

PETROLEUM DEVELOPMENT CORP DJ Basin

Well Name: **Connie 26F-402**

Surface Location: Connie 5N64W26EF Pad Sec.26-T5N-R64W

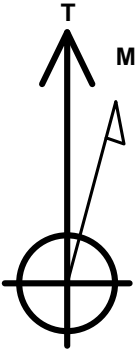
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone

Ground Elevation: 4598.0

+N/-S +E/-W Northing Easting Longitude Slot
0.0 0.0 1381364.41 3271490.55 40.376152 -104.525528
RKB - 13' WELL @ 4611.0ft (RKB - 13')

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 539'FNL & 236'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 1433'FNL & 2140'FWL, Sec.25	6682.0	-946.9	7170.3	Point



Azimuths to True North
Magnetic North: 8.14°

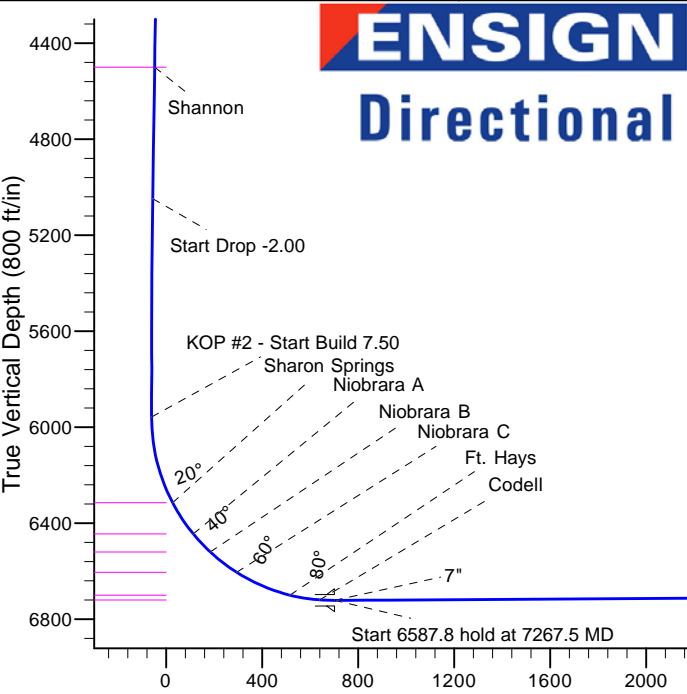
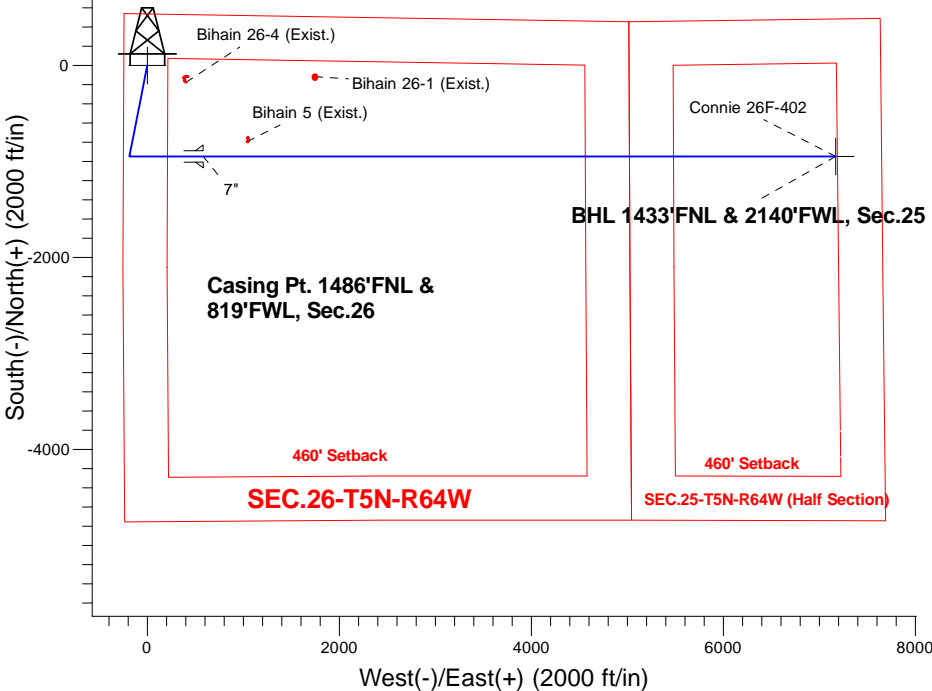
Magnetic Field
Strength: 52683.2snT
Dip Angle: 66.92°
Date: 11/3/2015
Model: IGRF2010

Connie 5N64W26EF Pad Sec.26-T5N-R64W
Connie 26F-402
Plan #1 (11-2-15)
12:34, November 05 2015

ANNOTATIONS

TVD	MD	Annotation
800.0	800.0	KOP - Start Build 1.50
5048.1	5146.8	Start Drop -2.00
5958.3	6062.8	KOP #2 - Start Build 7.50
6722.2	7267.5	Start 6587.8 hold at 7267.5 MD
6682.0	13855.3	TD at 13855.3

SHL 539'FNL & 236'FWL, Sec.26



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1676.9	13.15	191.11	1669.2	-98.3	-19.3	1.50	191.11	-6.3	
4	5146.8	13.15	191.11	5048.1	-873.1	-171.5	0.00	0.00	-55.7	
5	5804.5	0.00	0.00	5700.0	-946.9	-186.0	2.00	180.00	-60.4	
6	6062.8	0.00	0.00	5958.3	-946.9	-186.0	0.00	0.00	-60.4	
7	7267.5	90.35	90.00	6722.2	-946.9	582.6	7.50	90.00	701.6	
8	13855.3	90.35	90.00	6682.0	-946.9	7170.3	0.00	0.00	7232.5	BHL 1433'FNL & 2140'FWL, Sec.25

BHL 1433'FNL & 2140'FWL, Sec.25

Vertical Section at 97.52° (800 ft/in)



Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Connie 5N64W26EF Pad Sec.26-T5N-R64W

Connie 26F-402

Wellbore #1

Plan: Plan #1 (11-2-15)

Standard Planning Report

05 November, 2015

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-402
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Project	SEC.26-T5N-R64W, Weld County, CO		
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

Site		Connie 5N64W26EF Pad Sec.26-T5N-R64W			
Site Position:		Northing:	1,381,364.42 usft	Latitude:	40.376152
From:	Lat/Long	Easting:	3,271,490.55 usft	Longitude:	-104.525528
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.63

Well	Connie 26F-402					
Well Position	+N/-S	0.0 ft	Northing:	1,381,364.41 usft	Latitude:	40.376152
	+E/-W	0.0 ft	Easting:	3,271,490.55 usft	Longitude:	-104.525528
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	4,598.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/3/2015	8.14	66.92	52,683

Design	Plan #1 (11-2-15)			
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	97.52

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,676.9	13.15	191.11	1,669.2	-98.3	-19.3	1.50	1.50	0.00	191.11	
5,146.8	13.15	191.11	5,048.1	-873.1	-171.5	0.00	0.00	0.00	0.00	
5,804.5	0.00	0.00	5,700.0	-946.9	-186.0	2.00	-2.00	0.00	180.00	
6,062.8	0.00	0.00	5,958.3	-946.9	-186.0	0.00	0.00	0.00	0.00	
7,267.5	90.35	90.00	6,722.2	-946.9	582.6	7.50	7.50	0.00	90.00	
13,855.3	90.35	90.00	6,682.0	-946.9	7,170.3	0.00	0.00	0.00	0.00	BHL 1433'FNL & 214C

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-402
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 539'FNL & 236'FWL, Sec.26									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
900.0	1.50	191.11	900.0	-1.3	-0.3	-0.1	1.50	1.50	0.00
1,000.0	3.00	191.11	999.9	-5.1	-1.0	-0.3	1.50	1.50	0.00
1,100.0	4.50	191.11	1,099.7	-11.6	-2.3	-0.7	1.50	1.50	0.00
1,200.0	6.00	191.11	1,199.3	-20.5	-4.0	-1.3	1.50	1.50	0.00
1,300.0	7.50	191.11	1,298.6	-32.1	-6.3	-2.0	1.50	1.50	0.00
1,400.0	9.00	191.11	1,397.5	-46.1	-9.1	-2.9	1.50	1.50	0.00
1,500.0	10.50	191.11	1,496.1	-62.8	-12.3	-4.0	1.50	1.50	0.00
1,600.0	12.00	191.11	1,594.2	-81.9	-16.1	-5.2	1.50	1.50	0.00
1,676.9	13.15	191.11	1,669.2	-98.3	-19.3	-6.3	1.50	1.50	0.00
1,700.0	13.15	191.11	1,691.7	-103.5	-20.3	-6.6	0.00	0.00	0.00
1,800.0	13.15	191.11	1,789.1	-125.8	-24.7	-8.0	0.00	0.00	0.00
1,900.0	13.15	191.11	1,886.5	-148.2	-29.1	-9.5	0.00	0.00	0.00
2,000.0	13.15	191.11	1,983.8	-170.5	-33.5	-10.9	0.00	0.00	0.00
2,100.0	13.15	191.11	2,081.2	-192.8	-37.9	-12.3	0.00	0.00	0.00
2,200.0	13.15	191.11	2,178.6	-215.1	-42.3	-13.7	0.00	0.00	0.00
2,300.0	13.15	191.11	2,276.0	-237.5	-46.6	-15.2	0.00	0.00	0.00
2,400.0	13.15	191.11	2,373.3	-259.8	-51.0	-16.6	0.00	0.00	0.00
2,500.0	13.15	191.11	2,470.7	-282.1	-55.4	-18.0	0.00	0.00	0.00
2,600.0	13.15	191.11	2,568.1	-304.5	-59.8	-19.4	0.00	0.00	0.00
2,700.0	13.15	191.11	2,665.5	-326.8	-64.2	-20.9	0.00	0.00	0.00
2,800.0	13.15	191.11	2,762.9	-349.1	-68.6	-22.3	0.00	0.00	0.00
2,900.0	13.15	191.11	2,860.2	-371.4	-73.0	-23.7	0.00	0.00	0.00
3,000.0	13.15	191.11	2,957.6	-393.8	-77.3	-25.1	0.00	0.00	0.00
3,100.0	13.15	191.11	3,055.0	-416.1	-81.7	-26.6	0.00	0.00	0.00
3,200.0	13.15	191.11	3,152.4	-438.4	-86.1	-28.0	0.00	0.00	0.00
3,300.0	13.15	191.11	3,249.7	-460.8	-90.5	-29.4	0.00	0.00	0.00
3,400.0	13.15	191.11	3,347.1	-483.1	-94.9	-30.8	0.00	0.00	0.00
3,454.3	13.15	191.11	3,400.0	-495.2	-97.3	-31.6	0.00	0.00	0.00
Parkman									
3,500.0	13.15	191.11	3,444.5	-505.4	-99.3	-32.3	0.00	0.00	0.00
3,600.0	13.15	191.11	3,541.9	-527.8	-103.7	-33.7	0.00	0.00	0.00
3,700.0	13.15	191.11	3,639.2	-550.1	-108.1	-35.1	0.00	0.00	0.00
3,800.0	13.15	191.11	3,736.6	-572.4	-112.4	-36.5	0.00	0.00	0.00
3,900.0	13.15	191.11	3,834.0	-594.7	-116.8	-38.0	0.00	0.00	0.00
4,000.0	13.15	191.11	3,931.4	-617.1	-121.2	-39.4	0.00	0.00	0.00
4,100.0	13.15	191.11	4,028.7	-639.4	-125.6	-40.8	0.00	0.00	0.00
4,178.3	13.15	191.11	4,105.0	-656.9	-129.0	-41.9	0.00	0.00	0.00
Sussex									
4,200.0	13.15	191.11	4,126.1	-661.7	-130.0	-42.2	0.00	0.00	0.00
4,300.0	13.15	191.11	4,223.5	-684.1	-134.4	-43.7	0.00	0.00	0.00
4,400.0	13.15	191.11	4,320.9	-706.4	-138.8	-45.1	0.00	0.00	0.00

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Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,500.0	13.15	191.11	4,418.2	-728.7	-143.1	-46.5	0.00	0.00	0.00
4,584.0	13.15	191.11	4,500.0	-747.5	-146.8	-47.7	0.00	0.00	0.00
Shannon									
4,600.0	13.15	191.11	4,515.6	-751.0	-147.5	-47.9	0.00	0.00	0.00
4,700.0	13.15	191.11	4,613.0	-773.4	-151.9	-49.4	0.00	0.00	0.00
4,800.0	13.15	191.11	4,710.4	-795.7	-156.3	-50.8	0.00	0.00	0.00
4,900.0	13.15	191.11	4,807.8	-818.0	-160.7	-52.2	0.00	0.00	0.00
5,000.0	13.15	191.11	4,905.1	-840.4	-165.1	-53.6	0.00	0.00	0.00
5,100.0	13.15	191.11	5,002.5	-862.7	-169.5	-55.1	0.00	0.00	0.00
5,146.8	13.15	191.11	5,048.1	-873.1	-171.5	-55.7	0.00	0.00	0.00
Start Drop -2.00									
5,200.0	12.09	191.11	5,100.0	-884.6	-173.8	-56.5	2.00	-2.00	0.00
5,300.0	10.09	191.11	5,198.1	-903.4	-177.5	-57.7	2.00	-2.00	0.00
5,400.0	8.09	191.11	5,296.9	-918.9	-180.5	-58.6	2.00	-2.00	0.00
5,500.0	6.09	191.11	5,396.1	-931.0	-182.9	-59.4	2.00	-2.00	0.00
5,600.0	4.09	191.11	5,495.7	-939.7	-184.6	-60.0	2.00	-2.00	0.00
5,700.0	2.09	191.11	5,595.5	-945.0	-185.6	-60.3	2.00	-2.00	0.00
5,800.0	0.09	191.11	5,695.5	-946.9	-186.0	-60.4	2.00	-2.00	0.00
5,804.5	0.00	0.00	5,700.0	-946.9	-186.0	-60.4	2.00	-2.00	0.00
5,900.0	0.00	0.00	5,795.5	-946.9	-186.0	-60.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,895.5	-946.9	-186.0	-60.4	0.00	0.00	0.00
6,062.8	0.00	0.00	5,958.3	-946.9	-186.0	-60.4	0.00	0.00	0.00
KOP #2 - Start Build 7.50									
6,100.0	2.79	90.00	5,995.5	-946.9	-185.1	-59.5	7.50	7.50	0.00
6,200.0	10.29	90.00	6,094.8	-946.9	-173.7	-48.2	7.50	7.50	0.00
6,300.0	17.79	90.00	6,191.7	-946.9	-149.5	-24.2	7.50	7.50	0.00
6,400.0	25.29	90.00	6,284.7	-946.9	-112.8	12.2	7.50	7.50	0.00
6,433.9	27.83	90.00	6,315.0	-946.9	-97.6	27.2	7.50	7.50	0.00
Sharon Springs									
6,500.0	32.79	90.00	6,372.0	-946.9	-64.3	60.3	7.50	7.50	0.00
6,590.4	39.57	90.00	6,445.0	-946.9	-10.9	113.2	7.50	7.50	0.00
Niobrara A									
6,600.0	40.29	90.00	6,452.3	-946.9	-4.8	119.2	7.50	7.50	0.00
6,693.8	47.33	90.00	6,520.0	-946.9	60.1	183.6	7.50	7.50	0.00
Niobrara B									
6,700.0	47.79	90.00	6,524.2	-946.9	64.7	188.1	7.50	7.50	0.00
6,800.0	55.29	90.00	6,586.3	-946.9	142.9	265.7	7.50	7.50	0.00
6,833.9	57.83	90.00	6,605.0	-946.9	171.2	293.7	7.50	7.50	0.00
Niobrara C									
6,900.0	62.79	90.00	6,637.7	-946.9	228.6	350.6	7.50	7.50	0.00
7,000.0	70.29	90.00	6,677.5	-946.9	320.3	441.5	7.50	7.50	0.00
7,077.9	76.14	90.00	6,700.0	-946.9	394.9	515.5	7.50	7.50	0.00
Ft. Hays									
7,100.0	77.79	90.00	6,705.0	-946.9	416.4	536.8	7.50	7.50	0.00
7,200.0	85.29	90.00	6,719.7	-946.9	515.2	634.8	7.50	7.50	0.00
7,204.1	85.60	90.00	6,720.0	-946.9	519.3	638.8	7.50	7.50	0.00
Codell									
7,267.5	90.35	90.00	6,722.2	-946.9	582.6	701.6	7.50	7.50	0.00
Start 6587.8 hold at 7267.5 MD - 7"									
7,300.0	90.35	90.00	6,722.0	-946.9	615.1	733.8	0.00	0.00	0.00
7,400.0	90.35	90.00	6,721.4	-946.9	715.1	833.0	0.00	0.00	0.00
7,500.0	90.35	90.00	6,720.8	-946.9	815.1	932.1	0.00	0.00	0.00

