7	2.00	-2.00	0.00
5,600.0	8.32	223.66	5,385.5	-896.2	-855.2	1,238.8	2.00	-2.00	0.00
5,640.0	7.52	223.66	5,425.1	-900.2	-859.0	1,244.3	2.00	-2.00	0.00
5,680.0	6.72	223.66	5,464.8	-903.8	-862.4	1,249.2	2.00	-2.00	0.00
5,720.0	5.92	223.66	5,504.6	-907.0	-865.4	1,253.6	2.00	-2.00	0.00
5,760.0	5.12	223.66	5,544.4	-909.8	-868.1	1,257.5	2.00	-2.00	0.00
5,800.0	4.32	223.66	5,584.2	-912.2	-870.4	1,260.8	2.00	-2.00	0.00
5,840.0	3.52	223.66	5,624.1	-914.2	-872.2	1,263.5	2.00	-2.00	0.00
5,880.0	2.72	223.66	5,664.1	-915.7	-873.7	1,265.7	2.00	-2.00	0.00
5,920.0	1.92	223.66	5,704.1	-916.9	-874.9	1,267.3	2.00	-2.00	0.00
5,960.0	1.12	223.66	5,744.0	-917.7	-875.6	1,268.4	2.00	-2.00	0.00
6,000.0	0.32	223.66	5,784.0	-918.0	-875.9	1,268.9	2.00	-2.00	0.00
6,016.0	0.00	0.00	5,800.0	-918.1	-876.0	1,268.9	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,040.0	0.00	0.00	5,824.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,080.0	0.00	0.00	5,864.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,120.0	0.00	0.00	5,904.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,160.0	0.00	0.00	5,944.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,200.0	0.00	0.00	5,984.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,240.0	0.00	0.00	6,024.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,280.0	0.00	0.00	6,064.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,320.0	0.00	0.00	6,104.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,360.0	0.00	0.00	6,144.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,400.0	0.00	0.00	6,184.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,440.0	0.00	0.00	6,224.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,480.0	0.00	0.00	6,264.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,520.0	0.00	0.00	6,304.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,560.0	0.00	0.00	6,344.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,600.0	0.00	0.00	6,384.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,640.0	0.00	0.00	6,424.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,680.0	0.00	0.00	6,464.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,720.0	0.00	0.00	6,504.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,760.0	0.00	0.00	6,544.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,800.0	0.00	0.00	6,584.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,840.0	0.00	0.00	6,624.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,880.0	0.00	0.00	6,664.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,920.0	0.00	0.00	6,704.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
6,960.0	0.00	0.00	6,744.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,000.0	0.00	0.00	6,784.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,040.0	0.00	0.00	6,824.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,080.0	0.00	0.00	6,864.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,120.0	0.00	0.00	6,904.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,160.0	0.00	0.00	6,944.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,170.0	0.00	0.00	6,954.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
Niobrara									
7,200.0	0.00	0.00	6,984.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,240.0	0.00	0.00	7,024.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,280.0	0.00	0.00	7,064.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,320.0	0.00	0.00	7,104.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,360.0	0.00	0.00	7,144.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,400.0	0.00	0.00	7,184.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,440.0	0.00	0.00	7,224.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,480.0	0.00	0.00	7,264.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,500.0	0.00	0.00	7,284.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
Codell									
7,520.0	0.00	0.00	7,304.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,560.0	0.00	0.00	7,344.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,600.0	0.00	0.00	7,384.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,640.0	0.00	0.00	7,424.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,680.0	0.00	0.00	7,464.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,720.0	0.00	0.00	7,504.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,760.0	0.00	0.00	7,544.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,800.0	0.00	0.00	7,584.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,840.0	0.00	0.00	7,624.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,880.0	0.00	0.00	7,664.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,920.0	0.00	0.00	7,704.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,960.0	0.00	0.00	7,744.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
7,980.0	0.00	0.00	7,764.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well KW #4
Company:	BLUE CHIP OIL - Weld County CO	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Project:	SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site:	KW Pad SEC.12-T6N-R67W	North Reference:	True
Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Wellbore:	KW #4		
Design:	KW #4		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
J Sand									
8,000.0	0.00	0.00	7,784.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
8,040.0	0.00	0.00	7,824.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
8,080.0	0.00	0.00	7,864.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
8,120.0	0.00	0.00	7,904.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00
8,130.0	0.00	0.00	7,914.0	-918.1	-876.0	1,268.9	0.00	0.00	0.00

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,742.9	3,636.0	Parkman		0.00		
4,521.5	4,360.0	Sussex		0.00		
4,940.9	4,750.0	Shannon		0.00		
7,170.0	6,954.0	Niobrara		0.00		
7,500.0	7,284.0	Codell		0.00		
7,980.0	7,764.0	J Sand		0.00		



BLUE CHIP OIL - Weld County CO

SEC.12-T6N-R67W

KW Pad SEC.12-T6N-R67W

KW #4

KW #4

KW #4

Anticollision Report

29 July, 2008

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Reference	KW #4		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	7/29/2008		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,130.0	KW #4 (KW #4)	MWD	MWD - Standard	

Summary							
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning	
Offset Well - Wellbore - Design							
KW Pad SEC.12-T6N-R67W							
KW #1 (Vertical Well) - KW #1 (Vertical Well) - KW #1 (V	2,104.4	2,099.9	33.7	24.5	3.673	CC, ES, SF	
KW #2 - KW #2 - KW #2 Design and Nudge	1,000.0	1,000.0	45.9	41.6	10.742	CC	
KW #2 - KW #2 - KW #2 Design and Nudge	1,100.0	1,099.9	46.0	41.3	9.779	ES	
KW #2 - KW #2 - KW #2 Design and Nudge	1,300.0	1,298.7	49.1	43.5	8.844	SF	
KW #3 - KW #3 - KW #3 Design and Nudge	200.0	200.0	23.4	22.7	34.698	CC, ES	
KW #3 - KW #3 - KW #3 Design and Nudge	5,200.0	5,099.7	513.5	484.1	17.460	SF	
KW #5 - KW #5 - KW #5	1,439.8	1,440.1	24.1	17.9	3.886	CC, ES	
KW #5 - KW #5 - KW #5	1,500.0	1,500.0	24.7	18.3	3.833	SF	

Offset Design		KW Pad SEC.12-T6N-R67W - KW #1 (Vertical Well) - KW #1 (Vertical Well) - KW #1 (Vertical Well)										Offset Site Error:		0.0 ft		
Survey Program: 0-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning			
0.0	0.0	0.0	0.0	0.0	0.0	-164.29	-69.2	-19.5	71.9							
100.0	100.0	100.0	100.0	0.1	0.1	-164.29	-69.2	-19.5	71.9	71.7	0.22	319.912				
200.0	200.0	200.0	200.0	0.3	0.3	-164.29	-69.2	-19.5	71.9	71.2	0.67	106.637				
300.0	300.0	300.0	300.0	0.6	0.6	-164.29	-69.2	-19.5	71.9	70.8	1.12	63.982				
400.0	400.0	400.0	400.0	0.8	0.8	-164.29	-69.2	-19.5	71.9	70.3	1.57	45.702				
500.0	500.0	500.0	500.0	1.0	1.0	-164.29	-69.2	-19.5	71.9	69.9	2.02	35.546				
600.0	600.0	600.0	600.0	1.2	1.2	-164.29	-69.2	-19.5	71.9	69.4	2.47	29.083				
700.0	700.0	700.0	700.0	1.5	1.5	-164.29	-69.2	-19.5	71.9	69.0	2.92	24.609				
800.0	800.0	800.0	800.0	1.7	1.7	-164.29	-69.2	-19.5	71.9	68.5	3.37	21.327				
900.0	900.0	900.0	900.0	1.9	1.9	-164.29	-69.2	-19.5	71.9	68.1	3.82	18.818				
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-164.29	-69.2	-19.5	71.9	67.6	4.27	16.837				
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-164.29	-69.2	-19.5	71.9	67.2	4.72	15.234				
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-164.29	-69.2	-19.5	71.9	66.7	5.17	13.909				
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-164.29	-69.2	-19.5	71.9	66.3	5.62	12.796				
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-164.29	-69.2	-19.5	71.9	65.8	6.07	11.849				
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-164.29	-69.2	-19.5	71.9	65.4	6.52	11.031				
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-28.63	-69.2	-19.5	70.4	63.4	6.94	10.138				
1,700.0	1,699.8	1,699.8	1,699.8	3.6	3.7	-30.86	-69.2	-19.5	65.8	58.5	7.34	8.967				
1,800.0	1,799.5	1,799.5	1,799.5	3.8	3.9	-35.32	-69.2	-19.5	58.5	50.8	7.74	7.556				
1,900.0	1,898.7	1,898.7	1,898.7	4.0	4.2	-43.68	-69.2	-19.5	49.1	40.9	8.16	6.010				