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Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,600.0	90.35	90.00	6,720.2	-946.9	915.1	1,031.2	0.00	0.00	0.00
7,700.0	90.35	90.00	6,719.6	-946.9	1,015.1	1,130.4	0.00	0.00	0.00
7,800.0	90.35	90.00	6,719.0	-946.9	1,115.1	1,229.5	0.00	0.00	0.00
7,900.0	90.35	90.00	6,718.4	-946.9	1,215.1	1,328.6	0.00	0.00	0.00
8,000.0	90.35	90.00	6,717.8	-946.9	1,315.1	1,427.8	0.00	0.00	0.00
8,100.0	90.35	90.00	6,717.2	-946.9	1,415.1	1,526.9	0.00	0.00	0.00
8,200.0	90.35	90.00	6,716.5	-946.9	1,515.1	1,626.1	0.00	0.00	0.00
8,300.0	90.35	90.00	6,715.9	-946.9	1,615.1	1,725.2	0.00	0.00	0.00
8,400.0	90.35	90.00	6,715.3	-946.9	1,715.1	1,824.3	0.00	0.00	0.00
8,500.0	90.35	90.00	6,714.7	-946.9	1,815.1	1,923.5	0.00	0.00	0.00
8,600.0	90.35	90.00	6,714.1	-946.9	1,915.1	2,022.6	0.00	0.00	0.00
8,700.0	90.35	90.00	6,713.5	-946.9	2,015.1	2,121.7	0.00	0.00	0.00
8,800.0	90.35	90.00	6,712.9	-946.9	2,115.1	2,220.9	0.00	0.00	0.00
8,900.0	90.35	90.00	6,712.3	-946.9	2,215.1	2,320.0	0.00	0.00	0.00
9,000.0	90.35	90.00	6,711.7	-946.9	2,315.1	2,419.2	0.00	0.00	0.00
9,100.0	90.35	90.00	6,711.0	-946.9	2,415.1	2,518.3	0.00	0.00	0.00
9,200.0	90.35	90.00	6,710.4	-946.9	2,515.1	2,617.4	0.00	0.00	0.00
9,300.0	90.35	90.00	6,709.8	-946.9	2,615.1	2,716.6	0.00	0.00	0.00
9,400.0	90.35	90.00	6,709.2	-946.9	2,715.1	2,815.7	0.00	0.00	0.00
9,500.0	90.35	90.00	6,708.6	-946.9	2,815.1	2,914.8	0.00	0.00	0.00
9,600.0	90.35	90.00	6,708.0	-946.9	2,915.1	3,014.0	0.00	0.00	0.00
9,700.0	90.35	90.00	6,707.4	-946.9	3,015.1	3,113.1	0.00	0.00	0.00
9,800.0	90.35	90.00	6,706.8	-946.9	3,115.1	3,212.3	0.00	0.00	0.00
9,900.0	90.35	90.00	6,706.2	-946.9	3,215.1	3,311.4	0.00	0.00	0.00
10,000.0	90.35	90.00	6,705.6	-946.9	3,315.1	3,410.5	0.00	0.00	0.00
10,100.0	90.35	90.00	6,704.9	-946.9	3,415.1	3,509.7	0.00	0.00	0.00
10,200.0	90.35	90.00	6,704.3	-946.9	3,515.1	3,608.8	0.00	0.00	0.00
10,300.0	90.35	90.00	6,703.7	-946.9	3,615.1	3,707.9	0.00	0.00	0.00
10,400.0	90.35	90.00	6,703.1	-946.9	3,715.1	3,807.1	0.00	0.00	0.00
10,500.0	90.35	90.00	6,702.5	-946.9	3,815.1	3,906.2	0.00	0.00	0.00
10,600.0	90.35	90.00	6,701.9	-946.9	3,915.1	4,005.4	0.00	0.00	0.00
10,700.0	90.35	90.00	6,701.3	-946.9	4,015.1	4,104.5	0.00	0.00	0.00
10,800.0	90.35	90.00	6,700.7	-946.9	4,115.1	4,203.6	0.00	0.00	0.00
10,900.0	90.35	90.00	6,700.1	-946.9	4,215.1	4,302.8	0.00	0.00	0.00
11,000.0	90.35	90.00	6,699.4	-946.9	4,315.1	4,401.9	0.00	0.00	0.00
11,100.0	90.35	90.00	6,698.8	-946.9	4,415.1	4,501.0	0.00	0.00	0.00
11,200.0	90.35	90.00	6,698.2	-946.9	4,515.1	4,600.2	0.00	0.00	0.00
11,300.0	90.35	90.00	6,697.6	-946.9	4,615.1	4,699.3	0.00	0.00	0.00
11,400.0	90.35	90.00	6,697.0	-946.9	4,715.1	4,798.5	0.00	0.00	0.00
11,500.0	90.35	90.00	6,696.4	-946.9	4,815.1	4,897.6	0.00	0.00	0.00
11,600.0	90.35	90.00	6,695.8	-946.9	4,915.1	4,996.7	0.00	0.00	0.00
11,700.0	90.35	90.00	6,695.2	-946.9	5,015.1	5,095.9	0.00	0.00	0.00
11,800.0	90.35	90.00	6,694.6	-946.9	5,115.1	5,195.0	0.00	0.00	0.00
11,900.0	90.35	90.00	6,693.9	-946.9	5,215.1	5,294.1	0.00	0.00	0.00
12,000.0	90.35	90.00	6,693.3	-946.9	5,315.1	5,393.3	0.00	0.00	0.00
12,100.0	90.35	90.00	6,692.7	-946.9	5,415.1	5,492.4	0.00	0.00	0.00
12,200.0	90.35	90.00	6,692.1	-946.9	5,515.1	5,591.6	0.00	0.00	0.00
12,300.0	90.35	90.00	6,691.5	-946.9	5,615.1	5,690.7	0.00	0.00	0.00
12,400.0	90.35	90.00	6,690.9	-946.9	5,715.1	5,789.8	0.00	0.00	0.00
12,500.0	90.35	90.00	6,690.3	-946.9	5,815.1	5,889.0	0.00	0.00	0.00
12,600.0	90.35	90.00	6,689.7	-946.9	5,915.0	5,988.1	0.00	0.00	0.00
12,700.0	90.35	90.00	6,689.1	-946.9	6,015.0	6,087.2	0.00	0.00	0.00
12,800.0	90.35	90.00	6,688.4	-946.9	6,115.0	6,186.4	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-402
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,900.0	90.35	90.00	6,687.8	-946.9	6,215.0	6,285.5	0.00	0.00	0.00
13,000.0	90.35	90.00	6,687.2	-946.9	6,315.0	6,384.7	0.00	0.00	0.00
13,100.0	90.35	90.00	6,686.6	-946.9	6,415.0	6,483.8	0.00	0.00	0.00
13,200.0	90.35	90.00	6,686.0	-946.9	6,515.0	6,582.9	0.00	0.00	0.00
13,300.0	90.35	90.00	6,685.4	-946.9	6,615.0	6,682.1	0.00	0.00	0.00
13,400.0	90.35	90.00	6,684.8	-946.9	6,715.0	6,781.2	0.00	0.00	0.00
13,500.0	90.35	90.00	6,684.2	-946.9	6,815.0	6,880.3	0.00	0.00	0.00
13,600.0	90.35	90.00	6,683.6	-946.9	6,915.0	6,979.5	0.00	0.00	0.00
13,700.0	90.35	90.00	6,682.9	-946.9	7,015.0	7,078.6	0.00	0.00	0.00
13,800.0	90.35	90.00	6,682.3	-946.9	7,115.0	7,177.8	0.00	0.00	0.00
13,855.3	90.35	90.00	6,682.0	-946.9	7,170.3	7,232.5	0.00	0.00	0.00
TD at 13855.3 - BHL 1433'FNL & 2140'FWL, Sec.25									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 539'FNL & 236'FWL - plan hits target center - Point	0.00	0.63	1.0	0.0	0.0	1,381,364.42	3,271,490.55	40.376152	-104.525528
BHL 1433'FNL & 2140'F' - plan hits target center - Point	0.00	0.65	6,682.0	-946.9	7,170.3	1,380,496.41	3,278,670.51	40.373550	-104.499794

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,267.5	6,722.2	7"	7	8-3/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,454.3	3,400.0	Parkman		0.00	
4,178.3	4,105.0	Sussex		0.00	
4,584.0	4,500.0	Shannon		0.00	
6,433.9	6,315.0	Sharon Springs		0.00	
6,590.4	6,445.0	Niobrara A		0.00	
6,693.8	6,520.0	Niobrara B		0.00	
6,833.9	6,605.0	Niobrara C		0.00	
7,077.9	6,700.0	Ft. Hays		0.00	
7,204.1	6,720.0	Codell		0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-402
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (11-2-15)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
800.0	800.0	0.0	0.0	KOP - Start Build 1.50
5,146.8	5,048.1	-98.3	-19.3	Start Drop -2.00
6,062.8	5,958.3	-873.1	-171.5	KOP #2 - Start Build 7.50
7,267.5	6,722.2	-946.9	-186.0	Start 6587.8 hold at 7267.5 MD
13,855.3	6,682.0	-946.9	-186.0	TD at 13855.3



Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Connie 5N64W26EF Pad Sec.26-T5N-R64W

Connie 26F-402

Wellbore #1

Plan #1 (11-2-15)

Anticollision Report

05 November, 2015



Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (11-2-15)		
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 1,000.0 ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	11/5/2015		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	13,855.3	Plan #1 (11-2-15) (Wellbore #1)	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						
Bihain 5N64W26GK Pad Sec.26-T5N-R64W						
Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)	6,014.8	5,986.6	212.1	172.5	5.354	CC
Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)	13,855.3	13,673.0	271.8	-50.3	0.844	Level 1, ES, SF
Connie 5N64W26EF Pad Sec.26-T5N-R64W						
Connie 26E-332 - Wellbore #1 - Plan #1 (11-3-15)	800.0	799.0	45.0	41.6	13.357	CC, ES
Connie 26E-332 - Wellbore #1 - Plan #1 (11-3-15)	1,000.0	998.9	49.8	45.6	11.877	SF
Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)	800.0	799.0	29.9	26.5	8.875	CC, ES
Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)	13,855.3	13,629.7	592.6	203.9	1.524	SF
Connie 26F-302 - Wellbore #1 - Plan #1 (11-2-15)	800.0	800.0	15.1	11.7	4.479	CC
Connie 26F-302 - Wellbore #1 - Plan #1 (11-2-15)	13,855.3	13,729.2	319.2	-66.1	0.828	Level 1, ES, SF
Existing Wells Pad Sec.26-T5N-R64W						
Bihain 26-1 (Exist.) - Wellbore #1 - Wellbore #1	8,432.7	6,697.1	830.4	644.4	4.465	CC, ES
Bihain 26-1 (Exist.) - Wellbore #1 - Wellbore #1	8,500.0	6,696.7	833.1	645.3	4.437	SF
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	1,365.9	1,351.0	435.5	429.2	69.754	CC
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	1,500.0	1,483.9	436.0	429.1	62.873	ES
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	7,500.0	6,721.7	877.9	836.2	21.045	SF
Bihain 5 (Exist.) - Wellbore #1 - Wellbore #1	7,725.9	6,705.3	153.6	107.5	3.333	CC, ES, SF