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (")	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,000.0	1,997.5	1,997.5	1,997.5	4.3	4.4	-59.70	-69.2	-19.5	39.2	30.6	8.62	4.543		
2,100.0	2,095.6	2,095.6	2,095.6	4.6	4.6	-88.48	-69.2	-19.5	33.7	24.6	9.15	3.684		
2,104.4	2,099.9	2,099.9	2,099.9	4.6	4.6	-90.00	-69.2	-19.5	33.7	24.5	9.17	3.673 CC, ES, SF		
2,200.0	2,193.1	2,193.1	2,193.1	4.9	4.8	-121.85	-69.2	-19.5	40.0	30.5	9.55	4.188		
2,300.0	2,289.6	2,289.6	2,289.6	5.2	5.0	-143.54	-69.2	-19.5	58.2	48.4	9.84	5.917		
2,400.0	2,385.3	2,385.3	2,385.3	5.7	5.2	-155.20	-69.2	-19.5	83.8	73.6	10.13	8.267		
2,500.0	2,479.8	2,479.8	2,479.8	6.2	5.5	-161.83	-69.2	-19.5	114.3	103.9	10.45	10.938		
2,579.1	2,553.7	2,553.7	2,553.7	6.6	5.6	-165.21	-69.2	-19.5	141.4	130.7	10.71	13.198		
2,600.0	2,573.2	2,573.2	2,573.2	6.7	5.7	-165.97	-69.2	-19.5	148.9	138.1	10.80	13.782		
2,700.0	2,666.2	2,666.2	2,666.2	7.3	5.9	-168.73	-69.2	-19.5	184.9	173.6	11.24	16.445		
2,800.0	2,759.2	2,759.2	2,759.2	8.0	6.1	-170.59	-69.2	-19.5	221.2	209.5	11.70	18.903		
2,900.0	2,852.2	2,852.2	2,852.2	8.6	6.3	-171.92	-69.2	-19.5	257.6	245.4	12.17	21.169		
3,000.0	2,945.2	2,945.2	2,945.2	9.3	6.5	-172.93	-69.2	-19.5	294.1	281.4	12.64	23.258		
3,100.0	3,038.1	3,038.1	3,038.1	10.0	6.7	-173.71	-69.2	-19.5	330.6	317.5	13.13	25.187		
3,200.0	3,131.1	3,131.1	3,131.1	10.7	6.9	-174.34	-69.2	-19.5	367.3	353.6	13.62	26.971		
3,300.0	3,224.1	3,224.1	3,224.1	11.4	7.1	-174.85	-69.2	-19.5	403.9	389.8	14.11	28.623		
3,400.0	3,317.1	3,317.1	3,317.1	12.1	7.3	-175.28	-69.2	-19.5	440.6	426.0	14.61	30.155		
3,500.0	3,410.1	3,410.1	3,410.1	12.8	7.6	-175.65	-69.2	-19.5	477.2	462.1	15.11	31.580		
3,600.0	3,503.1	3,503.1	3,503.1	13.5	7.8	-175.96	-69.2	-19.5	513.9	498.3	15.62	32.908		
3,700.0	3,596.1	3,596.1	3,596.1	14.3	8.0	-176.23	-69.2	-19.5	550.6	534.5	16.13	34.146		
3,800.0	3,689.1	3,689.1	3,689.1	15.0	8.2	-176.46	-69.2	-19.5	587.4	570.7	16.64	35.304		
3,900.0	3,782.1	3,782.1	3,782.1	15.7	8.4	-176.67	-69.2	-19.5	624.1	606.9	17.15	36.388		
4,000.0	3,875.1	3,875.1	3,875.1	16.5	8.6	-176.86	-69.2	-19.5	660.8	643.2	17.67	37.405		
4,100.0	3,968.0	3,968.0	3,968.0	17.2	8.8	-177.02	-69.2	-19.5	697.6	679.4	18.18	38.361		
4,200.0	4,061.0	4,061.0	4,061.0	18.0	9.0	-177.17	-69.2	-19.5	734.3	715.6	18.70	39.260		
4,300.0	4,154.0	4,154.0	4,154.0	18.7	9.2	-177.31	-69.2	-19.5	771.0	751.8	19.22	40.108		
4,400.0	4,247.0	4,247.0	4,247.0	19.4	9.4	-177.43	-69.2	-19.5	807.8	788.0	19.75	40.908		
4,500.0	4,340.0	4,340.0	4,340.0	20.2	9.6	-177.54	-69.2	-19.5	844.5	824.3	20.27	41.664		
4,600.0	4,433.0	4,433.0	4,433.0	20.9	9.9	-177.64	-69.2	-19.5	881.3	860.5	20.80	42.380		
4,700.0	4,526.0	4,526.0	4,526.0	21.7	10.1	-177.74	-69.2	-19.5	918.1	896.7	21.32	43.058		
4,800.0	4,619.0	4,619.0	4,619.0	22.4	10.3	-177.82	-69.2	-19.5	954.8	933.0	21.85	43.702		
4,900.0	4,712.0	4,712.0	4,712.0	23.2	10.5	-177.91	-69.2	-19.5	991.6	969.2	22.38	44.313		
4,936.9	4,746.3	4,746.3	4,746.3	23.4	10.6	-177.93	-69.2	-19.5	1,005.1	982.6	22.57	44.531		
5,000.0	4,805.2	4,805.2	4,805.2	23.8	10.7	-178.00	-69.2	-19.5	1,027.7	1,004.7	22.99	44.707		
5,100.0	4,899.6	4,899.6	4,899.6	24.4	10.9	-178.08	-69.2	-19.5	1,060.8	1,037.1	23.61	44.927		
5,200.0	4,995.0	4,995.0	4,995.0	24.8	11.1	-178.15	-69.2	-19.5	1,090.5	1,066.3	24.20	45.057		
5,300.0	5,091.5	5,091.5	5,091.5	25.3	11.3	-178.22	-69.2	-19.5	1,116.9	1,092.2	24.76	45.105		
5,400.0	5,188.8	5,188.8	5,188.8	25.7	11.6	-178.27	-69.2	-19.5	1,139.9	1,114.7	25.29	45.078		
5,500.0	5,286.8	5,286.8	5,286.8	26.0	11.8	-178.31	-69.2	-19.5	1,159.6	1,133.8	25.78	44.984		
5,600.0	5,385.5	5,385.5	5,385.5	26.3	12.0	-178.34	-69.2	-19.5	1,175.7	1,149.5	26.23	44.826		
5,700.0	5,484.7	5,484.7	5,484.7	26.5	12.2	-178.37	-69.2	-19.5	1,188.5	1,161.8	26.64	44.608		
5,800.0	5,584.2	5,584.2	5,584.2	26.8	12.4	-178.38	-69.2	-19.5	1,197.7	1,170.7	27.02	44.333		
5,900.0	5,684.1	5,684.1	5,684.1	26.9	12.7	-178.39	-69.2	-19.5	1,203.5	1,176.2	27.35	44.003		
6,000.0	5,784.0	5,784.0	5,784.0	27.0	12.9	-178.40	-69.2	-19.5	1,205.8	1,178.2	27.64	43.619		
6,016.0	5,800.0	5,800.0	5,800.0	27.0	12.9	45.26	-69.2	-19.5	1,205.9	1,178.2	27.69	43.552		
6,100.0	5,884.0	5,884.0	5,884.0	27.1	13.1	45.26	-69.2	-19.5	1,205.9	1,177.9	28.02	43.043		
6,200.0	5,984.0	5,984.0	5,984.0	27.2	13.3	45.26	-69.2	-19.5	1,205.9	1,177.5	28.41	42.450		
6,300.0	6,084.0	6,084.0	6,084.0	27.3	13.6	45.26	-69.2	-19.5	1,205.9	1,177.1	28.80	41.872		
6,400.0	6,184.0	6,184.0	6,184.0	27.4	13.8	45.26	-69.2	-19.5	1,205.9	1,176.7	29.19	41.307		
6,500.0	6,284.0	6,284.0	6,284.0	27.5	14.0	45.26	-69.2	-19.5	1,205.9	1,176.3	29.59	40.755		
6,600.0	6,384.0	6,384.0	6,384.0	27.6	14.2	45.26	-69.2	-19.5	1,205.9	1,175.9	29.99	40.215		
6,700.0	6,484.0	6,484.0	6,484.0	27.7	14.5	45.26	-69.2	-19.5	1,205.9	1,175.5	30.38	39.688		