Offset Design	Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)											Offset Site Error:	0.0 ft
Survey Program:	O-MWD											Offset Well Error:	0.0 ft
Reference Measured Depth (ft)	Vertical Depth (ft)	Offset Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
3,400.0	3,347.1	3,560.5	3,522.6	11.8	11.0	-17.05	-1,457.2	-12.2	992.2	975.3	16.87	58.826	
3,500.0	3,444.5	3,652.9	3,613.4	12.3	11.4	-16.95	-1,442.2	-21.4	954.0	936.6	17.41	54.794	
3,600.0	3,541.9	3,745.4	3,704.1	12.8	11.8	-16.83	-1,427.2	-30.6	915.8	897.9	17.96	51.004	
3,700.0	3,639.2	3,837.8	3,794.8	13.3	12.2	-16.71	-1,412.2	-39.7	877.6	859.1	18.50	47.435	
3,800.0	3,736.6	3,930.2	3,885.5	13.7	12.6	-16.57	-1,397.2	-48.9	839.4	820.4	19.05	44.068	
3,900.0	3,834.0	4,022.6	3,976.2	14.2	13.0	-16.43	-1,382.2	-58.1	801.3	781.7	19.60	40.889	
4,000.0	3,931.4	4,115.0	4,066.9	14.7	13.3	-16.26	-1,367.1	-67.2	763.1	742.9	20.14	37.881	
4,100.0	4,028.7	4,207.4	4,157.6	15.2	13.7	-16.08	-1,352.1	-76.4	724.9	704.2	20.69	35.031	
4,200.0	4,126.1	4,299.8	4,248.4	15.7	14.1	-15.89	-1,337.1	-85.6	686.8	665.5	21.24	32.328	
4,300.0	4,223.5	4,392.2	4,339.1	16.2	14.5	-15.66	-1,322.1	-94.7	648.6	626.8	21.79	29.761	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)												Offset Well Error:	0.0 ft
Survey Program: 0-MWD													
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
4,400.0	4,320.9	4,484.6	4,429.8	16.7	14.9	-15.41	-1,307.1	-103.9	610.5	588.1	22.35	27.319	
4,500.0	4,418.2	4,577.0	4,520.5	17.1	15.3	-15.13	-1,292.1	-113.1	572.3	549.4	22.90	24.995	
4,600.0	4,515.6	4,669.4	4,611.2	17.6	15.6	-14.80	-1,277.1	-122.2	534.2	510.8	23.45	22.780	
4,700.0	4,613.0	4,761.8	4,701.9	18.1	16.0	-14.43	-1,262.1	-131.4	496.1	472.1	24.01	20.666	
4,800.0	4,710.4	4,854.2	4,792.6	18.6	16.4	-13.99	-1,247.1	-140.6	458.0	433.5	24.56	18.647	
4,900.0	4,807.8	4,946.6	4,883.4	19.1	16.8	-13.48	-1,232.1	-149.8	420.0	394.8	25.12	16.717	
5,000.0	4,905.1	5,039.0	4,974.1	19.6	17.2	-12.86	-1,217.0	-158.9	381.9	356.3	25.68	14.870	
5,100.0	5,002.5	5,130.5	5,063.9	20.1	17.6	-12.12	-1,202.2	-168.0	344.0	317.7	26.25	13.106	
5,146.8	5,048.1	5,169.9	5,102.7	20.3	17.7	-11.78	-1,196.1	-171.7	326.6	300.1	26.49	12.331	
5,200.0	5,100.0	5,215.4	5,147.5	20.5	17.8	-11.33	-1,189.7	-175.6	308.0	281.1	26.83	11.477	
5,300.0	5,198.1	5,300.0	5,231.2	20.8	18.1	-10.52	-1,179.3	-181.9	277.3	249.9	27.40	10.118	
5,400.0	5,296.9	5,392.7	5,323.3	21.1	18.3	-9.75	-1,170.4	-187.4	252.4	224.5	27.94	9.034	
5,500.0	5,396.1	5,484.4	5,414.7	21.3	18.5	-9.16	-1,164.1	-191.2	233.6	205.2	28.42	8.220	
5,600.0	5,495.7	5,577.4	5,507.6	21.5	18.7	-8.82	-1,160.3	-193.6	220.8	192.0	28.82	7.660	
5,700.0	5,595.5	5,671.3	5,601.5	21.7	18.8	-8.78	-1,159.0	-194.4	214.2	185.0	29.16	7.344	
5,804.5	5,700.0	5,775.8	5,706.0	21.8	18.9	-177.74	-1,159.0	-194.4	212.3	173.3	38.99	5.444	
5,900.0	5,795.5	5,871.3	5,801.5	21.9	19.1	-177.74	-1,159.0	-194.4	212.3	173.0	39.25	5.408	
6,000.0	5,895.5	5,971.8	5,901.8	22.0	19.2	-179.45	-1,159.0	-188.0	212.1	172.5	39.56	5.361	
6,014.8	5,910.4	5,986.6	5,916.4	22.0	19.2	180.00	-1,159.0	-186.0	212.1	172.5	39.62	5.354 CC	
6,062.8	5,958.3	6,033.5	5,962.5	22.1	19.2	177.75	-1,159.0	-177.6	212.3	172.5	39.79	5.335	
6,100.0	5,995.5	6,069.3	5,997.4	22.1	19.2	85.71	-1,159.0	-169.4	212.7	182.5	30.22	7.040	
6,150.0	6,045.3	6,116.9	6,043.0	22.2	19.2	83.03	-1,159.0	-155.9	213.8	183.4	30.33	7.049	
6,200.0	6,094.8	6,163.9	6,087.2	22.2	19.2	80.41	-1,159.0	-139.8	215.2	184.8	30.44	7.070	
6,250.0	6,143.6	6,210.4	6,129.8	22.3	19.1	77.88	-1,159.0	-121.2	217.1	186.6	30.56	7.105	
6,300.0	6,191.7	6,256.4	6,170.8	22.3	19.1	75.46	-1,159.0	-100.3	219.4	188.7	30.66	7.156	
6,350.0	6,238.8	6,300.0	6,208.4	22.3	19.1	73.23	-1,159.0	-78.3	222.0	191.2	30.72	7.225	
6,400.0	6,284.7	6,347.0	6,247.4	22.3	19.0	70.95	-1,159.0	-52.2	224.8	194.0	30.76	7.307	
6,450.0	6,329.2	6,391.6	6,283.0	22.3	19.0	68.88	-1,159.0	-25.2	227.8	197.1	30.76	7.407	
6,500.0	6,372.0	6,435.8	6,316.6	22.4	18.9	66.95	-1,159.0	3.5	231.0	200.3	30.71	7.522	
6,550.0	6,413.2	6,479.7	6,348.2	22.4	18.9	65.15	-1,159.0	33.9	234.3	203.6	30.62	7.650	
6,600.0	6,452.3	6,523.3	6,377.9	22.4	18.8	63.48	-1,159.0	65.8	237.6	207.1	30.51	7.786	
6,650.0	6,489.4	6,566.5	6,405.5	22.4	18.8	61.94	-1,159.0	99.1	240.9	210.5	30.40	7.924	
6,700.0	6,524.2	6,609.4	6,430.9	22.5	18.7	60.54	-1,159.0	133.6	244.1	213.8	30.29	8.059	
6,750.0	6,556.5	6,650.0	6,453.2	22.5	18.7	59.31	-1,159.0	167.6	247.3	217.0	30.20	8.186	
6,800.0	6,586.3	6,694.6	6,475.5	22.6	18.6	58.11	-1,159.0	206.1	250.2	220.0	30.22	8.280	
6,850.0	6,613.4	6,736.8	6,494.6	22.7	18.6	57.08	-1,159.0	243.8	253.1	222.7	30.32	8.345	
6,900.0	6,637.7	6,778.9	6,511.5	22.8	18.5	56.17	-1,159.0	282.3	255.7	225.1	30.55	8.369	
6,950.0	6,659.1	6,820.7	6,526.1	23.0	18.5	55.37	-1,159.0	321.5	258.0	227.1	30.93	8.343	
7,000.0	6,677.5	6,862.5	6,538.6	23.2	18.8	54.69	-1,159.0	361.4	260.1	228.7	31.46	8.268	
7,050.0	6,692.8	6,900.0	6,547.9	23.5	19.4	54.15	-1,159.0	397.7	262.0	229.8	32.14	8.150	
7,100.0	6,705.0	6,945.6	6,556.9	23.9	20.1	53.64	-1,159.0	442.4	263.5	230.3	33.11	7.956	
7,150.0	6,713.9	6,987.0	6,562.6	24.4	20.9	53.28	-1,159.0	483.4	264.7	230.4	34.23	7.732	
7,200.0	6,719.7	7,028.4	6,566.2	24.9	21.6	53.02	-1,159.0	524.6	265.5	230.0	35.53	7.473	
7,250.0	6,722.1	7,069.7	6,567.5	25.6	22.4	52.86	-1,159.0	565.9	266.1	229.1	36.99	7.192	
7,267.5	6,722.2	7,085.2	6,567.5	25.9	22.7	52.83	-1,159.0	581.4	266.2	228.6	37.56	7.086	
7,300.0	6,722.0	7,117.7	6,567.2	26.4	23.4	52.83	-1,159.0	613.9	266.2	227.5	38.64	6.889	
7,400.0	6,721.4	7,217.7	6,566.5	28.2	25.5	52.80	-1,159.0	713.9	266.3	224.2	42.07	6.329	
7,500.0	6,720.8	7,317.7	6,565.7	30.2	27.7	52.78	-1,159.0	813.9	266.3	220.6	45.70	5.828	
7,600.0	6,720.2	7,417.7	6,565.0	32.3	30.0	52.75	-1,159.0	913.9	266.4	216.9	49.48	5.384	
7,700.0	6,719.6	7,517.7	6,564.2	34.6	32.4	52.73	-1,159.0	1,013.9	266.5	213.1	53.38	4.993	
7,800.0	6,719.0	7,617.7	6,563.5	36.9	34.8	52.71	-1,159.0	1,113.9	266.6	209.2	57.37	4.647	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design		Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)											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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
7,900.0	6,718.4	7,717.7	6,562.7	39.4	37.3	52.68	-1,159.0	1,213.9	266.7	205.2	61.44	4.341			
8,000.0	6,717.8	7,817.7	6,562.0	41.8	39.8	52.66	-1,159.0	1,313.9	266.8	201.2	65.56	4.069			
8,100.0	6,717.2	7,917.7	6,561.2	44.4	42.4	52.63	-1,159.0	1,413.9	266.9	197.1	69.73	3.827			
8,200.0	6,716.5	8,017.7	6,560.5	46.9	45.0	52.61	-1,159.0	1,513.9	266.9	193.0	73.95	3.610			
8,300.0	6,715.9	8,117.7	6,559.7	49.5	47.6	52.59	-1,159.0	1,613.9	267.0	188.8	78.19	3.415			
8,400.0	6,715.3	8,217.7	6,559.0	52.1	50.3	52.56	-1,159.0	1,713.9	267.1	184.6	82.47	3.239			
8,500.0	6,714.7	8,317.7	6,558.2	54.7	52.9	52.54	-1,159.0	1,813.9	267.2	180.4	86.76	3.080			
8,600.0	6,714.1	8,417.7	6,557.5	57.4	55.6	52.51	-1,159.0	1,913.9	267.3	176.2	91.08	2.935			
8,700.0	6,713.5	8,517.7	6,556.7	60.1	58.3	52.49	-1,159.0	2,013.9	267.4	171.9	95.41	2.802			
8,800.0	6,712.9	8,617.7	6,556.0	62.7	61.0	52.47	-1,159.0	2,113.9	267.4	167.7	99.76	2.681			
8,900.0	6,712.3	8,717.7	6,555.2	65.4	63.7	52.44	-1,159.0	2,213.9	267.5	163.4	104.11	2.570			
9,000.0	6,711.7	8,817.7	6,554.5	68.1	66.4	52.42	-1,159.0	2,313.9	267.6	159.1	108.48	2.467			
9,100.0	6,711.0	8,917.7	6,553.7	70.8	69.1	52.40	-1,159.0	2,413.9	267.7	154.8	112.86	2.372			
9,200.0	6,710.4	9,017.7	6,553.0	73.5	71.8	52.37	-1,159.0	2,513.9	267.8	150.5	117.24	2.284			
9,300.0	6,709.8	9,117.7	6,552.2	76.3	74.5	52.35	-1,159.0	2,613.9	267.9	146.2	121.63	2.202			
9,400.0	6,709.2	9,217.7	6,551.5	79.0	77.3	52.32	-1,159.0	2,713.9	267.9	141.9	126.02	2.126			
9,500.0	6,708.6	9,317.7	6,550.7	81.7	80.0	52.30	-1,159.0	2,813.9	268.0	137.6	130.42	2.055			
9,600.0	6,708.0	9,417.7	6,550.0	84.5	82.8	52.28	-1,159.0	2,913.9	268.1	133.3	134.82	1.989			
9,700.0	6,707.4	9,517.7	6,549.2	87.2	85.5	52.25	-1,159.0	3,013.9	268.2	129.0	139.23	1.926			
9,800.0	6,706.8	9,617.7	6,548.5	89.9	88.3	52.23	-1,159.0	3,113.9	268.3	124.6	143.64	1.868			
9,900.0	6,706.2	9,717.7	6,547.7	92.7	91.0	52.21	-1,159.0	3,213.9	268.4	120.3	148.05	1.813			
10,000.0	6,705.6	9,817.7	6,546.9	95.4	93.8	52.18	-1,159.0	3,313.9	268.5	116.0	152.46	1.761			
10,100.0	6,704.9	9,917.7	6,546.2	98.2	96.6	52.16	-1,159.0	3,413.9	268.5	111.7	156.87	1.712			
10,200.0	6,704.3	10,017.7	6,545.4	101.0	99.3	52.13	-1,159.0	3,513.9	268.6	107.3	161.29	1.665			
10,300.0	6,703.7	10,117.7	6,544.7	103.7	102.1	52.11	-1,159.0	3,613.9	268.7	103.0	165.71	1.622			
10,400.0	6,703.1	10,217.7	6,543.9	106.5	104.9	52.09	-1,159.0	3,713.9	268.8	98.7	170.12	1.580			
10,500.0	6,702.5	10,317.7	6,543.2	109.3	107.6	52.06	-1,159.0	3,813.9	268.9	94.3	174.54	1.541			
10,600.0	6,701.9	10,417.7	6,542.4	112.0	110.4	52.04	-1,159.0	3,913.8	269.0	90.0	178.95	1.503			
10,700.0	6,701.3	10,517.7	6,541.7	114.8	113.2	52.02	-1,159.0	4,013.8	269.0	85.7	183.37	1.467	Level 3		
10,800.0	6,700.7	10,617.7	6,540.9	117.6	116.0	51.99	-1,159.0	4,113.8	269.1	81.3	187.79	1.433	Level 3		
10,900.0	6,700.1	10,717.7	6,540.2	120.3	118.8	51.97	-1,159.0	4,213.8	269.2	77.0	192.20	1.401	Level 3		
11,000.0	6,699.4	10,817.7	6,539.4	123.1	121.5	51.95	-1,158.9	4,313.8	269.3	72.7	196.62	1.370	Level 3		
11,100.0	6,698.8	10,917.7	6,538.7	125.9	124.3	51.92	-1,158.9	4,413.8	269.4	68.4	201.03	1.340	Level 3		
11,200.0	6,698.2	11,017.7	6,537.9	128.7	127.1	51.90	-1,158.9	4,513.8	269.5	64.0	205.44	1.312	Level 3		
11,300.0	6,697.6	11,117.7	6,537.2	131.5	129.9	51.88	-1,158.9	4,613.8	269.6	59.7	209.86	1.285	Level 3		
11,400.0	6,697.0	11,217.7	6,536.4	134.2	132.7	51.85	-1,158.9	4,713.8	269.6	55.4	214.27	1.258	Level 3		
11,500.0	6,696.4	11,317.7	6,535.7	137.0	135.5	51.83	-1,158.9	4,813.8	269.7	51.1	218.68	1.233	Level 2		
11,600.0	6,695.8	11,417.7	6,534.9	139.8	138.2	51.80	-1,158.9	4,913.8	269.8	46.7	223.09	1.209	Level 2		
11,700.0	6,695.2	11,517.7	6,534.2	142.6	141.0	51.78	-1,158.9	5,013.8	269.9	42.4	227.49	1.186	Level 2		
11,800.0	6,694.6	11,617.7	6,533.4	145.4	143.8	51.76	-1,158.9	5,113.8	270.0	38.1	231.90	1.164	Level 2		
11,900.0	6,693.9	11,717.7	6,532.7	148.2	146.6	51.73	-1,158.9	5,213.8	270.1	33.8	236.30	1.143	Level 2		
12,000.0	6,693.3	11,817.7	6,531.9	151.0	149.4	51.71	-1,158.9	5,313.8	270.2	29.5	240.71	1.122	Level 2		
12,100.0	6,692.7	11,917.7	6,531.2	153.7	152.2	51.69	-1,158.9	5,413.8	270.2	25.1	245.11	1.103	Level 2		
12,200.0	6,692.1	12,017.7	6,530.4	156.5	155.0	51.66	-1,158.9	5,513.8	270.3	20.8	249.51	1.083	Level 2		
12,300.0	6,691.5	12,117.7	6,529.7	159.3	157.8	51.64	-1,158.9	5,613.8	270.4	16.5	253.90	1.065	Level 2		
12,400.0	6,690.9	12,217.7	6,528.9	162.1	160.6	51.62	-1,158.9	5,713.8	270.5	12.2	258.30	1.047	Level 2		
12,500.0	6,690.3	12,317.7	6,528.2	164.9	163.4	51.59	-1,158.9	5,813.8	270.6	7.9	262.69	1.030	Level 2		
12,600.0	6,689.7	12,417.7	6,527.4	167.7	166.2	51.57	-1,158.9	5,913.8	270.7	3.6	267.09	1.013	Level 2		
12,700.0	6,689.1	12,517.7	6,526.7	170.5	169.0	51.55	-1,158.9	6,013.8	270.8	-0.7	271.48	0.997	Level 1		
12,800.0	6,688.4	12,617.7	6,525.9	173.3	171.7	51.52	-1,158.9	6,113.8	270.8	-5.0	275.87	0.982	Level 1		
12,900.0	6,687.8	12,717.7	6,525.2	176.1	174.5	51.50	-1,158.9	6,213.8	270.9	-9.3	280.25	0.967	Level 1		