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

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design KW Pad SEC.12-T6N-R67W - KW #1 (Vertical Well) - KW #1 (Vertical Well) - KW #1 (Vertical Well)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,800.0	6,584.0	6,584.0	6,584.0	27.8	14.7	45.26	-69.2	-19.5	1,205.9	1,175.1	30.78	39.173	
6,900.0	6,684.0	6,684.0	6,684.0	27.9	14.9	45.26	-69.2	-19.5	1,205.9	1,174.7	31.18	38.670	
7,000.0	6,784.0	6,784.0	6,784.0	28.0	15.1	45.26	-69.2	-19.5	1,205.9	1,174.3	31.59	38.178	
7,100.0	6,884.0	6,884.0	6,884.0	28.1	15.4	45.26	-69.2	-19.5	1,205.9	1,173.9	31.99	37.697	
7,200.0	6,984.0	6,984.0	6,984.0	28.2	15.6	45.26	-69.2	-19.5	1,205.9	1,173.5	32.39	37.227	
7,300.0	7,084.0	7,084.0	7,084.0	28.3	15.8	45.26	-69.2	-19.5	1,205.9	1,173.1	32.80	36.767	
7,400.0	7,184.0	7,184.0	7,184.0	28.5	16.0	45.26	-69.2	-19.5	1,205.9	1,172.7	33.20	36.318	
7,500.0	7,284.0	7,284.0	7,284.0	28.6	16.3	45.26	-69.2	-19.5	1,205.9	1,172.3	33.61	35.878	
7,600.0	7,384.0	7,384.0	7,384.0	28.7	16.5	45.26	-69.2	-19.5	1,205.9	1,171.9	34.02	35.447	
7,700.0	7,484.0	7,484.0	7,484.0	28.8	16.7	45.26	-69.2	-19.5	1,205.9	1,171.4	34.43	35.026	
7,800.0	7,584.0	7,500.0	7,500.0	28.9	16.7	45.26	-69.2	-19.5	1,208.8	1,174.2	34.65	34.887	
7,900.0	7,684.0	7,500.0	7,500.0	29.0	16.7	45.26	-69.2	-19.5	1,219.8	1,185.0	34.84	35.017	
8,000.0	7,784.0	7,500.0	7,500.0	29.2	16.7	45.26	-69.2	-19.5	1,238.9	1,203.9	35.02	35.374	
8,100.0	7,884.0	7,500.0	7,500.0	29.3	16.7	45.26	-69.2	-19.5	1,265.6	1,230.3	35.21	35.942	
8,130.0	7,914.0	7,500.0	7,500.0	29.3	16.7	45.26	-69.2	-19.5	1,275.0	1,239.7	35.27	36.152	

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0ft
Survey Program: 0-MWD												Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-162.36	-43.7	-13.9	45.9				
100.0	100.0	100.0	100.0	0.1	0.1	-162.36	-43.7	-13.9	45.9	45.7	0.22	204.105	
200.0	200.0	200.0	200.0	0.3	0.3	-162.36	-43.7	-13.9	45.9	45.2	0.67	68.035	
300.0	300.0	300.0	300.0	0.6	0.6	-162.36	-43.7	-13.9	45.9	44.8	1.12	40.821	
400.0	400.0	400.0	400.0	0.8	0.8	-162.36	-43.7	-13.9	45.9	44.3	1.57	29.158	
500.0	500.0	500.0	500.0	1.0	1.0	-162.36	-43.7	-13.9	45.9	43.9	2.02	22.678	
600.0	600.0	600.0	600.0	1.2	1.2	-162.36	-43.7	-13.9	45.9	43.4	2.47	18.555	
700.0	700.0	700.0	700.0	1.5	1.5	-162.36	-43.7	-13.9	45.9	43.0	2.92	15.700	
800.0	800.0	800.0	800.0	1.7	1.7	-162.36	-43.7	-13.9	45.9	42.5	3.37	13.607	
900.0	900.0	900.0	900.0	1.9	1.9	-162.36	-43.7	-13.9	45.9	42.1	3.82	12.006	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-162.36	-43.7	-13.9	45.9	41.6	4.27	10.742 CC	
1,100.0	1,100.0	1,099.9	1,099.9	2.4	2.3	-164.53	-44.3	-12.3	46.0	41.3	4.70	9.779 ES	
1,200.0	1,200.0	1,199.5	1,199.4	2.6	2.5	-170.91	-46.1	-7.4	46.7	41.6	5.12	9.114	
1,300.0	1,300.0	1,298.7	1,298.2	2.8	2.7	179.16	-49.0	0.7	49.1	43.5	5.55	8.844 SF	
1,400.0	1,400.0	1,396.7	1,395.6	3.0	3.0	169.93	-54.0	9.6	55.0	49.0	5.96	9.222	
1,500.0	1,500.0	1,494.6	1,492.9	3.3	3.2	164.73	-61.9	16.9	64.6	58.2	6.37	10.132	
1,600.0	1,600.0	1,592.1	1,589.7	3.5	3.4	-61.87	-72.7	22.6	76.0	69.2	6.80	11.187	
1,700.0	1,699.8	1,689.4	1,685.9	3.6	3.6	-64.36	-86.4	26.8	88.4	81.2	7.16	12.337	
1,800.0	1,799.5	1,786.4	1,781.4	3.8	3.9	-66.49	-102.9	29.4	101.6	94.1	7.55	13.469	
1,900.0	1,898.7	1,883.1	1,876.2	4.0	4.2	-68.32	-122.2	30.4	115.7	107.8	7.95	14.555	
2,000.0	1,997.5	1,979.5	1,970.0	4.3	4.5	-69.91	-144.3	30.0	130.7	122.3	8.40	15.561	
2,100.0	2,095.6	2,075.6	2,062.8	4.6	4.9	-71.31	-169.0	28.0	146.5	137.6	8.90	16.450	
2,200.0	2,193.1	2,171.3	2,154.5	4.9	5.3	-72.53	-196.4	24.5	163.1	153.6	9.49	17.192	
2,300.0	2,289.6	2,267.3	2,245.5	5.2	5.8	-73.62	-226.5	19.5	180.4	170.3	10.16	17.761	
2,400.0	2,385.3	2,365.6	2,338.4	5.7	6.3	-75.19	-258.3	13.8	197.5	186.6	10.95	18.041	
2,500.0	2,479.8	2,463.8	2,431.1	6.2	6.8	-77.38	-290.0	8.2	214.1	202.2	11.87	18.042	
2,579.1	2,553.7	2,541.3	2,504.3	6.6	7.3	-79.46	-315.0	3.7	227.0	214.3	12.69	17.891	
2,600.0	2,573.2	2,561.8	2,523.7	6.7	7.4	-80.10	-321.7	2.5	230.4	217.5	12.92	17.835	
2,700.0	2,666.2	2,659.7	2,616.2	7.3	8.0	-82.93	-353.3	-3.1	247.1	233.0	14.06	17.568	
2,800.0	2,759.2	2,757.6	2,708.7	8.0	8.6	-85.41	-384.9	-8.8	264.3	249.0	15.27	17.311	
2,900.0	2,852.2	2,855.5	2,801.1	8.6	9.1	-87.58	-416.5	-14.4	281.9	265.4	16.49	17.099	
3,000.0	2,945.2	2,953.4	2,893.6	9.3	9.7	-89.49	-448.2	-20.0	299.9	282.1	17.75	16.894	
3,100.0	3,038.1	3,051.3	2,986.1	10.0	10.3	-91.19	-479.8	-25.7	318.2	299.1	19.03	16.717	
3,200.0	3,131.1	3,149.2	3,078.6	10.7	11.0	-92.71	-511.4	-31.3	336.7	316.4	20.33	16.561	
3,300.0	3,224.1	3,247.1	3,171.0	11.4	11.6	-94.06	-543.1	-36.9	355.4	333.8	21.64	16.426	
3,400.0	3,317.1	3,345.0	3,263.5	12.1	12.2	-95.29	-574.7	-42.6	374.3	351.4	22.95	16.307	
3,500.0	3,410.1	3,442.9	3,356.0	12.8	12.8	-96.39	-606.3	-48.2	393.4	369.1	24.28	16.204	
3,600.0	3,503.1	3,540.8	3,448.5	13.5	13.4	-97.39	-638.0	-53.8	412.5	386.9	25.60	16.113	
3,700.0	3,596.1	3,638.7	3,540.9	14.3	14.1	-98.31	-669.6	-59.5	431.8	404.9	26.93	16.034	
3,800.0	3,689.1	3,736.6	3,633.4	15.0	14.7	-99.14	-701.2	-65.1	451.2	422.9	28.26	15.964	
3,900.0	3,782.1	3,834.5	3,725.9	15.7	15.3	-99.91	-732.9	-70.7	470.7	441.1	29.60	15.901	
4,000.0	3,875.1	3,932.4	3,818.4	16.5	15.9	-100.61	-764.5	-76.4	490.2	459.3	30.94	15.846	
4,100.0	3,968.0	4,030.3	3,910.8	17.2	16.6	-101.27	-796.1	-82.0	509.8	477.6	32.27	15.797	
4,200.0	4,061.0	4,128.2	4,003.3	18.0	17.2	-101.87	-827.8	-87.6	529.5	495.9	33.61	15.754	
4,300.0	4,154.0	4,226.1	4,095.8	18.7	17.9	-102.43	-859.4	-93.3	549.2	514.3	34.95	15.714	
4,400.0	4,247.0	4,324.0	4,188.3	19.4	18.5	-102.95	-891.0	-98.9	569.0	532.7	36.29	15.679	
4,500.0	4,340.0	4,421.9	4,280.8	20.2	19.1	-103.44	-922.7	-104.5	588.8	551.2	37.63	15.648	
4,600.0	4,433.0	4,519.8	4,373.2	20.9	19.8	-103.89	-954.3	-110.2	608.7	569.7	38.97	15.619	
4,700.0	4,526.0	4,617.7	4,465.7	21.7	20.4	-104.32	-985.9	-115.8	628.5	588.2	40.31	15.593	
4,800.0	4,619.0	4,715.6	4,558.2	22.4	21.0	-104.72	-1,017.6	-121.5	648.5	606.8	41.65	15.570	
4,900.0	4,712.0	4,813.5	4,650.7	23.2	21.7	-105.10	-1,049.2	-127.1	668.4	625.4	42.99	15.548	
4,936.9	4,746.3	4,849.6	4,684.8	23.4	21.9	-105.23	-1,060.9	-129.2	675.8	632.3	43.48	15.541	

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

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.0	4,805.2	4,911.5	4,743.2	23.8	22.3	-105.64	-1,080.9	-132.7	688.2	643.9	44.29	15.538	
5,100.0	4,899.6	5,009.6	4,835.9	24.4	23.0	-106.03	-1,112.6	-138.4	707.1	661.7	45.44	15.560	
5,200.0	4,995.0	5,108.0	4,928.8	24.8	23.6	-106.14	-1,144.3	-144.0	725.1	678.6	46.56	15.574	
5,300.0	5,091.5	5,206.3	5,021.7	25.3	24.3	-105.97	-1,176.1	-149.7	742.2	694.6	47.63	15.582	
5,400.0	5,188.8	5,304.5	5,114.5	25.7	24.9	-105.56	-1,207.9	-155.4	758.4	709.8	48.65	15.588	
5,500.0	5,286.8	5,402.5	5,207.0	26.0	25.6	-104.92	-1,239.5	-161.0	773.9	724.2	49.62	15.597	
5,600.0	5,385.5	5,500.1	5,299.2	26.3	26.2	-104.06	-1,271.1	-166.6	788.7	738.2	50.51	15.613	
5,700.0	5,484.7	5,597.3	5,391.0	26.5	26.8	-103.00	-1,302.5	-172.2	803.1	751.7	51.34	15.643	
5,800.0	5,584.2	5,693.9	5,482.3	26.8	27.5	-101.77	-1,333.7	-177.8	817.2	765.1	52.08	15.691	
5,900.0	5,684.1	5,789.8	5,572.8	26.9	28.1	-100.37	-1,364.6	-183.3	831.2	778.5	52.73	15.765	
6,000.0	5,784.0	5,884.8	5,662.6	27.0	28.7	-98.83	-1,395.4	-188.8	845.5	792.2	53.28	15.869	
6,016.0	5,800.0	5,899.9	5,676.9	27.0	28.8	125.09	-1,400.2	-189.6	847.8	794.4	53.36	15.889	
6,100.0	5,884.0	5,979.3	5,751.9	27.1	29.4	126.68	-1,425.9	-194.2	860.3	806.6	53.72	16.015	
6,200.0	5,984.0	6,089.1	5,856.2	27.2	29.9	128.71	-1,459.7	-200.2	875.4	821.4	54.00	16.211	
6,300.0	6,084.0	6,203.1	5,965.7	27.3	30.3	130.50	-1,490.6	-205.7	889.4	835.2	54.23	16.401	
6,400.0	6,184.0	6,319.5	6,078.8	27.4	30.8	132.02	-1,517.7	-210.6	901.9	847.5	54.44	16.568	
6,500.0	6,284.0	6,438.0	6,195.0	27.5	31.1	133.27	-1,540.7	-214.6	912.6	858.0	54.63	16.705	
6,600.0	6,384.0	6,558.4	6,313.9	27.6	31.5	134.25	-1,559.1	-217.9	921.3	866.5	54.83	16.803	
6,700.0	6,484.0	6,680.1	6,434.8	27.7	31.7	134.96	-1,572.7	-220.3	927.8	872.8	55.03	16.859	
6,800.0	6,584.0	6,802.7	6,557.2	27.8	32.0	135.40	-1,581.3	-221.9	931.9	876.7	55.24	16.869	
6,900.0	6,684.0	6,925.9	6,680.3	27.9	32.1	135.57	-1,584.8	-222.5	933.6	878.1	55.46	16.833	
7,000.0	6,784.0	7,029.7	6,784.0	28.0	32.2	135.58	-1,584.8	-222.5	933.6	877.9	55.67	16.769	
7,100.0	6,884.0	7,129.7	6,884.0	28.1	32.3	135.58	-1,584.8	-222.5	933.6	877.7	55.88	16.708	
7,200.0	6,984.0	7,229.7	6,984.0	28.2	32.4	135.58	-1,584.8	-222.5	933.6	877.5	56.08	16.646	
7,300.0	7,084.0	7,329.7	7,084.0	28.3	32.4	135.58	-1,584.8	-222.5	933.6	877.3	56.29	16.584	
7,400.0	7,184.0	7,429.7	7,184.0	28.5	32.5	135.58	-1,584.8	-222.5	933.6	877.1	56.51	16.522	
7,500.0	7,284.0	7,529.7	7,284.0	28.6	32.6	135.58	-1,584.8	-222.5	933.6	876.9	56.72	16.459	
7,600.0	7,384.0	7,629.7	7,384.0	28.7	32.7	135.58	-1,584.8	-222.5	933.6	876.7	56.94	16.396	
7,700.0	7,484.0	7,729.7	7,484.0	28.8	32.8	135.58	-1,584.8	-222.5	933.6	876.4	57.16	16.333	
7,800.0	7,584.0	7,829.7	7,584.0	28.9	32.9	135.58	-1,584.8	-222.5	933.6	876.2	57.38	16.269	
7,900.0	7,684.0	7,929.7	7,684.0	29.0	33.0	135.58	-1,584.8	-222.5	933.6	876.0	57.61	16.206	
8,000.0	7,784.0	8,029.7	7,784.0	29.2	33.1	135.58	-1,584.8	-222.5	933.6	875.8	57.84	16.142	
8,100.0	7,884.0	8,129.7	7,884.0	29.3	33.2	135.58	-1,584.8	-222.5	933.6	875.5	58.07	16.077	
8,130.0	7,914.0	8,159.6	7,914.0	29.3	33.2	135.58	-1,584.8	-222.5	933.6	875.5	58.14	16.058	