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)													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	
13,000.0	6,687.2	12,817.7	6,524.4	178.9	177.3	51.48	-1,158.9	6,313.8	271.0	-13.6	284.64	0.952	Level 1	
13,100.0	6,686.6	12,917.7	6,523.7	181.7	180.1	51.45	-1,158.9	6,413.8	271.1	-17.9	289.02	0.938	Level 1	
13,200.0	6,686.0	13,017.7	6,522.9	184.5	182.9	51.43	-1,158.9	6,513.8	271.2	-22.2	293.40	0.924	Level 1	
13,300.0	6,685.4	13,117.7	6,522.2	187.3	185.7	51.41	-1,158.9	6,613.8	271.3	-26.5	297.78	0.911	Level 1	
13,400.0	6,684.8	13,217.7	6,521.4	190.1	188.5	51.39	-1,158.9	6,713.8	271.4	-30.8	302.16	0.898	Level 1	
13,500.0	6,684.2	13,317.7	6,520.7	192.9	191.3	51.36	-1,158.9	6,813.8	271.5	-35.1	306.53	0.886	Level 1	
13,600.0	6,683.6	13,417.7	6,519.9	195.7	194.1	51.34	-1,158.9	6,913.8	271.5	-39.4	310.91	0.873	Level 1	
13,700.0	6,682.9	13,517.7	6,519.2	198.4	196.9	51.32	-1,158.9	7,013.8	271.6	-43.7	315.28	0.862	Level 1	
13,800.0	6,682.3	13,617.7	6,518.4	201.2	199.7	51.29	-1,158.9	7,113.8	271.7	-47.9	319.64	0.850	Level 1	
13,855.3	6,682.0	13,673.0	6,518.0	202.8	201.3	51.28	-1,158.9	7,169.0	271.8	-50.3	322.06	0.844	Level 1, ES, SF	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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	
0.0	0.0	0.0	0.0	0.0	0.0	35.15	36.8	25.9	45.0				
100.0	100.0	99.0	99.0	0.1	0.1	35.15	36.8	25.9	45.0	44.8	0.22	201.228	
200.0	200.0	199.0	199.0	0.3	0.3	35.15	36.8	25.9	45.0	44.3	0.67	66.964	
300.0	300.0	299.0	299.0	0.6	0.6	35.15	36.8	25.9	45.0	43.9	1.12	40.125	
400.0	400.0	399.0	399.0	0.8	0.8	35.15	36.8	25.9	45.0	43.4	1.57	28.644	
500.0	500.0	499.0	499.0	1.0	1.0	35.15	36.8	25.9	45.0	43.0	2.02	22.272	
600.0	600.0	599.0	599.0	1.2	1.2	35.15	36.8	25.9	45.0	42.5	2.47	18.219	
700.0	700.0	699.0	699.0	1.5	1.5	35.15	36.8	25.9	45.0	42.1	2.92	15.414	
800.0	800.0	799.0	799.0	1.7	1.7	35.15	36.8	25.9	45.0	41.6	3.37	13.357 CC, ES	
900.0	900.0	899.0	899.0	1.9	1.9	-156.61	36.8	25.9	46.2	42.4	3.79	12.184	
1,000.0	999.9	998.9	998.9	2.1	2.1	-158.39	36.8	25.9	49.8	45.6	4.20	11.877 SF	
1,100.0	1,099.7	1,098.7	1,098.7	2.3	2.4	-160.82	36.8	25.9	56.0	51.4	4.61	12.145	
1,200.0	1,199.3	1,198.3	1,198.3	2.5	2.6	-163.45	36.8	25.9	64.7	59.7	5.03	12.869	
1,300.0	1,298.6	1,297.6	1,297.6	2.7	2.8	-165.93	36.8	25.9	76.0	70.6	5.45	13.955	
1,400.0	1,397.5	1,396.5	1,396.5	3.0	3.0	-168.11	36.8	25.9	90.0	84.1	5.87	15.330	
1,500.0	1,496.1	1,495.1	1,495.1	3.3	3.2	-169.94	36.8	25.9	106.6	100.4	6.30	16.937	
1,600.0	1,594.2	1,593.2	1,593.2	3.6	3.5	-171.44	36.8	25.9	125.9	119.2	6.72	18.729	
1,676.9	1,669.2	1,668.2	1,668.2	3.9	3.6	-172.41	36.8	25.9	142.5	135.4	7.05	20.211	
1,700.0	1,691.7	1,690.7	1,690.7	4.0	3.7	-172.68	36.8	25.9	147.7	140.6	7.15	20.649	
1,800.0	1,789.1	1,788.1	1,788.1	4.4	3.9	-173.66	36.8	25.9	170.3	162.7	7.60	22.404	
1,900.0	1,886.5	1,885.5	1,885.5	4.8	4.1	-174.40	36.8	25.9	193.0	184.9	8.06	23.951	
2,000.0	1,983.8	1,982.8	1,982.8	5.2	4.3	-174.99	36.8	25.9	215.6	207.1	8.51	25.324	
2,100.0	2,081.2	2,080.2	2,080.2	5.7	4.6	-175.47	36.8	25.9	238.3	229.3	8.98	26.548	
2,200.0	2,178.6	2,177.6	2,177.6	6.1	4.8	-175.86	36.8	25.9	261.0	251.6	9.44	27.645	
2,300.0	2,276.0	2,275.0	2,275.0	6.6	5.0	-176.20	36.8	25.9	283.7	273.8	9.91	28.632	
2,400.0	2,373.3	2,372.3	2,372.3	7.1	5.2	-176.48	36.8	25.9	306.4	296.0	10.38	29.524	
2,500.0	2,470.7	2,469.7	2,469.7	7.5	5.4	-176.72	36.8	25.9	329.1	318.3	10.85	30.335	
2,600.0	2,568.1	2,567.6	2,567.6	8.0	5.7	-177.00	36.8	25.5	351.8	340.5	11.32	31.089	
2,700.0	2,665.5	2,665.8	2,665.8	8.5	5.9	-177.50	37.1	23.5	374.3	362.5	11.77	31.793	
2,800.0	2,762.9	2,764.0	2,763.9	8.9	6.1	-178.18	37.5	19.9	396.6	384.4	12.23	32.433	
2,900.0	2,860.2	2,862.0	2,861.8	9.4	6.3	-179.03	38.1	14.6	418.8	406.1	12.69	33.003	
3,000.0	2,957.6	2,959.9	2,959.4	9.9	6.5	179.99	38.9	7.6	440.9	427.8	13.16	33.512	
3,100.0	3,055.0	3,057.6	3,056.7	10.4	6.7	178.90	39.9	-1.0	463.1	449.5	13.63	33.964	
3,200.0	3,152.4	3,154.8	3,153.4	10.8	6.9	177.75	41.0	-10.9	485.3	471.2	14.12	34.366	
3,300.0	3,249.7	3,251.9	3,249.9	11.3	7.1	176.69	42.2	-20.8	507.7	493.1	14.62	34.732	
3,400.0	3,347.1	3,348.9	3,346.5	11.8	7.4	175.72	43.3	-30.8	530.3	515.2	15.12	35.065	
3,500.0	3,444.5	3,445.9	3,443.0	12.3	7.6	174.83	44.5	-40.8	553.0	537.4	15.64	35.368	
3,600.0	3,541.9	3,543.0	3,539.5	12.8	7.8	174.00	45.6	-50.7	575.8	559.7	16.15	35.644	
3,700.0	3,639.2	3,640.0	3,636.0	13.3	8.1	173.24	46.8	-60.7	598.7	582.0	16.68	35.896	
3,800.0	3,736.6	3,737.1	3,732.6	13.7	8.3	172.54	47.9	-70.6	621.7	604.5	17.21	36.127	
3,900.0	3,834.0	3,834.1	3,829.1	14.2	8.6	171.89	49.1	-80.6	644.8	627.1	17.74	36.339	
4,000.0	3,931.4	3,931.1	3,925.6	14.7	8.8	171.28	50.2	-90.6	668.0	649.7	18.28	36.533	
4,100.0	4,028.7	4,028.2	4,022.1	15.2	9.1	170.71	51.3	-100.5	691.2	672.4	18.83	36.711	
4,200.0	4,126.1	4,125.2	4,118.7	15.7	9.3	170.18	52.5	-110.5	714.5	695.1	19.38	36.876	
4,300.0	4,223.5	4,222.3	4,215.2	16.2	9.6	169.68	53.6	-120.4	737.9	717.9	19.93	37.027	
4,400.0	4,320.9	4,319.3	4,311.7	16.7	9.8	169.21	54.8	-130.4	761.3	740.8	20.48	37.167	
4,500.0	4,418.2	4,416.4	4,408.2	17.1	10.1	168.77	55.9	-140.3	784.7	763.7	21.04	37.297	
4,600.0	4,515.6	4,513.4	4,504.7	17.6	10.4	168.36	57.1	-150.3	808.2	786.6	21.60	37.417	
4,700.0	4,613.0	4,610.4	4,601.3	18.1	10.6	167.97	58.2	-160.3	831.7	809.6	22.16	37.529	
4,800.0	4,710.4	4,707.5	4,697.8	18.6	10.9	167.60	59.4	-170.2	855.3	832.5	22.73	37.633	
4,900.0	4,807.8	4,808.5	4,798.4	19.1	11.1	167.34	60.4	-179.0	878.7	855.4	23.26	37.771	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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								
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	
5,000.0	4,905.1	4,910.1	4,899.9	19.6	11.3	167.33	61.0	-184.3	901.6	877.8	23.75	37.969		
5,100.0	5,002.5	5,011.8	5,001.5	20.1	11.5	167.54	61.2	-186.1	924.0	899.8	24.20	38.186		
5,146.8	5,048.1	5,057.3	5,047.1	20.3	11.6	167.68	61.2	-186.1	934.5	910.0	24.41	38.285		
5,200.0	5,100.0	5,109.2	5,099.0	20.5	11.7	167.88	61.2	-186.1	945.8	921.1	24.68	38.320		
5,300.0	5,198.1	5,207.4	5,197.1	20.8	11.9	168.20	61.2	-186.1	964.7	939.5	25.17	38.326		
5,400.0	5,296.9	5,306.1	5,295.9	21.1	12.1	168.45	61.2	-186.1	980.1	954.5	25.63	38.248		
5,500.0	5,396.1	5,405.3	5,395.1	21.3	12.3	168.64	61.2	-186.1	992.2	966.2	26.05	38.093		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Connie 5N64W26EF Pad Sec.26-T5N-R64W - Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)													
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	35.29	24.4	17.3	29.9				
100.0	100.0	99.0	99.0	0.1	0.1	35.29	24.4	17.3	29.9	29.7	0.22	133.708	
200.0	200.0	199.0	199.0	0.3	0.3	35.29	24.4	17.3	29.9	29.2	0.67	44.495	
300.0	300.0	299.0	299.0	0.6	0.6	35.29	24.4	17.3	29.9	28.8	1.12	26.662	
400.0	400.0	399.0	399.0	0.8	0.8	35.29	24.4	17.3	29.9	28.3	1.57	19.033	
500.0	500.0	499.0	499.0	1.0	1.0	35.29	24.4	17.3	29.9	27.9	2.02	14.799	
600.0	600.0	599.0	599.0	1.2	1.2	35.29	24.4	17.3	29.9	27.4	2.47	12.106	
700.0	700.0	699.0	699.0	1.5	1.5	35.29	24.4	17.3	29.9	27.0	2.92	10.242	
800.0	800.0	799.0	799.0	1.7	1.7	35.29	24.4	17.3	29.9	26.5	3.37	8.875 CC, ES	
900.0	900.0	899.0	899.0	1.9	1.9	-156.81	24.4	17.3	31.1	27.3	3.79	8.202	
1,000.0	999.9	998.9	998.9	2.1	2.1	-159.34	24.4	17.3	34.7	30.5	4.20	8.281	
1,100.0	1,099.7	1,098.7	1,098.7	2.3	2.4	-162.54	24.4	17.3	40.9	36.3	4.61	8.883	
1,200.0	1,199.3	1,198.3	1,198.3	2.5	2.6	-165.67	24.4	17.3	49.7	44.7	5.03	9.897	
1,300.0	1,298.6	1,297.6	1,297.6	2.7	2.8	-168.36	24.4	17.3	61.2	55.7	5.45	11.235	
1,400.0	1,397.5	1,396.5	1,396.5	3.0	3.0	-170.53	24.4	17.3	75.3	69.4	5.87	12.830	
1,500.0	1,496.1	1,497.4	1,497.4	3.3	3.2	-172.37	23.3	16.7	90.9	84.6	6.27	14.490	
1,600.0	1,594.2	1,598.7	1,598.6	3.6	3.4	-174.08	19.8	14.9	106.5	99.8	6.65	16.013	
1,676.9	1,669.2	1,676.9	1,676.7	3.9	3.6	-175.33	15.5	12.7	118.5	111.6	6.95	17.061	
1,700.0	1,691.7	1,700.4	1,700.1	4.0	3.6	-175.70	13.9	11.9	122.1	115.0	7.04	17.338	
1,800.0	1,789.1	1,802.8	1,802.0	4.4	3.8	-177.24	5.5	7.7	136.0	128.5	7.46	18.219	
1,900.0	1,886.5	1,905.8	1,904.3	4.8	4.0	-178.75	-5.4	2.2	147.3	139.4	7.90	18.650	
2,000.0	1,983.8	2,006.9	2,004.5	5.2	4.3	179.75	-18.2	-4.3	156.6	148.3	8.35	18.760	
2,100.0	2,081.2	2,106.5	2,102.9	5.7	4.5	178.42	-30.9	-10.7	165.7	156.9	8.81	18.819	
2,200.0	2,178.6	2,206.0	2,201.4	6.1	4.8	177.23	-43.6	-17.1	175.0	165.7	9.28	18.859	
2,300.0	2,276.0	2,305.5	2,299.9	6.6	5.1	176.16	-56.4	-23.6	184.3	174.5	9.76	18.882	
2,400.0	2,373.3	2,405.0	2,398.4	7.1	5.3	175.20	-69.1	-30.0	193.6	183.4	10.25	18.891	
2,500.0	2,470.7	2,504.5	2,496.9	7.5	5.6	174.32	-81.8	-36.5	203.0	192.3	10.75	18.888	
2,600.0	2,568.1	2,604.0	2,595.4	8.0	5.9	173.52	-94.6	-42.9	212.4	201.2	11.25	18.877	
2,700.0	2,665.5	2,703.5	2,693.8	8.5	6.2	172.78	-107.3	-49.4	221.9	210.2	11.77	18.858	
2,800.0	2,762.9	2,803.0	2,792.3	8.9	6.6	172.11	-120.1	-55.8	231.4	219.1	12.29	18.833	
2,900.0	2,860.2	2,902.5	2,890.8	9.4	6.9	171.49	-132.8	-62.2	241.0	228.2	12.81	18.804	
3,000.0	2,957.6	3,002.1	2,989.3	9.9	7.2	170.92	-145.5	-68.7	250.5	237.2	13.35	18.771	
3,100.0	3,055.0	3,101.6	3,087.8	10.4	7.5	170.39	-158.3	-75.1	260.1	246.2	13.88	18.735	
3,200.0	3,152.4	3,201.1	3,186.2	10.8	7.8	169.90	-171.0	-81.6	269.7	255.3	14.43	18.698	
3,300.0	3,249.7	3,300.6	3,284.7	11.3	8.2	169.44	-183.7	-88.0	279.4	264.4	14.97	18.659	
3,400.0	3,347.1	3,400.1	3,383.2	11.8	8.5	169.01	-196.5	-94.5	289.0	273.5	15.52	18.619	
3,500.0	3,444.5	3,499.6	3,481.7	12.3	8.8	168.61	-209.2	-100.9	298.7	282.6	16.08	18.579	
3,600.0	3,541.9	3,599.1	3,580.2	12.8	9.2	168.24	-222.0	-107.3	308.3	291.7	16.63	18.538	
3,700.0	3,639.2	3,698.6	3,678.7	13.3	9.5	167.89	-234.7	-113.8	318.0	300.8	17.19	18.497	
3,800.0	3,736.6	3,798.2	3,777.1	13.7	9.8	167.56	-247.4	-120.2	327.7	310.0	17.76	18.457	
3,900.0	3,834.0	3,897.7	3,875.6	14.2	10.2	167.24	-260.2	-126.7	337.4	319.1	18.32	18.417	
4,000.0	3,931.4	3,997.2	3,974.1	14.7	10.5	166.95	-272.9	-133.1	347.1	328.2	18.89	18.378	
4,100.0	4,028.7	4,096.7	4,072.6	15.2	10.9	166.67	-285.7	-139.6	356.9	337.4	19.46	18.339	
4,200.0	4,126.1	4,196.2	4,171.1	15.7	11.2	166.41	-298.4	-146.0	366.6	346.6	20.03	18.301	
4,300.0	4,223.5	4,295.7	4,269.6	16.2	11.5	166.16	-311.1	-152.4	376.3	355.7	20.60	18.264	
4,400.0	4,320.9	4,395.2	4,368.0	16.7	11.9	165.92	-323.9	-158.9	386.1	364.9	21.18	18.228	
4,500.0	4,418.2	4,494.7	4,466.5	17.1	12.2	165.69	-336.6	-165.3	395.8	374.1	21.76	18.192	
4,600.0	4,515.6	4,594.2	4,565.0	17.6	12.6	165.48	-349.3	-171.8	405.6	383.2	22.34	18.157	
4,700.0	4,613.0	4,685.4	4,655.3	18.1	12.9	165.34	-360.3	-177.3	416.1	393.2	22.87	18.194	
4,800.0	4,710.4	4,773.3	4,742.7	18.6	13.1	165.40	-368.6	-181.5	429.2	405.8	23.35	18.384	
4,900.0	4,807.8	4,860.5	4,829.7	19.1	13.3	165.63	-374.4	-184.4	444.9	421.1	23.79	18.703	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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	4,905.1	4,946.9	4,916.0	19.6	13.4	166.00	-377.8	-186.2	463.2	439.0	24.20	19.140		
5,100.0	5,002.5	5,032.4	5,001.5	20.1	13.6	166.50	-378.9	-186.7	484.1	459.5	24.59	19.685		
5,146.8	5,048.1	5,078.0	5,047.1	20.3	13.6	166.79	-378.9	-186.7	494.5	469.7	24.78	19.957		
5,200.0	5,100.0	5,129.9	5,099.0	20.5	13.7	167.14	-378.9	-186.7	505.8	480.8	25.00	20.230		
5,300.0	5,198.1	5,228.0	5,197.1	20.8	13.9	167.69	-378.9	-186.7	524.6	499.2	25.39	20.660		
5,400.0	5,296.9	5,326.8	5,295.9	21.1	14.0	168.11	-378.9	-186.7	540.1	514.3	25.76	20.964		
5,500.0	5,396.1	5,426.0	5,395.1	21.3	14.2	168.42	-378.9	-186.7	552.2	526.1	26.11	21.150		
5,600.0	5,495.7	5,525.6	5,494.7	21.5	14.3	168.64	-378.9	-186.7	560.9	534.4	26.42	21.226		
5,700.0	5,595.5	5,625.5	5,594.5	21.7	14.5	168.77	-378.9	-186.7	566.1	539.4	26.71	21.196		
5,804.5	5,700.0	5,729.9	5,699.0	21.8	14.7	-0.07	-378.9	-186.7	568.0	532.2	35.76	15.882		
5,900.0	5,795.5	5,825.4	5,794.5	21.9	14.8	-0.07	-378.9	-186.7	568.0	532.0	36.04	15.762		
5,946.7	5,842.2	5,872.1	5,841.2	22.0	14.9	0.00	-378.9	-186.0	568.0	531.8	36.17	15.705		
6,000.0	5,895.5	5,925.2	5,894.0	22.0	15.0	0.42	-378.9	-181.8	568.0	531.7	36.34	15.631		
6,062.8	5,958.3	5,986.5	5,954.7	22.1	15.0	1.36	-378.9	-172.5	568.2	531.6	36.57	15.537		
6,100.0	5,995.5	6,022.2	5,989.5	22.1	15.1	-87.93	-378.9	-164.8	568.4	540.7	27.73	20.495		
6,150.0	6,045.3	6,069.7	6,035.3	22.2	15.1	-87.00	-378.9	-152.1	568.8	541.1	27.76	20.487		
6,200.0	6,094.8	6,116.7	6,079.7	22.2	15.1	-86.08	-378.9	-136.7	569.4	541.6	27.79	20.489		
6,250.0	6,143.6	6,163.2	6,122.6	22.3	15.1	-85.18	-378.9	-118.9	570.1	542.3	27.82	20.494		
6,300.0	6,191.7	6,209.2	6,163.9	22.3	15.2	-84.31	-378.9	-98.6	570.9	543.1	27.85	20.497		
6,350.0	6,238.8	6,254.8	6,203.6	22.3	15.2	-83.47	-378.9	-76.2	571.8	543.9	27.91	20.489		
6,400.0	6,284.7	6,300.0	6,241.6	22.3	15.2	-82.65	-378.9	-51.7	572.8	544.8	27.99	20.465		
6,450.0	6,329.2	6,344.8	6,277.6	22.3	15.2	-81.87	-378.9	-25.2	573.9	545.8	28.12	20.413		
6,500.0	6,372.0	6,389.2	6,311.9	22.4	15.2	-81.12	-378.9	3.1	575.0	546.8	28.29	20.327		
6,550.0	6,413.2	6,433.3	6,344.1	22.4	15.3	-80.41	-378.9	33.2	576.2	547.7	28.53	20.200		
6,600.0	6,452.3	6,477.1	6,374.4	22.4	15.3	-79.74	-378.9	64.8	577.4	548.6	28.84	20.024		
6,650.0	6,489.4	6,520.6	6,402.7	22.4	15.3	-79.11	-378.9	97.9	578.6	549.4	29.21	19.804		
6,700.0	6,524.2	6,563.8	6,428.8	22.5	15.4	-78.53	-378.9	132.3	579.7	550.0	29.70	19.519		
6,750.0	6,556.5	6,606.8	6,452.9	22.5	15.5	-77.99	-378.9	167.9	580.9	550.6	30.29	19.179		
6,800.0	6,586.3	6,650.0	6,475.0	22.6	15.9	-77.49	-378.9	205.0	581.9	551.0	30.98	18.782		
6,850.0	6,613.4	6,692.2	6,494.5	22.7	16.3	-77.04	-378.9	242.4	583.0	551.2	31.80	18.332		
6,900.0	6,637.7	6,734.6	6,512.0	22.8	16.9	-76.64	-378.9	281.1	583.9	551.1	32.74	17.834		
6,950.0	6,659.1	6,776.9	6,527.4	23.0	17.5	-76.29	-378.9	320.5	584.7	550.9	33.80	17.301		
7,000.0	6,677.5	6,819.1	6,540.4	23.2	18.2	-75.99	-378.9	360.6	585.5	550.5	34.97	16.742		
7,050.0	6,692.8	6,861.1	6,551.2	23.5	18.9	-75.74	-378.9	401.2	586.1	549.8	36.26	16.165		
7,100.0	6,705.0	6,900.0	6,559.2	23.9	19.6	-75.55	-378.9	439.2	586.6	549.0	37.59	15.606		
7,150.0	6,713.9	6,945.0	6,566.0	24.4	20.5	-75.40	-378.9	483.7	587.0	547.8	39.14	14.998		
7,200.0	6,719.7	6,986.8	6,570.0	24.9	21.3	-75.30	-378.9	525.3	587.2	546.5	40.72	14.422		
7,250.0	6,722.1	7,028.7	6,571.7	25.6	22.2	-75.26	-378.9	567.1	587.3	545.0	42.37	13.863		
7,267.5	6,722.2	7,045.7	6,571.8	25.9	22.5	-75.26	-378.9	584.2	587.3	544.3	43.01	13.657		
7,271.3	6,722.2	7,046.6	6,571.7	25.9	22.5	-75.26	-378.9	585.1	587.3	544.2	43.10	13.626		
7,300.0	6,722.0	7,075.3	6,571.5	26.4	23.2	-75.25	-378.9	613.8	587.4	543.1	44.28	13.263		
7,400.0	6,721.4	7,175.3	6,570.6	28.2	25.4	-75.22	-378.9	713.8	587.4	538.9	48.56	12.098		
7,500.0	6,720.8	7,275.3	6,569.7	30.2	27.7	-75.19	-378.9	813.8	587.5	534.5	53.04	11.078		
7,600.0	6,720.2	7,375.3	6,568.8	32.3	30.1	-75.16	-378.9	913.8	587.6	529.9	57.68	10.187		
7,700.0	6,719.6	7,475.3	6,567.9	34.6	32.6	-75.14	-378.9	1,013.8	587.7	525.2	62.45	9.410		
7,800.0	6,719.0	7,575.3	6,566.9	36.9	35.1	-75.11	-378.9	1,113.8	587.7	520.4	67.33	8.730		
7,900.0	6,718.4	7,675.3	6,566.0	39.4	37.7	-75.08	-378.9	1,213.8	587.8	515.5	72.28	8.133		
8,000.0	6,717.8	7,775.3	6,565.1	41.8	40.3	-75.05	-378.9	1,313.8	587.9	510.6	77.29	7.606		
8,100.0	6,717.2	7,875.3	6,564.2	44.4	42.9	-75.02	-378.9	1,413.8	588.0	505.6	82.36	7.139		
8,200.0	6,716.5	7,975.3	6,563.3	46.9	45.5	-75.00	-378.9	1,513.8	588.0	500.6	87.47	6.722		
8,300.0	6,715.9	8,075.3	6,562.4	49.5	48.2	-74.97	-378.9	1,613.7	588.1	495.5	92.62	6.350		