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-159.11	-21.9	-8.3	23.4					
100.0	100.0	100.0	100.0	0.1	0.1	-159.11	-21.9	-8.3	23.4	23.2	0.22	104.095		
200.0	200.0	200.0	200.0	0.3	0.3	-159.11	-21.9	-8.3	23.4	22.7	0.67	34.698 CC, ES		
300.0	300.0	299.1	299.1	0.6	0.6	-154.68	-22.7	-10.8	25.2	24.1	1.11	22.695		
400.0	400.0	397.8	397.4	0.8	0.8	-144.95	-25.4	-17.8	31.1	29.6	1.56	19.946		
500.0	500.0	495.9	495.0	1.0	1.0	-138.00	-30.5	-27.5	41.4	39.3	2.04	20.261		
600.0	600.0	593.3	591.3	1.2	1.3	-134.42	-38.3	-39.0	55.4	52.8	2.55	21.675		
700.0	700.0	689.6	686.2	1.5	1.7	-132.79	-48.5	-52.4	72.7	69.6	3.09	23.548		
800.0	800.0	784.8	779.3	1.7	2.1	-132.19	-61.1	-67.4	93.3	89.7	3.65	25.595		
900.0	900.0	878.5	870.3	1.9	2.5	-132.13	-76.0	-84.0	117.1	112.9	4.23	27.686		
1,000.0	1,000.0	970.7	959.1	2.1	3.0	-132.33	-93.0	-102.1	144.0	139.1	4.84	29.754		
1,100.0	1,100.0	1,061.2	1,045.5	2.4	3.6	-132.66	-111.9	-121.4	173.9	168.4	5.47	31.769		
1,200.0	1,200.0	1,149.9	1,129.3	2.6	4.1	-133.04	-132.5	-141.9	206.6	200.5	6.13	33.717		
1,300.0	1,300.0	1,238.3	1,211.9	2.8	4.7	-133.44	-155.1	-163.8	242.2	235.4	6.81	35.549		
1,400.0	1,400.0	1,331.4	1,298.6	3.0	5.4	-133.79	-179.6	-187.3	278.6	271.0	7.53	36.990		
1,500.0	1,500.0	1,424.6	1,385.4	3.3	6.1	-134.06	-204.0	-210.8	315.0	306.7	8.26	38.152		
1,600.0	1,600.0	1,518.3	1,472.7	3.5	6.8	2.06	-228.6	-234.5	349.7	342.5	7.29	47.989		
1,700.0	1,699.8	1,613.2	1,561.1	3.6	7.5	1.89	-253.5	-258.5	381.2	373.5	7.76	49.097		
1,800.0	1,799.5	1,709.2	1,650.4	3.8	8.2	1.76	-278.7	-282.7	409.4	401.1	8.25	49.601		
1,900.0	1,898.7	1,806.1	1,740.6	4.0	8.9	1.67	-304.1	-307.1	434.2	425.4	8.75	49.608		
2,000.0	1,997.5	1,903.7	1,831.6	4.3	9.7	1.59	-329.7	-331.8	455.5	446.3	9.26	49.205		
2,100.0	2,095.6	2,002.1	1,923.2	4.6	10.4	1.54	-355.6	-356.6	473.5	463.7	9.77	48.460		
2,200.0	2,193.1	2,101.0	2,015.4	4.9	11.1	1.51	-381.5	-381.6	488.0	477.8	10.29	47.429		
2,300.0	2,289.6	2,200.4	2,107.9	5.2	11.9	1.48	-407.6	-406.7	499.1	488.3	10.81	46.157		
2,400.0	2,385.3	2,300.1	2,200.8	5.7	12.6	1.48	-433.8	-431.9	506.7	495.4	11.34	44.682		
2,500.0	2,479.8	2,400.0	2,293.8	6.2	13.4	1.48	-460.0	-457.1	510.8	499.0	11.87	43.032		
2,579.1	2,553.7	2,479.1	2,367.5	6.6	14.0	1.49	-480.7	-477.1	511.6	499.3	12.29	41.621		
2,600.0	2,573.2	2,500.0	2,387.0	6.7	14.1	1.49	-486.2	-482.4	511.5	499.1	12.42	41.193		
2,700.0	2,666.2	2,600.0	2,480.1	7.3	14.9	1.51	-512.5	-507.6	511.1	498.1	13.02	39.246		
2,800.0	2,759.2	2,700.0	2,573.2	8.0	15.6	1.53	-538.7	-532.9	510.7	497.1	13.64	37.448		
2,900.0	2,852.2	2,800.0	2,666.4	8.6	16.4	1.55	-564.9	-558.1	510.4	496.1	14.26	35.786		
3,000.0	2,945.2	2,900.0	2,759.5	9.3	17.1	1.57	-591.2	-583.4	510.0	495.1	14.89	34.249		
3,100.0	3,038.1	3,000.0	2,852.6	10.0	17.9	1.58	-617.4	-608.6	509.6	494.1	15.52	32.824		
3,200.0	3,131.1	3,100.0	2,945.8	10.7	18.6	1.60	-643.7	-633.9	509.2	493.0	16.16	31.502		
3,300.0	3,224.1	3,200.0	3,038.9	11.4	19.4	1.62	-669.9	-659.1	508.8	492.0	16.81	30.272		
3,400.0	3,317.1	3,300.0	3,132.0	12.1	20.1	1.64	-696.1	-684.3	508.4	491.0	17.46	29.126		
3,500.0	3,410.1	3,400.0	3,225.2	12.8	20.9	1.66	-722.4	-709.6	508.0	489.9	18.11	28.057		
3,600.0	3,503.1	3,500.0	3,318.3	13.5	21.6	1.68	-748.6	-734.8	507.6	488.9	18.76	27.058		
3,700.0	3,596.1	3,600.0	3,411.4	14.3	22.4	1.70	-774.9	-760.1	507.2	487.8	19.42	26.123		
3,800.0	3,689.1	3,700.0	3,504.6	15.0	23.1	1.71	-801.1	-785.3	506.9	486.8	20.08	25.246		
3,900.0	3,782.1	3,800.0	3,597.7	15.7	23.9	1.73	-827.4	-810.6	506.5	485.7	20.74	24.422		
4,000.0	3,875.1	3,900.0	3,690.8	16.5	24.7	1.75	-853.6	-835.8	506.1	484.7	21.40	23.646		
4,100.0	3,968.0	4,000.0	3,784.0	17.2	25.4	1.77	-879.8	-861.1	505.7	483.6	22.07	22.916		
4,200.0	4,061.0	4,100.0	3,877.1	18.0	26.2	1.79	-906.1	-886.3	505.3	482.6	22.73	22.226		
4,300.0	4,154.0	4,200.0	3,970.2	18.7	26.9	1.81	-932.3	-911.6	504.9	481.5	23.40	21.575		
4,400.0	4,247.0	4,300.0	4,063.4	19.4	27.7	1.83	-958.6	-936.8	504.5	480.4	24.07	20.958		
4,500.0	4,340.0	4,400.0	4,156.5	20.2	28.4	1.84	-984.8	-962.1	504.1	479.4	24.74	20.374		
4,600.0	4,433.0	4,500.0	4,249.6	20.9	29.2	1.86	-1,011.0	-987.3	503.7	478.3	25.42	19.820		
4,700.0	4,526.0	4,600.0	4,342.8	21.7	29.9	1.88	-1,037.3	-1,012.6	503.4	477.3	26.09	19.293		
4,800.0	4,619.0	4,700.0	4,435.9	22.4	30.7	1.90	-1,063.5	-1,037.8	503.0	476.2	26.76	18.792		
4,900.0	4,712.0	4,800.0	4,529.0	23.2	31.4	1.92	-1,089.8	-1,063.1	502.6	475.1	27.44	18.316		
4,936.9	4,746.3	4,836.9	4,563.4	23.4	31.7	1.93	-1,099.5	-1,072.4	502.4	474.7	27.69	18.146		