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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	
8,400.0	6,715.3	8,175.3	6,561.5	52.1	50.9	-74.94	-378.9	1,713.7	588.2	490.4	97.80	6.014	
8,500.0	6,714.7	8,275.3	6,560.6	54.7	53.5	-74.91	-378.9	1,813.7	588.3	485.3	103.00	5.711	
8,600.0	6,714.1	8,375.3	6,559.7	57.4	56.2	-74.88	-378.9	1,913.7	588.4	480.1	108.22	5.436	
8,700.0	6,713.5	8,475.3	6,558.8	60.1	59.0	-74.86	-378.9	2,013.7	588.4	475.0	113.46	5.186	
8,800.0	6,712.9	8,575.3	6,557.9	62.7	61.7	-74.83	-378.9	2,113.7	588.5	469.8	118.72	4.957	
8,900.0	6,712.3	8,675.3	6,557.0	65.4	64.4	-74.80	-378.9	2,213.7	588.6	464.6	123.99	4.747	
9,000.0	6,711.7	8,775.3	6,556.1	68.1	67.1	-74.77	-378.9	2,313.7	588.7	459.4	129.27	4.554	
9,100.0	6,711.0	8,875.3	6,555.1	70.8	69.9	-74.75	-378.9	2,413.7	588.7	454.2	134.56	4.375	
9,200.0	6,710.4	8,975.3	6,554.2	73.5	72.6	-74.72	-378.9	2,513.7	588.8	449.0	139.86	4.210	
9,300.0	6,709.8	9,075.3	6,553.3	76.3	75.4	-74.69	-378.9	2,613.7	588.9	443.7	145.17	4.057	
9,400.0	6,709.2	9,175.3	6,552.4	79.0	78.1	-74.66	-378.9	2,713.7	589.0	438.5	150.48	3.914	
9,500.0	6,708.6	9,275.3	6,551.5	81.7	80.9	-74.63	-378.9	2,813.7	589.0	433.2	155.80	3.781	
9,600.0	6,708.0	9,375.3	6,550.6	84.5	83.7	-74.61	-378.9	2,913.7	589.1	428.0	161.13	3.656	
9,700.0	6,707.4	9,475.3	6,549.7	87.2	86.4	-74.58	-378.9	3,013.7	589.2	422.7	166.46	3.540	
9,800.0	6,706.8	9,575.3	6,548.8	89.9	89.2	-74.55	-378.9	3,113.7	589.3	417.5	171.79	3.430	
9,900.0	6,706.2	9,675.3	6,547.9	92.7	92.0	-74.52	-378.9	3,213.7	589.4	412.2	177.13	3.327	
10,000.0	6,705.6	9,775.3	6,547.0	95.4	94.7	-74.49	-378.9	3,313.7	589.4	407.0	182.47	3.230	
10,100.0	6,704.9	9,875.3	6,546.1	98.2	97.5	-74.47	-378.9	3,413.7	589.5	401.7	187.81	3.139	
10,200.0	6,704.3	9,975.3	6,545.2	101.0	100.3	-74.44	-378.9	3,513.7	589.6	396.4	193.16	3.052	
10,300.0	6,703.7	10,075.3	6,544.3	103.7	103.1	-74.41	-378.9	3,613.7	589.7	391.2	198.50	2.971	
10,400.0	6,703.1	10,175.3	6,543.4	106.5	105.8	-74.38	-378.9	3,713.7	589.8	385.9	203.85	2.893	
10,500.0	6,702.5	10,275.3	6,542.4	109.3	108.6	-74.36	-378.9	3,813.6	589.8	380.6	209.20	2.819	
10,600.0	6,701.9	10,375.3	6,541.5	112.0	111.4	-74.33	-378.9	3,913.6	589.9	375.4	214.55	2.750	
10,700.0	6,701.3	10,475.3	6,540.6	114.8	114.2	-74.30	-378.9	4,013.6	590.0	370.1	219.90	2.683	
10,800.0	6,700.7	10,575.3	6,539.7	117.6	117.0	-74.27	-378.9	4,113.6	590.1	364.8	225.26	2.620	
10,900.0	6,700.1	10,675.3	6,538.8	120.3	119.8	-74.24	-378.9	4,213.6	590.2	359.5	230.61	2.559	
11,000.0	6,699.4	10,775.3	6,537.9	123.1	122.6	-74.22	-378.9	4,313.6	590.2	354.3	235.97	2.501	
11,100.0	6,698.8	10,875.3	6,537.0	125.9	125.3	-74.19	-378.9	4,413.6	590.3	349.0	241.32	2.446	
11,200.0	6,698.2	10,975.3	6,536.1	128.7	128.1	-74.16	-378.9	4,513.6	590.4	343.7	246.68	2.393	
11,300.0	6,697.6	11,075.3	6,535.2	131.5	130.9	-74.13	-378.9	4,613.6	590.5	338.4	252.03	2.343	
11,400.0	6,697.0	11,175.3	6,534.3	134.2	133.7	-74.11	-378.9	4,713.6	590.6	333.2	257.39	2.294	
11,500.0	6,696.4	11,275.3	6,533.4	137.0	136.5	-74.08	-378.9	4,813.6	590.6	327.9	262.74	2.248	
11,600.0	6,695.8	11,375.3	6,532.5	139.8	139.3	-74.05	-378.9	4,913.6	590.7	322.6	268.10	2.203	
11,700.0	6,695.2	11,475.3	6,531.6	142.6	142.1	-74.02	-378.9	5,013.6	590.8	317.3	273.45	2.160	
11,800.0	6,694.6	11,575.3	6,530.6	145.4	144.9	-74.00	-378.9	5,113.6	590.9	312.1	278.81	2.119	
11,900.0	6,693.9	11,675.3	6,529.7	148.2	147.7	-73.97	-378.9	5,213.6	591.0	306.8	284.16	2.080	
12,000.0	6,693.3	11,775.3	6,528.8	151.0	150.5	-73.94	-378.9	5,313.6	591.0	301.5	289.52	2.041	
12,100.0	6,692.7	11,875.3	6,527.9	153.7	153.3	-73.91	-378.9	5,413.6	591.1	296.2	294.87	2.005	
12,200.0	6,692.1	11,975.3	6,527.0	156.5	156.1	-73.88	-378.9	5,513.6	591.2	291.0	300.23	1.969	
12,300.0	6,691.5	12,075.3	6,526.1	159.3	158.9	-73.86	-378.9	5,613.6	591.3	285.7	305.58	1.935	
12,400.0	6,690.9	12,175.3	6,525.2	162.1	161.7	-73.83	-378.9	5,713.6	591.4	280.4	310.93	1.902	
12,500.0	6,690.3	12,275.3	6,524.3	164.9	164.5	-73.80	-378.9	5,813.6	591.4	275.2	316.28	1.870	
12,600.0	6,689.7	12,375.3	6,523.4	167.7	167.3	-73.77	-378.9	5,913.6	591.5	269.9	321.63	1.839	
12,700.0	6,689.1	12,475.3	6,522.5	170.5	170.1	-73.75	-378.9	6,013.5	591.6	264.6	326.98	1.809	
12,800.0	6,688.4	12,575.3	6,521.6	173.3	172.9	-73.72	-378.9	6,113.5	591.7	259.4	332.33	1.780	
12,900.0	6,687.8	12,675.3	6,520.7	176.1	175.7	-73.69	-378.9	6,213.5	591.8	254.1	337.68	1.752	
13,000.0	6,687.2	12,775.3	6,519.8	178.9	178.5	-73.66	-378.9	6,313.5	591.9	248.8	343.03	1.725	
13,100.0	6,686.6	12,875.3	6,518.8	181.7	181.3	-73.64	-378.9	6,413.5	591.9	243.6	348.38	1.699	
13,200.0	6,686.0	12,975.3	6,517.9	184.5	184.1	-73.61	-378.9	6,513.5	592.0	238.3	353.72	1.674	
13,300.0	6,685.4	13,075.3	6,517.0	187.3	186.9	-73.58	-378.9	6,613.5	592.1	233.0	359.07	1.649	
13,400.0	6,684.8	13,175.3	6,516.1	190.1	189.7	-73.55	-378.9	6,713.5	592.2	227.8	364.41	1.625	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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														
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	
13,500.0	6,684.2	13,275.3	6,515.2	192.9	192.5	-73.53	-378.9	6,813.5	592.3	222.5	369.76	1.602		
13,600.0	6,683.6	13,375.3	6,514.3	195.7	195.3	-73.50	-378.9	6,913.5	592.4	217.3	375.10	1.579		
13,700.0	6,682.9	13,475.3	6,513.4	198.4	198.1	-73.47	-378.9	7,013.5	592.4	212.0	380.44	1.557		
13,800.0	6,682.3	13,575.3	6,512.5	201.2	200.9	-73.44	-378.9	7,113.5	592.5	206.7	385.78	1.536		
13,855.3	6,682.0	13,629.7	6,512.0	202.8	202.4	-73.43	-378.9	7,167.9	592.6	203.9	388.71	1.524 SF		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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		
0.0	0.0	0.0	0.0	0.0	0.0	34.89	12.4	8.6	15.1	15.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	34.89	12.4	8.6	15.1	14.9	0.22	67.184		
200.0	200.0	200.0	200.0	0.3	0.3	34.89	12.4	8.6	15.1	14.4	0.67	22.395		
300.0	300.0	300.0	300.0	0.6	0.6	34.89	12.4	8.6	15.1	14.0	1.12	13.437		
400.0	400.0	400.0	400.0	0.8	0.8	34.89	12.4	8.6	15.1	13.5	1.57	9.598		
500.0	500.0	500.0	500.0	1.0	1.0	34.89	12.4	8.6	15.1	13.1	2.02	7.465		
600.0	600.0	600.0	600.0	1.2	1.2	34.89	12.4	8.6	15.1	12.6	2.47	6.108		
700.0	700.0	700.0	700.0	1.5	1.5	34.89	12.4	8.6	15.1	12.2	2.92	5.168		
800.0	800.0	800.0	800.0	1.7	1.7	34.89	12.4	8.6	15.1	11.7	3.37	4.479 CC		
900.0	900.0	900.0	900.0	1.9	1.9	-158.07	12.4	8.6	16.3	12.5	3.79	4.298		
1,000.0	999.9	999.9	999.9	2.1	2.1	-162.26	12.4	8.6	20.0	15.8	4.20	4.765		
1,100.0	1,099.7	1,100.4	1,100.3	2.3	2.3	-166.19	11.1	8.3	25.0	20.4	4.58	5.459		
1,200.0	1,199.3	1,200.9	1,200.8	2.5	2.5	-169.27	7.3	7.1	30.0	25.1	4.95	6.071		
1,300.0	1,298.6	1,301.7	1,301.3	2.7	2.7	-171.87	1.0	5.2	35.1	29.8	5.33	6.587		
1,400.0	1,397.5	1,402.5	1,401.8	3.0	2.9	-174.16	-7.9	2.6	40.2	34.5	5.72	7.023		
1,500.0	1,496.1	1,503.5	1,502.0	3.3	3.1	-176.26	-19.4	-0.8	45.3	39.2	6.12	7.394		
1,600.0	1,594.2	1,604.6	1,602.1	3.6	3.4	-178.22	-33.4	-5.0	50.4	43.9	6.54	7.710		
1,676.9	1,669.2	1,682.5	1,678.9	3.9	3.6	-179.66	-45.9	-8.7	54.4	47.5	6.86	7.919		
1,700.0	1,691.7	1,705.8	1,701.8	4.0	3.7	179.92	-49.9	-9.9	55.5	48.5	6.97	7.962		
1,800.0	1,789.1	1,805.7	1,800.0	4.4	4.0	178.28	-67.4	-15.1	60.2	52.7	7.43	8.101		
1,900.0	1,886.5	1,905.6	1,898.2	4.8	4.3	176.88	-84.9	-20.3	64.9	57.0	7.90	8.215		
2,000.0	1,983.8	2,005.4	1,996.4	5.2	4.7	175.67	-102.4	-25.5	69.7	61.3	8.39	8.309		
2,100.0	2,081.2	2,105.3	2,094.6	5.7	5.0	174.61	-119.9	-30.7	74.5	65.6	8.88	8.384		
2,200.0	2,178.6	2,205.2	2,192.8	6.1	5.4	173.68	-137.4	-35.9	79.3	69.9	9.39	8.446		
2,300.0	2,276.0	2,305.1	2,291.0	6.6	5.8	172.86	-154.9	-41.1	84.1	74.2	9.90	8.496		
2,400.0	2,373.3	2,404.9	2,389.2	7.1	6.1	172.13	-172.4	-46.3	89.0	78.6	10.42	8.536		
2,500.0	2,470.7	2,504.8	2,487.4	7.5	6.5	171.47	-189.9	-51.5	93.8	82.9	10.95	8.568		
2,600.0	2,568.1	2,604.7	2,585.6	8.0	6.9	170.88	-207.3	-56.7	98.7	87.2	11.49	8.593		
2,700.0	2,665.5	2,704.6	2,683.8	8.5	7.3	170.34	-224.8	-61.9	103.6	91.6	12.03	8.613		
2,800.0	2,762.9	2,804.4	2,782.0	8.9	7.7	169.85	-242.3	-67.1	108.5	95.9	12.57	8.629		
2,900.0	2,860.2	2,904.3	2,880.1	9.4	8.1	169.41	-259.8	-72.3	113.4	100.3	13.12	8.641		
3,000.0	2,957.6	3,004.2	2,978.3	9.9	8.5	169.00	-277.3	-77.4	118.3	104.6	13.68	8.650		
3,100.0	3,055.0	3,104.1	3,076.5	10.4	8.9	168.62	-294.8	-82.6	123.2	109.0	14.23	8.656		
3,200.0	3,152.4	3,204.0	3,174.7	10.8	9.3	168.28	-312.3	-87.8	128.1	113.3	14.79	8.661		
3,300.0	3,249.7	3,303.8	3,272.9	11.3	9.7	167.95	-329.8	-93.0	133.1	117.7	15.36	8.663		
3,400.0	3,347.1	3,403.7	3,371.1	11.8	10.1	167.66	-347.3	-98.2	138.0	122.1	15.92	8.664		
3,500.0	3,444.5	3,503.6	3,469.3	12.3	10.5	167.38	-364.8	-103.4	142.9	126.4	16.49	8.665		
3,600.0	3,541.9	3,603.5	3,567.5	12.8	10.9	167.12	-382.2	-108.6	147.8	130.8	17.06	8.664		
3,700.0	3,639.2	3,703.3	3,665.7	13.3	11.3	166.88	-399.7	-113.8	152.8	135.1	17.64	8.662		
3,800.0	3,736.6	3,803.2	3,763.9	13.7	11.7	166.65	-417.2	-119.0	157.7	139.5	18.21	8.660		
3,900.0	3,834.0	3,903.1	3,862.1	14.2	12.1	166.43	-434.7	-124.2	162.6	143.9	18.79	8.657		
4,000.0	3,931.4	4,003.0	3,960.3	14.7	12.5	166.23	-452.2	-129.4	167.6	148.2	19.37	8.654		
4,100.0	4,028.7	4,102.8	4,058.5	15.2	13.0	166.04	-469.7	-134.6	172.5	152.6	19.95	8.650		
4,200.0	4,126.1	4,202.7	4,156.7	15.7	13.4	165.86	-487.2	-139.8	177.5	157.0	20.53	8.646		
4,300.0	4,223.5	4,302.6	4,254.9	16.2	13.8	165.69	-504.7	-145.0	182.4	161.3	21.11	8.642		
4,400.0	4,320.9	4,402.5	4,353.1	16.7	14.2	165.53	-522.2	-150.2	187.4	165.7	21.69	8.638		
4,500.0	4,418.2	4,502.3	4,451.3	17.1	14.6	165.38	-539.6	-155.4	192.3	170.0	22.28	8.633		
4,600.0	4,515.6	4,602.2	4,549.5	17.6	15.0	165.24	-557.1	-160.6	197.3	174.4	22.86	8.629		
4,700.0	4,613.0	4,702.1	4,647.7	18.1	15.4	165.10	-574.6	-165.8	202.2	178.8	23.45	8.624		
4,800.0	4,710.4	4,802.0	4,745.9	18.6	15.8	164.97	-592.1	-171.0	207.2	183.1	24.04	8.620		
4,900.0	4,807.8	4,897.4	4,839.8	19.1	16.2	164.92	-608.2	-175.8	212.9	188.3	24.58	8.658		