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

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design KW Pad SEC.12-T6N-R67W - KW #3 - KW #3 - KW #3 Design and Nudge												Offset Site Error:	0.0ft
Survey Program: 0-MWD												Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
4,948.0	4,756.6	4,848.0	4,573.8	23.5	31.8	1.93	-1,102.4	-1,075.2	502.4	474.6	27.77	18.093	
5,000.0	4,805.2	4,900.0	4,622.2	23.8	32.2	1.94	-1,116.0	-1,088.3	502.9	474.7	28.14	17.873	
5,100.0	4,899.6	4,999.9	4,715.2	24.4	32.9	1.94	-1,142.2	-1,113.6	506.4	477.6	28.80	17.587	
5,200.0	4,995.0	5,099.7	4,808.1	24.8	33.7	1.94	-1,168.4	-1,138.7	513.5	484.1	29.41	17.460 SF	
5,300.0	5,091.5	5,199.1	4,900.7	25.3	34.4	1.92	-1,194.5	-1,163.8	524.0	494.0	29.97	17.482	
5,400.0	5,188.8	5,298.1	4,992.9	25.7	35.2	1.90	-1,220.5	-1,188.8	538.0	507.5	30.49	17.646	
5,500.0	5,286.8	5,396.6	5,084.7	26.0	35.9	1.86	-1,246.3	-1,213.7	555.4	524.4	30.95	17.946	
5,600.0	5,385.5	5,494.4	5,175.7	26.3	36.7	1.83	-1,272.0	-1,238.4	576.2	544.9	31.35	18.378	
5,700.0	5,484.7	5,591.4	5,266.1	26.5	37.4	1.78	-1,297.4	-1,262.9	600.5	568.8	31.70	18.940	
5,800.0	5,584.2	5,687.5	5,355.6	26.8	38.1	1.73	-1,322.7	-1,287.2	628.1	596.1	32.00	19.629	
5,900.0	5,684.1	5,782.6	5,444.1	26.9	38.8	1.69	-1,347.6	-1,311.2	659.1	626.8	32.23	20.445	
6,000.0	5,784.0	5,876.5	5,531.6	27.0	39.6	1.64	-1,372.3	-1,334.9	693.3	660.9	32.41	21.390	
6,016.0	5,800.0	5,891.4	5,545.5	27.0	39.7	-134.72	-1,376.2	-1,338.6	699.1	666.6	32.44	21.552	
6,100.0	5,884.0	5,969.7	5,618.4	27.1	40.3	-134.77	-1,396.7	-1,358.4	729.7	696.8	32.83	22.229	
6,200.0	5,984.0	6,062.8	5,705.1	27.2	41.0	-134.84	-1,421.1	-1,381.9	766.1	732.8	33.29	23.012	
6,300.0	6,084.0	6,170.6	5,805.7	27.3	41.7	-134.90	-1,449.1	-1,408.8	802.1	768.3	33.79	23.738	
6,400.0	6,184.0	6,303.0	5,930.9	27.4	42.4	-134.97	-1,480.1	-1,438.7	834.7	800.3	34.33	24.316	
6,500.0	6,284.0	6,439.4	6,061.7	27.5	43.0	-135.02	-1,507.7	-1,465.2	862.7	827.9	34.84	24.761	
6,600.0	6,384.0	6,579.3	6,197.8	27.6	43.5	-135.06	-1,531.3	-1,487.9	886.1	850.8	35.35	25.071	
6,700.0	6,484.0	6,722.3	6,338.2	27.7	43.9	-135.09	-1,550.5	-1,506.3	904.7	868.9	35.82	25.254	
6,800.0	6,584.0	6,867.6	6,482.2	27.8	44.3	-135.11	-1,564.7	-1,520.0	918.3	882.1	36.28	25.316	
6,900.0	6,684.0	7,014.5	6,628.6	27.9	44.5	-135.13	-1,573.7	-1,528.7	926.9	890.2	36.70	25.259	
7,000.0	6,784.0	7,162.4	6,776.4	28.0	44.7	-135.13	-1,577.4	-1,532.2	930.3	893.2	37.09	25.084	
7,100.0	6,884.0	7,270.1	6,884.0	28.1	44.8	-135.13	-1,577.4	-1,532.3	930.4	892.9	37.41	24.872	
7,200.0	6,984.0	7,370.1	6,984.0	28.2	44.8	-135.13	-1,577.4	-1,532.3	930.4	892.6	37.71	24.669	
7,300.0	7,084.0	7,470.1	7,084.0	28.3	44.9	-135.13	-1,577.4	-1,532.3	930.4	892.3	38.02	24.468	
7,400.0	7,184.0	7,570.1	7,184.0	28.5	44.9	-135.13	-1,577.4	-1,532.3	930.4	892.0	38.34	24.268	
7,500.0	7,284.0	7,670.1	7,284.0	28.6	45.0	-135.13	-1,577.4	-1,532.3	930.4	891.7	38.65	24.070	
7,600.0	7,384.0	7,770.1	7,384.0	28.7	45.1	-135.13	-1,577.4	-1,532.3	930.4	891.4	38.97	23.873	
7,700.0	7,484.0	7,870.1	7,484.0	28.8	45.1	-135.13	-1,577.4	-1,532.3	930.4	891.1	39.29	23.679	
7,800.0	7,584.0	7,970.1	7,584.0	28.9	45.2	-135.13	-1,577.4	-1,532.3	930.4	890.7	39.61	23.486	
7,900.0	7,684.0	8,070.1	7,684.0	29.0	45.3	-135.13	-1,577.4	-1,532.3	930.4	890.4	39.94	23.294	
8,000.0	7,784.0	8,170.1	7,784.0	29.2	45.3	-135.13	-1,577.4	-1,532.3	930.4	890.1	40.27	23.105	
8,100.0	7,884.0	8,270.1	7,884.0	29.3	45.4	-135.13	-1,577.4	-1,532.3	930.4	889.8	40.60	22.917	
8,130.0	7,914.0	8,300.1	7,914.0	29.3	45.4	-135.13	-1,577.4	-1,532.3	930.4	889.7	40.70	22.862	