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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	4,905.1	4,990.4	4,931.8	19.6	16.4	165.13	-621.0	-179.6	221.4	196.4	25.05	8.839		
5,100.0	5,002.5	5,082.8	5,023.7	20.1	16.6	165.58	-631.0	-182.6	233.0	207.6	25.47	9.149		
5,146.8	5,048.1	5,125.8	5,066.5	20.3	16.7	165.86	-634.7	-183.6	239.5	213.8	25.65	9.336		
5,200.0	5,100.0	5,174.5	5,115.1	20.5	16.8	166.23	-638.1	-184.7	247.2	221.3	25.86	9.559		
5,300.0	5,198.1	5,265.8	5,206.2	20.8	17.0	166.90	-642.3	-185.9	261.3	235.2	26.19	9.979		
5,400.0	5,296.9	5,356.7	5,297.1	21.1	17.1	167.55	-643.8	-186.4	275.2	248.7	26.49	10.390		
5,500.0	5,396.1	5,455.7	5,396.1	21.3	17.2	168.13	-643.8	-186.4	287.2	260.5	26.76	10.735		
5,600.0	5,495.7	5,555.3	5,495.7	21.5	17.4	168.52	-643.8	-186.4	295.9	268.9	27.01	10.956		
5,700.0	5,595.5	5,655.1	5,595.5	21.7	17.5	168.74	-643.8	-186.4	301.2	274.0	27.25	11.055		
5,804.5	5,700.0	5,759.6	5,700.0	21.8	17.6	-0.07	-643.8	-186.4	303.1	264.2	38.84	7.804		
5,900.0	5,795.5	5,855.1	5,795.5	21.9	17.7	-0.07	-643.8	-186.4	303.1	264.0	39.08	7.756		
6,000.0	5,895.5	5,955.1	5,895.5	22.0	17.9	-0.03	-643.8	-186.2	303.1	263.8	39.32	7.709		
6,007.3	5,902.8	5,962.4	5,902.8	22.0	17.9	0.01	-643.8	-186.0	303.1	263.8	39.34	7.705		
6,062.8	5,958.3	6,017.6	5,957.9	22.1	17.9	0.73	-643.8	-182.2	303.1	263.6	39.53	7.668		
6,100.0	5,995.5	6,054.4	5,994.3	22.1	18.0	-88.54	-643.8	-177.4	303.2	274.9	28.29	10.718		
6,150.0	6,045.3	6,103.4	6,042.5	22.2	18.0	-87.57	-643.8	-168.4	303.4	275.1	28.31	10.717		
6,200.0	6,094.8	6,152.2	6,089.8	22.2	18.1	-86.61	-643.8	-156.4	303.6	275.3	28.32	10.722		
6,250.0	6,143.6	6,200.0	6,135.3	22.3	18.1	-85.68	-643.8	-141.7	304.0	275.6	28.33	10.730		
6,300.0	6,191.7	6,248.8	6,180.6	22.3	18.1	-84.75	-643.8	-123.8	304.4	276.0	28.35	10.738		
6,350.0	6,238.8	6,296.6	6,224.0	22.3	18.1	-83.86	-643.8	-103.5	304.9	276.5	28.38	10.743		
6,400.0	6,284.7	6,344.2	6,265.7	22.3	18.1	-83.00	-643.8	-80.6	305.4	276.9	28.43	10.740		
6,450.0	6,329.2	6,391.6	6,305.7	22.3	18.2	-82.17	-643.8	-55.3	306.0	277.4	28.52	10.726		
6,500.0	6,372.0	6,438.7	6,343.9	22.4	18.2	-81.38	-643.8	-27.7	306.6	277.9	28.66	10.696		
6,550.0	6,413.2	6,485.6	6,380.1	22.4	18.2	-80.62	-643.8	2.0	307.2	278.4	28.86	10.646		
6,600.0	6,452.3	6,532.2	6,414.3	22.4	18.2	-79.91	-643.8	33.7	307.9	278.7	29.13	10.571		
6,650.0	6,489.4	6,578.7	6,446.4	22.4	18.3	-79.24	-643.8	67.3	308.5	279.1	29.46	10.474		
6,700.0	6,524.2	6,625.0	6,476.3	22.5	18.3	-78.62	-643.8	102.7	309.2	279.3	29.91	10.339		
6,750.0	6,556.5	6,671.1	6,503.8	22.5	18.4	-78.04	-643.8	139.7	309.8	279.4	30.45	10.174		
6,800.0	6,586.3	6,717.1	6,529.0	22.6	18.5	-77.51	-643.8	178.1	310.5	279.3	31.11	9.979		
6,850.0	6,613.4	6,762.9	6,551.8	22.7	18.6	-77.04	-643.8	217.8	311.0	279.1	31.89	9.753		
6,900.0	6,637.7	6,808.6	6,572.1	22.8	18.9	-76.61	-643.8	258.8	311.6	278.8	32.80	9.501		
6,950.0	6,659.1	6,854.2	6,589.9	23.0	19.2	-76.24	-643.8	300.7	312.1	278.2	33.83	9.225		
7,000.0	6,677.5	6,900.0	6,605.2	23.2	19.6	-75.91	-643.8	343.9	312.5	277.5	34.99	8.931		
7,050.0	6,692.8	6,945.0	6,617.7	23.5	20.1	-75.65	-643.8	387.2	312.9	276.6	36.27	8.627		
7,100.0	6,705.0	6,990.4	6,627.7	23.9	20.8	-75.44	-643.8	431.4	313.2	275.5	37.66	8.315		
7,150.0	6,713.9	7,035.7	6,635.0	24.4	21.5	-75.28	-643.8	476.1	313.4	274.2	39.16	8.002		
7,200.0	6,719.7	7,081.0	6,639.7	24.9	22.3	-75.18	-643.8	521.1	313.5	272.8	40.75	7.693		
7,250.0	6,722.1	7,126.2	6,641.7	25.6	23.2	-75.13	-643.8	566.3	313.6	271.2	42.43	7.391		
7,267.5	6,722.2	7,142.0	6,641.8	25.9	23.5	-75.13	-643.8	582.1	313.6	270.6	43.03	7.288		
7,269.9	6,722.2	7,144.4	6,641.8	25.9	23.5	-75.13	-643.8	584.5	313.6	270.5	43.12	7.272		
7,300.0	6,722.0	7,174.3	6,641.5	26.4	24.1	-75.12	-643.8	614.4	313.6	269.3	44.35	7.072		
7,400.0	6,721.4	7,274.3	6,640.6	28.2	26.2	-75.06	-643.8	714.4	313.7	265.1	48.59	6.456		
7,500.0	6,720.8	7,374.3	6,639.7	30.2	28.5	-75.01	-643.8	814.4	313.8	260.7	53.04	5.915		
7,600.0	6,720.2	7,474.3	6,638.8	32.3	30.8	-74.96	-643.8	914.4	313.8	256.2	57.66	5.443		
7,700.0	6,719.6	7,574.3	6,637.9	34.6	33.2	-74.91	-643.8	1,014.4	313.9	251.5	62.41	5.030		
7,800.0	6,719.0	7,674.3	6,637.0	36.9	35.7	-74.85	-643.8	1,114.4	314.0	246.7	67.26	4.669		
7,900.0	6,718.4	7,774.3	6,636.0	39.4	38.2	-74.80	-643.8	1,214.4	314.1	241.9	72.19	4.351		
8,000.0	6,717.8	7,874.3	6,635.1	41.8	40.8	-74.75	-643.8	1,314.4	314.2	237.0	77.18	4.070		
8,100.0	6,717.2	7,974.3	6,634.2	44.4	43.4	-74.70	-643.8	1,414.4	314.2	232.0	82.22	3.822		
8,200.0	6,716.5	8,074.3	6,633.3	46.9	46.0	-74.65	-643.8	1,514.4	314.3	227.0	87.31	3.600		
8,300.0	6,715.9	8,174.3	6,632.4	49.5	48.6	-74.59	-643.8	1,614.4	314.4	222.0	92.43	3.401		

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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			
8,400.0	6,715.3	8,274.3	6,631.5	52.1	51.3	-74.54	-643.8	1,714.4	314.5	216.9	97.58	3.223			
8,500.0	6,714.7	8,374.3	6,630.6	54.7	54.0	-74.49	-643.8	1,814.4	314.5	211.8	102.76	3.061			
8,600.0	6,714.1	8,474.3	6,629.7	57.4	56.6	-74.44	-643.8	1,914.4	314.6	206.7	107.96	2.914			
8,700.0	6,713.5	8,574.3	6,628.8	60.1	59.3	-74.38	-643.8	2,014.4	314.7	201.5	113.17	2.781			
8,800.0	6,712.9	8,674.3	6,627.9	62.7	62.0	-74.33	-643.8	2,114.3	314.8	196.4	118.40	2.659			
8,900.0	6,712.3	8,774.3	6,627.0	65.4	64.8	-74.28	-643.8	2,214.3	314.9	191.2	123.64	2.547			
9,000.0	6,711.7	8,874.3	6,626.1	68.1	67.5	-74.23	-643.8	2,314.3	314.9	186.1	128.89	2.444			
9,100.0	6,711.0	8,974.3	6,625.2	70.8	70.2	-74.18	-643.8	2,414.3	315.0	180.9	134.14	2.348			
9,200.0	6,710.4	9,074.3	6,624.2	73.5	72.9	-74.13	-643.8	2,514.3	315.1	175.7	139.41	2.260			
9,300.0	6,709.8	9,174.3	6,623.3	76.3	75.7	-74.07	-643.8	2,614.3	315.2	170.5	144.68	2.178			
9,400.0	6,709.2	9,274.3	6,622.4	79.0	78.4	-74.02	-643.8	2,714.3	315.3	165.3	149.96	2.102			
9,500.0	6,708.6	9,374.3	6,621.5	81.7	81.2	-73.97	-643.8	2,814.3	315.4	160.1	155.25	2.031			
9,600.0	6,708.0	9,474.3	6,620.6	84.5	83.9	-73.92	-643.8	2,914.3	315.4	154.9	160.53	1.965			
9,700.0	6,707.4	9,574.3	6,619.7	87.2	86.7	-73.87	-643.8	3,014.3	315.5	149.7	165.83	1.903			
9,800.0	6,706.8	9,674.3	6,618.8	89.9	89.4	-73.81	-643.8	3,114.3	315.6	144.5	171.12	1.844			
9,900.0	6,706.2	9,774.3	6,617.9	92.7	92.2	-73.76	-643.8	3,214.3	315.7	139.3	176.41	1.789			
10,000.0	6,705.6	9,874.3	6,617.0	95.4	95.0	-73.71	-643.8	3,314.3	315.8	134.1	181.71	1.738			
10,100.0	6,704.9	9,974.3	6,616.1	98.2	97.7	-73.66	-643.8	3,414.3	315.9	128.8	187.01	1.689			
10,200.0	6,704.3	10,074.3	6,615.2	101.0	100.5	-73.61	-643.8	3,514.3	315.9	123.6	192.31	1.643			
10,300.0	6,703.7	10,174.3	6,614.3	103.7	103.3	-73.56	-643.8	3,614.3	316.0	118.4	197.61	1.599			
10,400.0	6,703.1	10,274.3	6,613.4	106.5	106.1	-73.50	-643.8	3,714.3	316.1	113.2	202.91	1.558			
10,500.0	6,702.5	10,374.3	6,612.4	109.3	108.8	-73.45	-643.8	3,814.3	316.2	108.0	208.21	1.519			
10,600.0	6,701.9	10,474.3	6,611.5	112.0	111.6	-73.40	-643.8	3,914.3	316.3	102.8	213.51	1.481 Level 3			
10,700.0	6,701.3	10,574.3	6,610.6	114.8	114.4	-73.35	-643.8	4,014.3	316.4	97.5	218.81	1.446 Level 3			
10,800.0	6,700.7	10,674.3	6,609.7	117.6	117.2	-73.30	-643.8	4,114.3	316.4	92.3	224.11	1.412 Level 3			
10,900.0	6,700.1	10,774.3	6,608.8	120.3	120.0	-73.25	-643.8	4,214.3	316.5	87.1	229.41	1.380 Level 3			
11,000.0	6,699.4	10,874.3	6,607.9	123.1	122.8	-73.20	-643.8	4,314.2	316.6	81.9	234.71	1.349 Level 3			
11,100.0	6,698.8	10,974.3	6,607.0	125.9	125.5	-73.14	-643.8	4,414.2	316.7	76.7	240.01	1.320 Level 3			
11,200.0	6,698.2	11,074.3	6,606.1	128.7	128.3	-73.09	-643.8	4,514.2	316.8	71.5	245.31	1.291 Level 3			
11,300.0	6,697.6	11,174.3	6,605.2	131.5	131.1	-73.04	-643.8	4,614.2	316.9	66.3	250.60	1.264 Level 3			
11,400.0	6,697.0	11,274.3	6,604.3	134.2	133.9	-72.99	-643.8	4,714.2	317.0	61.1	255.90	1.239 Level 2			
11,500.0	6,696.4	11,374.3	6,603.4	137.0	136.7	-72.94	-643.8	4,814.2	317.1	55.9	261.19	1.214 Level 2			
11,600.0	6,695.8	11,474.3	6,602.5	139.8	139.5	-72.89	-643.8	4,914.2	317.1	50.7	266.48	1.190 Level 2			
11,700.0	6,695.2	11,574.3	6,601.6	142.6	142.3	-72.84	-643.8	5,014.2	317.2	45.5	271.77	1.167 Level 2			
11,800.0	6,694.6	11,674.3	6,600.6	145.4	145.1	-72.79	-643.8	5,114.2	317.3	40.3	277.06	1.145 Level 2			
11,900.0	6,693.9	11,774.3	6,599.7	148.2	147.9	-72.73	-643.8	5,214.2	317.4	35.1	282.34	1.124 Level 2			
12,000.0	6,693.3	11,874.3	6,598.8	151.0	150.6	-72.68	-643.8	5,314.2	317.5	29.9	287.63	1.104 Level 2			
12,100.0	6,692.7	11,974.3	6,597.9	153.7	153.4	-72.63	-643.8	5,414.2	317.6	24.7	292.91	1.084 Level 2			
12,200.0	6,692.1	12,074.3	6,597.0	156.5	156.2	-72.58	-643.8	5,514.2	317.7	19.5	298.19	1.065 Level 2			
12,300.0	6,691.5	12,174.3	6,596.1	159.3	159.0	-72.53	-643.8	5,614.2	317.8	14.3	303.47	1.047 Level 2			
12,400.0	6,690.9	12,274.3	6,595.2	162.1	161.8	-72.48	-643.8	5,714.2	317.8	9.1	308.74	1.029 Level 2			
12,500.0	6,690.3	12,374.3	6,594.3	164.9	164.6	-72.43	-643.8	5,814.2	317.9	3.9	314.02	1.012 Level 2			
12,600.0	6,689.7	12,474.3	6,593.4	167.7	167.4	-72.38	-643.8	5,914.2	318.0	-1.3	319.29	0.996 Level 1			
12,700.0	6,689.1	12,574.3	6,592.5	170.5	170.2	-72.33	-643.8	6,014.2	318.1	-6.4	324.56	0.980 Level 1			
12,800.0	6,688.4	12,674.3	6,591.6	173.3	173.0	-72.28	-643.8	6,114.2	318.2	-11.6	329.83	0.965 Level 1			
12,900.0	6,687.8	12,774.3	6,590.7	176.1	175.8	-72.22	-643.8	6,214.2	318.3	-16.8	335.09	0.950 Level 1			
13,000.0	6,687.2	12,874.3	6,589.8	178.9	178.6	-72.17	-643.8	6,314.2	318.4	-22.0	340.36	0.935 Level 1			
13,100.0	6,686.6	12,974.3	6,588.9	181.7	181.4	-72.12	-643.8	6,414.2	318.5	-27.1	345.62	0.921 Level 1			
13,200.0	6,686.0	13,074.3	6,587.9	184.5	184.2	-72.07	-643.8	6,514.1	318.6	-32.3	350.87	0.908 Level 1			
13,300.0	6,685.4	13,174.3	6,587.0	187.3	187.0	-72.02	-643.8	6,614.1	318.7	-37.5	356.13	0.895 Level 1			
13,400.0	6,684.8	13,274.3	6,586.1	190.1	189.8	-71.97	-643.8	6,714.1	318.8	-42.6	361.38	0.882 Level 1			

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	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								
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore	Centre	Between	Between	Minimum	Separation	Warning		
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation	Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)				
13,500.0	6,684.2	13,374.3	6,585.2	192.9	192.6	-71.92	-643.8	6,814.1	318.8	-47.8	366.63	0.870	Level 1		
13,600.0	6,683.6	13,474.2	6,584.3	195.7	195.4	-71.87	-643.8	6,914.1	318.9	-52.9	371.88	0.858	Level 1		
13,700.0	6,682.9	13,574.2	6,583.4	198.4	198.2	-71.82	-643.8	7,014.1	319.0	-58.1	377.13	0.846	Level 1		
13,800.0	6,682.3	13,674.2	6,582.5	201.2	201.0	-71.77	-643.8	7,114.1	319.1	-63.2	382.37	0.835	Level 1		
13,855.3	6,682.0	13,729.2	6,582.0	202.8	202.5	-71.74	-643.8	7,169.1	319.2	-66.1	385.26	0.828	Level 1, ES, SF		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-1 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6816-UNKNOWN													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		
7,900.0	6,718.4	6,700.4	6,700.4	39.4	134.0	-90.22	-116.5	1,747.8	986.5	814.5	172.08	5.733		
8,000.0	6,717.8	6,699.8	6,699.8	41.8	134.0	-90.18	-116.5	1,747.8	936.3	761.7	174.64	5.362		
8,100.0	6,717.2	6,699.2	6,699.2	44.4	134.0	-90.14	-116.5	1,747.8	894.5	717.3	177.22	5.048		
8,200.0	6,716.5	6,698.5	6,698.5	46.9	134.0	-90.10	-116.5	1,747.8	862.4	682.5	179.83	4.795		
8,300.0	6,715.9	6,697.9	6,697.9	49.5	134.0	-90.06	-116.5	1,747.8	840.9	658.4	182.47	4.609		
8,400.0	6,715.3	6,697.3	6,697.3	52.1	133.9	-90.01	-116.5	1,747.8	831.0	645.9	185.11	4.489		
8,432.7	6,715.1	6,697.1	6,697.1	53.0	133.9	-90.00	-116.5	1,747.8	830.4	644.4	185.98	4.465 CC, ES		
8,500.0	6,714.7	6,696.7	6,696.7	54.7	133.9	-89.97	-116.5	1,747.8	833.1	645.3	187.78	4.437 SF		
8,600.0	6,714.1	6,696.1	6,696.1	57.4	133.9	-89.93	-116.5	1,747.8	847.1	656.6	190.45	4.448		
8,700.0	6,713.5	6,695.5	6,695.5	60.1	133.9	-89.89	-116.5	1,747.8	872.3	679.2	193.14	4.517		
8,800.0	6,712.9	6,694.9	6,694.9	62.7	133.9	-89.85	-116.5	1,747.8	908.0	712.2	195.84	4.636		
8,900.0	6,712.3	6,694.3	6,694.3	65.4	133.9	-89.80	-116.5	1,747.8	952.8	754.3	198.54	4.799		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS												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	
0.0	0.0	0.0	0.0	0.0	0.0	105.14	-114.8	424.1	439.5				
100.0	100.0	86.6	86.6	0.1	0.1	105.15	-114.8	424.0	439.3	439.0	0.23	1,931.988	
200.0	200.0	187.0	187.0	0.3	0.4	105.16	-114.8	423.8	439.1	438.4	0.70	627.164	
300.0	300.0	287.0	287.0	0.6	0.6	105.17	-114.9	423.5	438.8	437.6	1.19	369.097	
400.0	400.0	387.2	387.2	0.8	0.9	105.19	-114.9	423.3	438.6	436.9	1.68	261.372	
500.0	500.0	487.0	487.0	1.0	1.2	105.22	-115.0	423.0	438.3	436.2	2.17	202.435	
600.0	600.0	587.0	587.0	1.2	1.4	105.24	-115.2	422.7	438.1	435.4	2.65	165.166	
700.0	700.0	687.0	687.0	1.5	1.7	105.27	-115.3	422.4	437.9	434.7	3.14	139.515	
800.0	800.0	786.9	786.9	1.7	1.9	105.31	-115.6	422.1	437.7	434.0	3.62	120.901	
900.0	900.0	886.5	886.5	1.9	2.2	-85.93	-115.9	421.9	437.4	433.3	4.06	107.652	
1,000.0	999.9	986.5	986.5	2.1	2.4	-86.40	-116.2	421.7	437.0	432.5	4.49	97.412	
1,100.0	1,099.7	1,086.5	1,086.5	2.3	2.7	-87.22	-116.5	421.4	436.5	431.6	4.93	88.506	
1,200.0	1,199.3	1,186.1	1,186.1	2.5	2.9	-88.38	-116.8	421.2	436.0	430.6	5.40	80.727	
1,300.0	1,298.6	1,285.7	1,285.7	2.7	3.2	-89.89	-117.0	420.9	435.6	429.7	5.90	73.862	
1,365.9	1,363.8	1,351.0	1,351.0	2.9	3.4	-91.06	-117.2	420.7	435.5	429.2	6.24	69.754 CC	
1,400.0	1,397.5	1,384.7	1,384.7	3.0	3.5	-91.72	-117.2	420.6	435.5	429.1	6.42	67.817	
1,500.0	1,496.1	1,483.9	1,483.9	3.3	3.7	-93.93	-117.1	420.3	436.0	429.1	6.93	62.873 ES	
1,600.0	1,594.2	1,583.1	1,583.1	3.6	3.8	-96.50	-116.6	419.8	437.3	429.8	7.43	58.832	
1,676.9	1,669.2	1,659.7	1,659.7	3.9	4.0	-98.72	-115.9	419.2	438.9	431.0	7.84	55.959	
1,700.0	1,691.7	1,682.7	1,682.7	4.0	4.0	-99.42	-115.7	418.9	439.5	431.5	7.97	55.138	
1,800.0	1,789.1	1,780.9	1,780.9	4.4	4.2	-102.41	-114.6	417.7	442.6	434.1	8.55	51.795	
1,900.0	1,886.5	1,880.4	1,880.4	4.8	4.4	-105.40	-113.4	416.2	446.7	437.5	9.15	48.844	
2,000.0	1,983.8	1,978.9	1,978.8	5.2	4.6	-108.31	-112.3	414.2	451.5	441.7	9.76	46.261	
2,100.0	2,081.2	2,079.1	2,079.0	5.7	4.9	-111.16	-111.5	411.8	457.1	446.7	10.39	43.979	
2,200.0	2,178.6	2,177.5	2,177.4	6.1	5.1	-113.80	-111.6	409.1	463.2	452.2	11.03	41.988	
2,300.0	2,276.0	2,274.6	2,274.4	6.6	5.4	-116.29	-112.1	406.4	470.3	458.6	11.66	40.321	
2,400.0	2,373.3	2,371.3	2,371.1	7.1	5.6	-118.68	-112.6	404.0	478.4	466.1	12.29	38.942	
2,500.0	2,470.7	2,468.9	2,468.7	7.5	5.9	-120.98	-113.3	401.8	487.5	474.6	12.90	37.796	
2,600.0	2,568.1	2,566.9	2,566.6	8.0	6.1	-123.21	-114.1	399.5	497.3	483.8	13.50	36.836	
2,700.0	2,665.5	2,664.8	2,664.5	8.5	6.4	-125.34	-114.9	397.1	507.8	493.7	14.09	36.034	
2,800.0	2,762.9	2,761.6	2,761.3	8.9	6.7	-127.37	-115.7	394.8	519.0	504.3	14.67	35.374	
2,900.0	2,860.2	2,858.7	2,858.3	9.4	6.9	-129.31	-116.4	392.6	531.0	515.8	15.24	34.843	
3,000.0	2,957.6	2,956.3	2,955.9	9.9	7.2	-131.18	-117.1	390.5	543.6	527.8	15.80	34.407	
3,100.0	3,055.0	3,051.1	3,050.7	10.4	7.4	-132.92	-117.7	388.5	557.0	540.6	16.35	34.074	
3,200.0	3,152.4	3,145.9	3,145.5	10.8	7.7	-134.60	-117.8	386.9	571.5	554.7	16.88	33.858	
3,300.0	3,249.7	3,243.9	3,243.4	11.3	7.9	-136.24	-117.8	385.5	586.7	569.3	17.41	33.703	
3,400.0	3,347.1	3,343.1	3,342.6	11.8	8.2	-137.73	-118.8	384.4	602.1	584.2	17.92	33.600	
3,500.0	3,444.5	3,442.0	3,441.6	12.3	8.4	-139.07	-120.5	383.6	617.6	599.2	18.41	33.544	
3,600.0	3,541.9	3,539.9	3,539.4	12.8	8.6	-140.32	-122.4	382.9	633.4	614.5	18.89	33.531	
3,700.0	3,639.2	3,638.4	3,637.9	13.3	8.8	-141.51	-124.4	382.1	649.3	630.0	19.37	33.529	
3,800.0	3,736.6	3,735.4	3,734.9	13.7	9.0	-142.62	-126.4	381.4	665.5	645.7	19.84	33.543	
3,900.0	3,834.0	3,829.1	3,828.5	14.2	9.2	-143.65	-128.0	380.8	682.3	662.0	20.30	33.603	
4,000.0	3,931.4	3,919.5	3,919.0	14.7	9.3	-144.63	-128.8	380.6	700.2	679.5	20.73	33.770	
4,100.0	4,028.7	4,012.6	4,012.0	15.2	9.5	-145.63	-128.7	380.7	719.1	698.0	21.10	34.081	
4,200.0	4,126.1	4,105.0	4,104.5	15.7	9.5	-146.62	-127.8	380.6	738.9	717.4	21.42	34.490	
4,300.0	4,223.5	4,202.1	4,201.6	16.2	9.6	-147.64	-126.3	380.5	759.2	737.4	21.76	34.889	
4,400.0	4,320.9	4,299.3	4,298.7	16.7	9.7	-148.61	-124.8	380.4	779.7	757.6	22.10	35.275	
4,500.0	4,418.2	4,398.6	4,398.0	17.1	9.8	-149.47	-124.2	381.1	800.2	777.8	22.42	35.698	
4,600.0	4,515.6	4,499.2	4,498.5	17.6	9.8	-150.17	-124.9	382.9	820.6	797.9	22.72	36.120	
4,700.0	4,613.0	4,603.8	4,603.1	18.1	9.9	-150.80	-126.8	385.0	840.5	817.4	23.06	36.443	
4,800.0	4,710.4	4,711.2	4,710.5	18.6	10.0	-151.35	-130.1	387.1	859.4	836.0	23.45	36.646	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft	
Survey Program: 100-NS-GYRO-MS													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
4,900.0	4,807.8	4,811.6	4,810.8	19.1	10.2	-151.84	-133.7	388.8	877.8	853.9	23.86	36.782		
5,000.0	4,905.1	4,910.3	4,909.4	19.6	10.3	-152.34	-137.0	389.8	896.1	871.8	24.29	36.891		
5,100.0	5,002.5	5,011.4	5,010.5	20.1	10.5	-152.91	-139.9	389.8	914.2	889.4	24.74	36.949		
5,146.8	5,048.1	5,058.1	5,057.2	20.3	10.6	-153.19	-141.1	389.5	922.6	897.6	24.96	36.956		
5,200.0	5,100.0	5,111.4	5,110.5	20.5	10.7	-153.58	-142.3	388.9	931.7	906.4	25.23	36.933		
5,300.0	5,198.1	5,213.7	5,212.7	20.8	11.0	-154.24	-144.7	387.2	946.2	920.5	25.69	36.833		
5,400.0	5,296.9	5,314.6	5,313.5	21.1	11.2	-154.76	-147.2	385.2	957.3	931.2	26.13	36.634		
5,500.0	5,396.1	5,405.5	5,404.4	21.3	11.4	-155.08	-149.6	384.2	965.8	939.3	26.52	36.413		
5,600.0	5,495.7	5,500.0	5,498.9	21.5	11.6	-155.27	-151.8	384.1	971.9	945.1	26.87	36.170		
5,700.0	5,595.5	5,593.5	5,592.4	21.7	11.8	-155.34	-153.6	384.5	975.5	948.4	27.17	35.907		
5,804.5	5,700.0	5,692.7	5,691.6	21.8	12.0	35.82	-155.2	385.4	976.4	943.8	32.59	29.957		
5,900.0	5,795.5	5,788.5	5,787.3	21.9	12.1	35.93	-156.8	386.6	975.8	943.0	32.83	29.723		
6,000.0	5,895.5	5,888.2	5,887.1	22.0	12.2	36.06	-158.5	388.0	975.2	942.2	33.07	29.491		
6,062.8	5,958.3	5,951.7	5,950.5	22.1	12.3	36.14	-159.7	389.0	974.9	941.6	33.22	29.343		
6,100.0	5,995.5	5,989.5	5,988.3	22.1	12.4	-53.89	-160.4	389.6	974.1	945.8	28.27	34.458		
6,150.0	6,045.3	6,038.8	6,037.6	22.2	12.5	-54.18	-161.4	390.4	971.3	943.1	28.25	34.381		
6,200.0	6,094.8	6,087.5	6,086.3	22.2	12.5	-54.73	-162.4	391.2	966.8	938.6	28.17	34.319		
6,250.0	6,143.6	6,136.8	6,135.6	22.3	12.6	-55.57	-163.3	392.0	960.4	932.3	28.03	34.257		
6,300.0	6,191.7	6,185.8	6,184.6	22.3	12.7	-56.69	-164.2	392.8	952.2	924.3	27.86	34.178		
6,350.0	6,238.8	6,232.7	6,231.4	22.3	12.7	-58.08	-165.2	393.5	942.3	914.7	27.67	34.060		
6,400.0	6,284.7	6,278.0	6,276.7	22.3	12.8	-59.72	-166.1	394.3	931.1	903.6	27.48	33.878		
6,450.0	6,329.2	6,322.4	6,321.1	22.3	12.9	-61.63	-166.9	395.1	918.5	891.2	27.33	33.604		
6,500.0	6,372.0	6,365.6	6,364.3	22.4	12.9	-63.80	-167.7	395.9	904.9	877.7	27.25	33.208		
6,550.0	6,413.2	6,406.9	6,405.6	22.4	13.0	-66.17	-168.5	396.7	890.5	863.3	27.26	32.672		
6,600.0	6,452.3	6,445.4	6,444.0	22.4	13.1	-68.70	-169.2	397.5	875.6	848.2	27.37	31.994		
6,650.0	6,489.4	6,481.9	6,480.5	22.4	13.1	-71.37	-169.8	398.2	860.4	832.8	27.59	31.182		
6,700.0	6,524.2	6,516.1	6,514.7	22.5	13.2	-74.10	-170.3	398.8	845.4	817.5	27.93	30.264		
6,750.0	6,556.5	6,547.8	6,546.4	22.5	13.2	-76.84	-170.8	399.4	830.9	802.5	28.38	29.279		
6,800.0	6,586.3	6,577.0	6,575.6	22.6	13.2	-79.51	-171.1	399.9	817.3	788.4	28.91	28.268		
6,850.0	6,613.4	6,603.7	6,602.3	22.7	13.3	-82.05	-171.3	400.3	805.0	775.4	29.52	27.267		
6,900.0	6,637.7	6,628.6	6,627.2	22.8	13.3	-84.43	-171.5	400.7	794.3	764.1	30.19	26.307		
6,950.0	6,659.1	6,650.7	6,649.3	23.0	13.3	-86.54	-171.7	401.1	785.6	754.7	30.92	25.410		
7,000.0	6,677.5	6,669.8	6,668.4	23.2	13.4	-88.32	-171.8	401.4	779.3	747.6	31.69	24.592		
7,050.0	6,692.8	6,685.9	6,684.4	23.5	13.4	-89.71	-172.0	401.7	775.7	743.2	32.51	23.858		
7,086.6	6,702.0	6,695.7	6,694.3	23.8	13.4	-90.47	-172.1	401.9	774.9	741.7	33.15	23.372		
7,100.0	6,705.0	6,698.8	6,697.4	23.9	13.4	-90.69	-172.1	401.9	775.0	741.6	33.39	23.213		
7,150.0	6,713.9	6,708.7	6,707.3	24.4	13.4	-91.23	-172.2	402.1	777.4	743.1	34.31	22.659		
7,200.0	6,719.7	6,715.3	6,713.9	24.9	13.4	-91.29	-172.2	402.2	782.9	747.7	35.27	22.198		
7,250.0	6,722.1	6,718.6	6,717.2	25.6	13.4	-90.87	-172.2	402.3	791.7	755.4	36.25	21.836		
7,267.5	6,722.2	6,719.0	6,717.6	25.9	13.4	-90.61	-172.2	402.3	795.4	758.8	36.60	21.734		
7,300.0	6,722.0	6,719.4	6,718.0	26.4	13.4	-90.64	-172.2	402.3	803.4	766.2	37.27	21.556		
7,400.0	6,721.4	6,720.6	6,719.2	28.2	13.4	-90.73	-172.2	402.3	835.5	796.1	39.44	21.187		
7,500.0	6,720.8	6,721.7	6,720.3	30.2	13.4	-90.81	-172.3	402.3	877.9	836.2	41.71	21.045 SF		
7,600.0	6,720.2	6,722.9	6,721.5	32.3	13.4	-90.90	-172.3	402.4	929.1	885.0	44.08	21.078		
7,700.0	6,719.6	6,724.0	6,722.6	34.6	13.4	-90.98	-172.3	402.4	987.8	941.3	46.52	21.236		