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	12.30	25.5	5.6	26.1					
100.0	100.0	100.0	100.0	0.1	0.1	12.30	25.5	5.6	26.1	25.9	0.22	116.128		
200.0	200.0	200.0	200.0	0.3	0.3	12.30	25.5	5.6	26.1	25.4	0.67	38.709		
300.0	300.0	300.0	300.0	0.6	0.6	12.30	25.5	5.6	26.1	25.0	1.12	23.226		
400.0	400.0	400.0	400.0	0.8	0.8	12.30	25.5	5.6	26.1	24.5	1.57	16.590		
500.0	500.0	500.0	500.0	1.0	1.0	12.30	25.5	5.6	26.1	24.1	2.02	12.903		
600.0	600.0	600.0	600.0	1.2	1.2	12.30	25.5	5.6	26.1	23.6	2.47	10.557		
700.0	700.0	700.0	700.0	1.5	1.5	12.30	25.5	5.6	26.1	23.2	2.92	8.933		
800.0	800.0	800.0	800.0	1.7	1.7	12.30	25.5	5.6	26.1	22.7	3.37	7.742		
900.0	900.0	900.0	900.0	1.9	1.9	12.30	25.5	5.6	26.1	22.3	3.82	6.831		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	12.30	25.5	5.6	26.1	21.8	4.27	6.112		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	12.30	25.5	5.6	26.1	21.4	4.72	5.530		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	12.30	25.5	5.6	26.1	20.9	5.17	5.049		
1,300.0	1,300.0	1,300.3	1,300.3	2.8	2.8	8.66	25.2	3.8	25.5	19.9	5.60	4.547		
1,400.0	1,400.0	1,400.4	1,400.2	3.0	3.0	-3.14	24.2	-1.3	24.3	18.3	6.03	4.028		
1,439.8	1,439.8	1,440.1	1,439.8	3.1	3.1	-10.36	23.7	-4.3	24.1	17.9	6.20	3.886 CC, ES		
1,500.0	1,500.0	1,500.0	1,499.5	3.3	3.2	-23.53	22.7	-9.9	24.7	18.3	6.46	3.833 SF		
1,600.0	1,600.0	1,599.0	1,597.7	3.5	3.4	92.89	20.5	-21.7	30.0	23.1	6.89	4.358		
1,700.0	1,699.8	1,697.5	1,695.0	3.6	3.7	81.34	17.8	-36.8	39.6	32.3	7.29	5.430		
1,800.0	1,799.5	1,795.5	1,791.2	3.8	4.0	75.69	14.4	-55.1	51.9	44.2	7.72	6.719		
1,900.0	1,898.7	1,892.9	1,886.2	4.0	4.3	73.21	10.5	-76.5	66.1	57.9	8.19	8.078		
2,000.0	1,997.5	1,989.6	1,979.7	4.3	4.7	72.41	6.1	-100.8	82.1	73.4	8.70	9.431		
2,100.0	2,095.6	2,085.7	2,071.6	4.6	5.2	72.50	1.1	-128.0	99.6	90.3	9.28	10.729		
2,200.0	2,193.1	2,182.8	2,163.8	4.9	5.7	73.26	-4.4	-158.1	118.3	108.3	9.96	11.882		
2,300.0	2,289.6	2,281.0	2,257.0	5.2	6.2	75.09	-10.0	-188.7	136.3	125.6	10.74	12.693		
2,400.0	2,385.3	2,379.2	2,350.1	5.7	6.8	77.70	-15.6	-219.4	153.7	142.1	11.65	13.199		
2,500.0	2,479.8	2,477.2	2,443.1	6.2	7.4	80.86	-21.2	-249.9	170.9	158.2	12.68	13.472		
2,579.1	2,553.7	2,554.5	2,516.4	6.6	7.9	83.65	-25.6	-274.0	184.5	171.0	13.60	13.573		
2,600.0	2,573.2	2,575.0	2,535.8	6.7	8.0	84.47	-26.8	-280.4	188.2	174.4	13.85	13.589		
2,700.0	2,666.2	2,672.6	2,628.4	7.3	8.6	87.99	-32.3	-310.9	206.2	191.1	15.09	13.665		
2,800.0	2,759.2	2,770.2	2,721.0	8.0	9.2	90.95	-37.9	-341.3	224.9	208.5	16.36	13.747		
2,900.0	2,852.2	2,867.9	2,813.6	8.6	9.8	93.46	-43.4	-371.8	244.0	226.4	17.64	13.832		
3,000.0	2,945.2	2,965.5	2,906.1	9.3	10.5	95.60	-49.0	-402.2	263.6	244.6	18.94	13.917		
3,100.0	3,038.1	3,063.1	2,998.7	10.0	11.1	97.44	-54.6	-432.7	283.4	263.2	20.24	14.001		
3,200.0	3,131.1	3,160.8	3,091.3	10.7	11.7	99.05	-60.1	-463.1	303.5	281.9	21.55	14.083		
3,300.0	3,224.1	3,258.4	3,183.9	11.4	12.4	100.45	-65.7	-493.6	323.8	300.9	22.86	14.162		
3,400.0	3,317.1	3,356.0	3,276.5	12.1	13.0	101.69	-71.3	-524.0	344.2	320.1	24.18	14.238		
3,500.0	3,410.1	3,453.6	3,369.1	12.8	13.6	102.79	-76.8	-554.5	364.8	339.3	25.50	14.310		
3,600.0	3,503.1	3,551.3	3,461.7	13.5	14.3	103.78	-82.4	-584.9	385.5	358.7	26.81	14.379		
3,700.0	3,596.1	3,648.9	3,554.3	14.3	14.9	104.66	-88.0	-615.4	406.4	378.2	28.13	14.444		
3,800.0	3,689.1	3,746.5	3,646.9	15.0	15.6	105.46	-93.5	-645.8	427.2	397.8	29.45	14.506		
3,900.0	3,782.1	3,844.2	3,739.5	15.7	16.2	106.18	-99.1	-676.3	448.2	417.4	30.77	14.564		
4,000.0	3,875.1	3,941.8	3,832.1	16.5	16.9	106.84	-104.7	-706.7	469.2	437.1	32.10	14.620		
4,100.0	3,968.0	4,039.4	3,924.6	17.2	17.5	107.44	-110.2	-737.2	490.3	456.9	33.42	14.672		
4,200.0	4,061.0	4,137.0	4,017.2	18.0	18.2	107.99	-115.8	-767.6	511.4	476.7	34.74	14.722		
4,300.0	4,154.0	4,234.7	4,109.8	18.7	18.8	108.50	-121.3	-798.1	532.6	496.6	36.06	14.769		
4,400.0	4,247.0	4,332.3	4,202.4	19.4	19.5	108.97	-126.9	-828.5	553.8	516.4	37.39	14.814		
4,500.0	4,340.0	4,429.9	4,295.0	20.2	20.2	109.41	-132.5	-859.0	575.1	536.4	38.71	14.856		
4,600.0	4,433.0	4,527.5	4,387.6	20.9	20.8	109.81	-138.0	-889.4	596.3	556.3	40.03	14.897		
4,700.0	4,526.0	4,625.2	4,480.2	21.7	21.5	110.19	-143.6	-919.9	617.6	576.3	41.35	14.935		
4,800.0	4,619.0	4,722.8	4,572.8	22.4	22.1	110.54	-149.2	-950.3	639.0	596.3	42.68	14.971		
4,900.0	4,712.0	4,820.4	4,665.4	23.2	22.8	110.87	-154.7	-980.8	660.3	616.3	44.00	15.006		