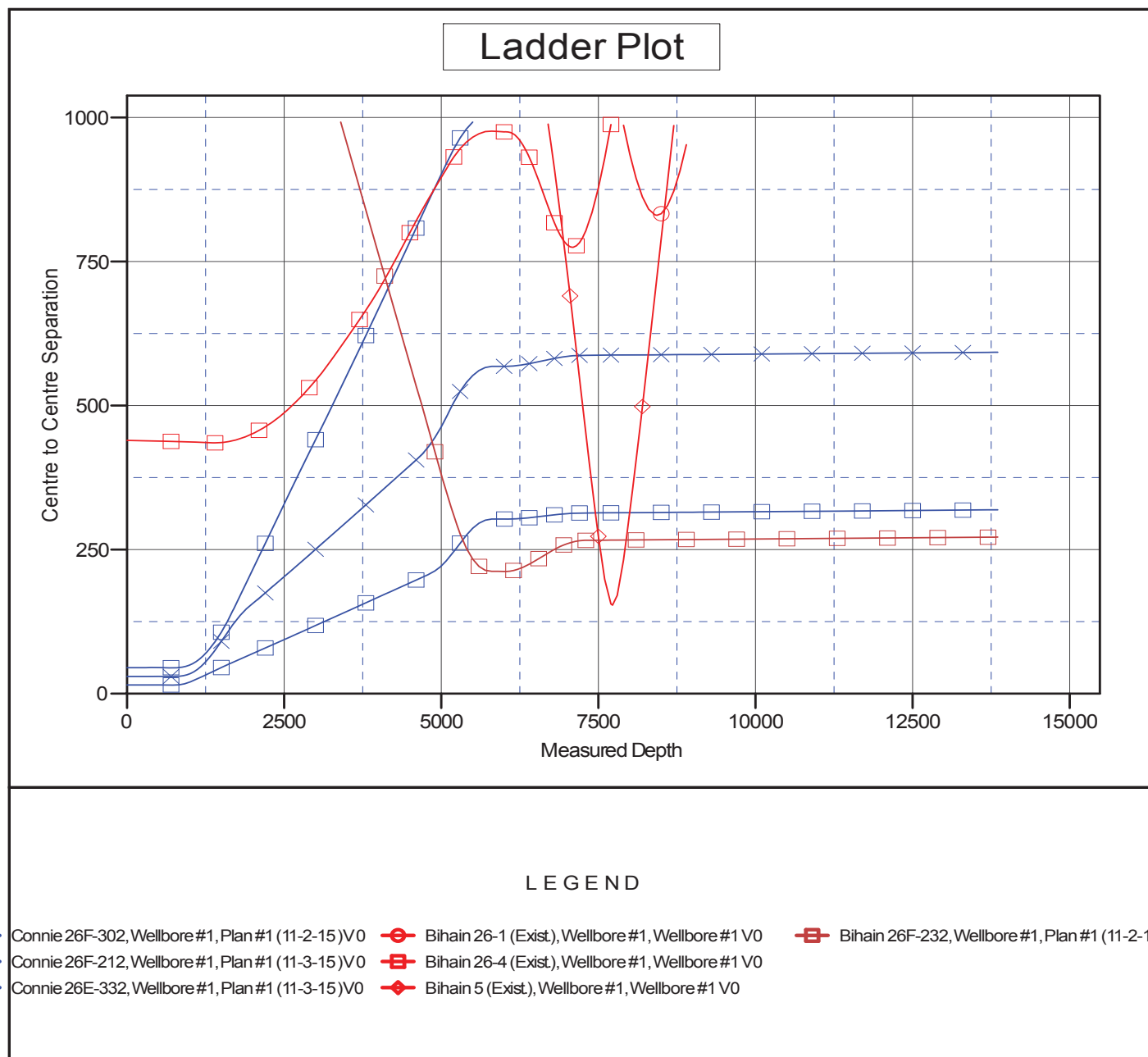
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 5 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS													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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
6,700.0	6,524.2	6,512.7	6,512.1	22.5	12.2	-13.11	-794.3	1,041.5	988.7	965.2	23.49	42.095		
6,750.0	6,556.5	6,545.0	6,544.3	22.5	12.3	-14.70	-794.2	1,041.4	951.0	928.9	22.11	43.012		
6,800.0	6,586.3	6,574.7	6,574.0	22.6	12.3	-16.68	-794.0	1,041.4	911.3	890.5	20.78	43.853		
6,850.0	6,613.4	6,601.6	6,601.0	22.7	12.3	-19.21	-793.9	1,041.3	869.9	850.3	19.60	44.373		
6,900.0	6,637.7	6,625.8	6,625.2	22.8	12.3	-22.47	-793.7	1,041.2	826.9	808.1	18.74	44.113		
6,950.0	6,659.1	6,647.1	6,646.4	23.0	12.4	-26.74	-793.6	1,041.2	782.5	764.0	18.46	42.377		
7,000.0	6,677.5	6,665.4	6,664.7	23.2	12.4	-32.37	-793.5	1,041.1	736.9	717.8	19.12	38.543		
7,050.0	6,692.8	6,680.5	6,679.9	23.5	12.4	-39.82	-793.5	1,041.1	690.4	669.4	21.05	32.794		
7,100.0	6,705.0	6,692.6	6,691.9	23.9	12.4	-49.48	-793.4	1,041.0	643.2	618.9	24.34	26.425		
7,150.0	6,713.9	6,701.4	6,700.7	24.4	12.4	-61.36	-793.3	1,041.0	595.6	567.1	28.48	20.914		
7,200.0	6,719.7	6,707.0	6,706.3	24.9	12.4	-74.53	-793.3	1,041.0	547.7	515.4	32.37	16.923		
7,250.0	6,722.1	6,709.3	6,708.7	25.6	12.4	-87.22	-793.3	1,041.0	500.0	465.0	35.02	14.278		
7,267.5	6,722.2	6,709.4	6,708.7	25.9	12.4	-91.22	-793.3	1,041.0	483.4	447.8	35.61	13.575		
7,300.0	6,722.0	6,709.1	6,708.4	26.4	12.4	-91.11	-793.3	1,041.0	452.7	416.4	36.28	12.478		
7,400.0	6,721.4	6,708.2	6,707.5	28.2	12.4	-90.78	-793.3	1,041.0	360.2	321.8	38.42	9.376		
7,500.0	6,720.8	6,707.3	6,706.6	30.2	12.4	-90.45	-793.3	1,041.0	273.1	232.4	40.68	6.714		
7,600.0	6,720.2	6,706.4	6,705.8	32.3	12.4	-90.12	-793.3	1,041.0	198.6	155.5	43.02	4.615		
7,700.0	6,719.6	6,705.5	6,704.9	34.6	12.4	-89.79	-793.3	1,041.0	155.7	110.3	45.44	3.428		
7,725.9	6,719.4	6,705.3	6,704.6	35.2	12.4	-89.70	-793.3	1,041.0	153.6	107.5	46.08	3.333 CC, ES, SF		
7,800.0	6,719.0	6,704.6	6,704.0	36.9	12.4	-89.45	-793.3	1,041.0	170.5	122.6	47.91	3.560		
7,900.0	6,718.4	6,703.7	6,703.1	39.4	12.4	-89.12	-793.3	1,041.0	232.2	181.8	50.42	4.605		
8,000.0	6,717.8	6,702.8	6,702.2	41.8	12.4	-88.79	-793.3	1,041.0	314.2	261.3	52.97	5.932		
8,100.0	6,717.2	6,702.0	6,701.3	44.4	12.4	-88.46	-793.3	1,041.0	404.4	348.9	55.55	7.281		
8,200.0	6,716.5	6,701.1	6,700.4	46.9	12.4	-88.13	-793.3	1,041.0	498.4	440.2	58.15	8.571		
8,300.0	6,715.9	6,700.2	6,699.5	49.5	12.4	-87.79	-793.3	1,041.0	594.3	533.5	60.76	9.781		
8,400.0	6,715.3	6,699.3	6,698.6	52.1	12.4	-87.46	-793.4	1,041.0	691.4	628.0	63.40	10.906		
8,500.0	6,714.7	6,698.4	6,697.7	54.7	12.4	-87.13	-793.4	1,041.0	789.2	723.2	66.04	11.950		
8,600.0	6,714.1	6,697.5	6,696.9	57.4	12.4	-86.80	-793.4	1,041.0	887.5	818.8	68.70	12.919		
8,700.0	6,713.5	6,696.6	6,696.0	60.1	12.4	-86.47	-793.4	1,041.0	986.1	914.8	71.36	13.820		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4611.0ft (RKB - 13')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Connie 26F-402
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.63°



Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	US_EDM
Reference Design:	Plan #1 (11-2-15)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4611.0ft (RKB - 13')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Connie 26F-402

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.63°