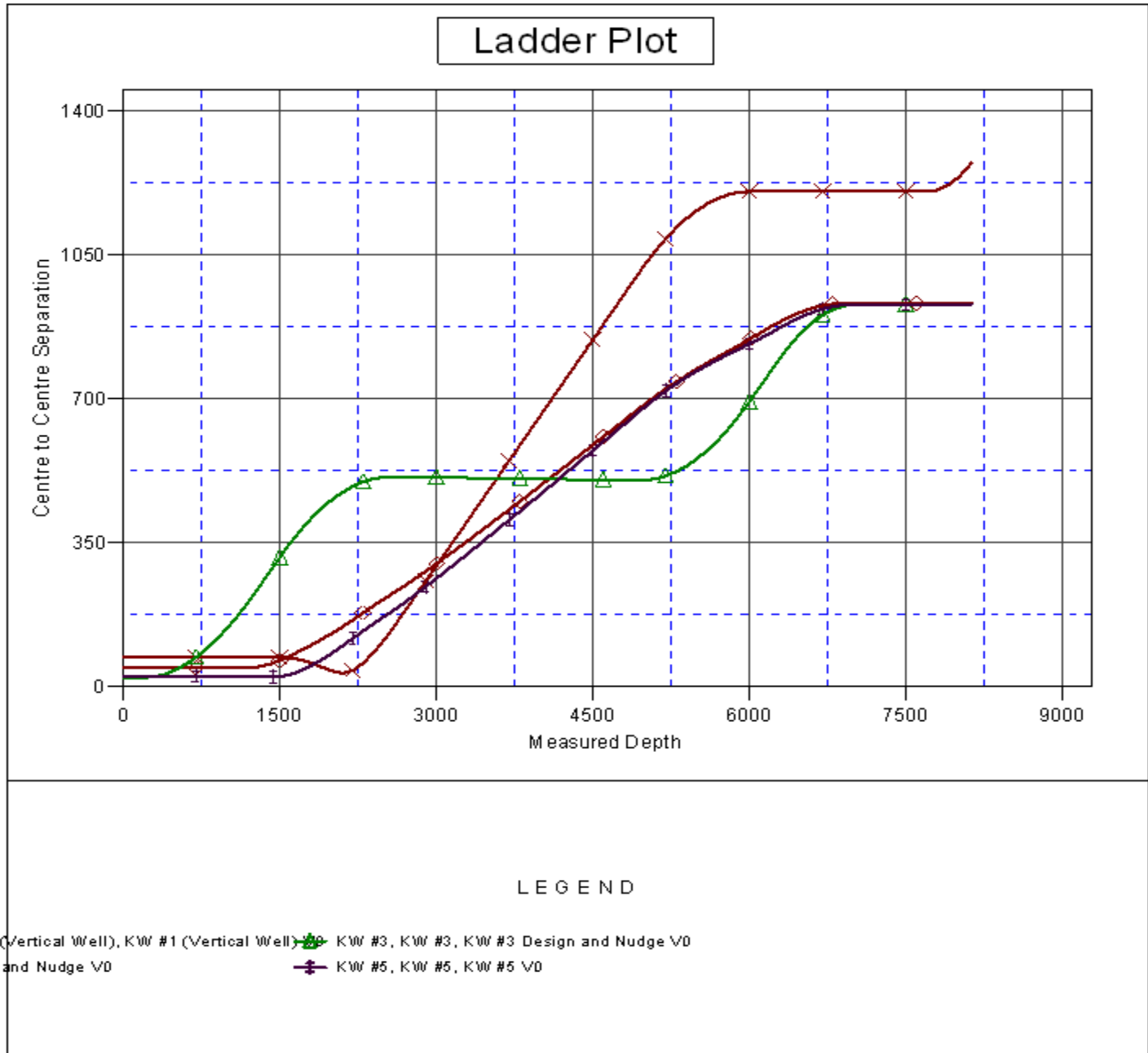
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Offset Design KW Pad SEC.12-T6N-R67W - KW #5 - KW #5 - KW #5													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,936.9	4,746.3	4,856.5	4,699.5	23.4	23.0	110.98	-156.8	-992.0	668.2	623.7	44.49	15.018		
5,000.0	4,805.2	4,918.1	4,758.0	23.8	23.4	111.37	-160.3	-1,011.2	681.4	636.1	45.29	15.045		
5,100.0	4,899.6	5,016.1	4,851.0	24.4	24.1	111.74	-165.9	-1,041.8	701.4	654.9	46.46	15.096		
5,200.0	4,995.0	5,114.3	4,944.1	24.8	24.8	111.81	-171.5	-1,072.4	720.1	672.5	47.60	15.126		
5,300.0	5,091.5	5,212.5	5,037.2	25.3	25.4	111.62	-177.1	-1,103.0	737.5	688.8	48.72	15.138		
5,400.0	5,188.8	5,310.7	5,130.4	25.7	26.1	111.19	-182.7	-1,133.7	753.8	704.0	49.80	15.137		
5,500.0	5,286.8	5,408.8	5,223.3	26.0	26.8	110.53	-188.3	-1,164.2	769.0	718.2	50.84	15.127		
5,600.0	5,385.5	5,506.5	5,316.0	26.3	27.4	109.65	-193.8	-1,194.7	783.3	731.5	51.82	15.116		
5,700.0	5,484.7	5,603.8	5,408.3	26.5	28.1	108.57	-199.4	-1,225.1	796.7	744.0	52.74	15.107		
5,800.0	5,584.2	5,700.6	5,500.2	26.8	28.7	107.31	-204.9	-1,255.3	809.6	756.0	53.58	15.109		
5,900.0	5,684.1	5,796.8	5,591.4	26.9	29.4	105.88	-210.4	-1,285.3	822.1	767.8	54.35	15.127		
6,000.0	5,784.0	5,892.2	5,681.8	27.0	30.0	104.29	-215.8	-1,315.0	834.5	779.5	55.02	15.167		
6,016.0	5,800.0	5,907.3	5,696.2	27.0	30.1	-32.32	-216.7	-1,319.8	836.4	781.3	55.12	15.176		
6,100.0	5,884.0	5,987.0	5,771.8	27.1	30.7	-33.92	-221.2	-1,344.6	847.2	791.6	55.60	15.239		
6,200.0	5,984.0	6,081.9	5,861.7	27.2	31.3	-35.77	-226.6	-1,374.2	861.0	804.8	56.12	15.341		
6,300.0	6,084.0	6,187.5	5,962.2	27.3	32.0	-37.72	-232.5	-1,406.2	875.2	818.7	56.58	15.469		
6,400.0	6,184.0	6,300.7	6,071.1	27.4	32.5	-39.51	-238.0	-1,436.7	888.6	831.7	56.90	15.616		
6,500.0	6,284.0	6,416.3	6,183.4	27.5	32.9	-41.03	-242.9	-1,463.4	900.5	843.4	57.16	15.754		
6,600.0	6,384.0	6,534.0	6,298.9	27.6	33.3	-42.27	-247.1	-1,486.0	910.8	853.4	57.39	15.870		
6,700.0	6,484.0	6,653.4	6,416.8	27.7	33.7	-43.25	-250.4	-1,504.1	919.2	861.6	57.61	15.956		
6,800.0	6,584.0	6,774.2	6,536.9	27.8	33.9	-43.96	-252.8	-1,517.5	925.4	867.6	57.82	16.006		
6,900.0	6,684.0	6,895.9	6,658.3	27.9	34.1	-44.40	-254.4	-1,526.0	929.3	871.3	58.02	16.017		
7,000.0	6,784.0	7,018.2	6,780.5	28.0	34.3	-44.58	-255.0	-1,529.4	930.9	872.7	58.23	15.987		
7,100.0	6,884.0	7,121.8	6,884.0	28.1	34.4	-44.58	-255.0	-1,529.4	930.9	872.5	58.44	15.931		
7,200.0	6,984.0	7,221.8	6,984.0	28.2	34.5	-44.58	-255.0	-1,529.4	930.9	872.3	58.65	15.874		
7,300.0	7,084.0	7,321.8	7,084.0	28.3	34.6	-44.58	-255.0	-1,529.4	930.9	872.1	58.86	15.816		
7,400.0	7,184.0	7,421.8	7,184.0	28.5	34.6	-44.58	-255.0	-1,529.4	930.9	871.9	59.08	15.759		
7,500.0	7,284.0	7,521.8	7,284.0	28.6	34.7	-44.58	-255.0	-1,529.4	930.9	871.7	59.29	15.701		
7,600.0	7,384.0	7,621.8	7,384.0	28.7	34.8	-44.58	-255.0	-1,529.4	930.9	871.4	59.51	15.643		
7,700.0	7,484.0	7,721.8	7,484.0	28.8	34.9	-44.58	-255.0	-1,529.4	930.9	871.2	59.74	15.584		
7,800.0	7,584.0	7,821.8	7,584.0	28.9	35.0	-44.58	-255.0	-1,529.4	930.9	871.0	59.96	15.525		
7,900.0	7,684.0	7,921.8	7,684.0	29.0	35.1	-44.58	-255.0	-1,529.4	930.9	870.8	60.19	15.467		
8,000.0	7,784.0	8,021.8	7,784.0	29.2	35.3	-44.58	-255.0	-1,529.4	930.9	870.5	60.42	15.407		
8,100.0	7,884.0	8,121.8	7,884.0	29.3	35.4	-44.58	-255.0	-1,529.4	930.9	870.3	60.66	15.348		
8,130.0	7,914.0	8,151.7	7,914.0	29.3	35.4	-44.58	-255.0	-1,529.4	930.9	870.2	60.73	15.330		

Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
Reference Site:	KW Pad SEC.12-T6N-R67W	MD Reference:	WELL @ 4899.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4899.0ft (Original Well Elev) Coordinates are relative to: KW #4
 Offset Depths are relative to Offset Datum
 Central Meridian is 105° 30' 0.000 W °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.43°



Company:	BLUE CHIP OIL - Weld County CO	Local Co-ordinate Reference:	Well KW #4
Project:	SEC.12-T6N-R67W	TVD Reference:	WELL @ 4899.0ft (Original Well Elev)
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Site Error:	0.0ft	North Reference:	True
Reference Well:	KW #4	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	KW #4	Database:	Landmark
Reference Design:	KW #4	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4899.0ft (Original Well Elev) Coordinates are relative to: KW #4
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
 Central Meridian is 105° 30' 0.000 W ° Grid Convergence at Surface is: 0.43°

