

PETROLEUM DEVELOPMENT CORP DJ Basin

Well Name: **Connie 26F-302**

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

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

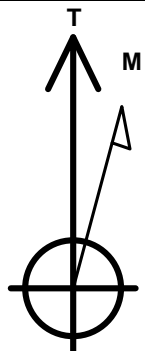
Ground Elevation: 4598.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1381376.89	3271499.05	40.376186	-104.525497	

RKB - 13' WELL @ 4611.0ft (RKB - 13')

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 527'FNL & 245'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 1130'FNL & 2140'FWL, Sec.25	6582.0	-656.2	7160.4	Point



Azimuths to True North
Magnetic North: 8.14°

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

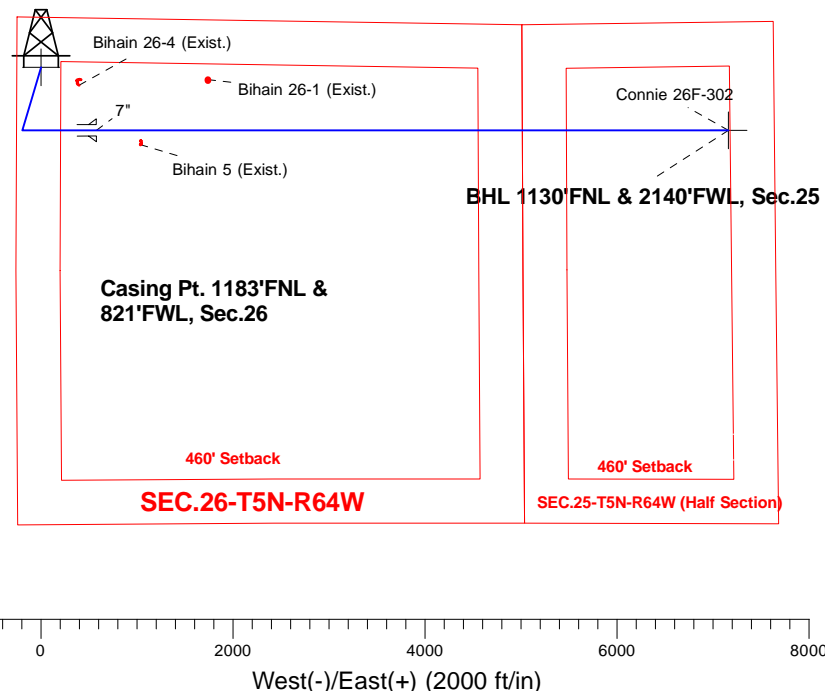
Connie 5N64W26EF Pad Sec.26-T5N-R64W
Connie 26F-302
Plan #1 (11-2-15)
12:25, November 05 2015

ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP - Start Build 1.50
4776.7	4833.3	Start Drop -2.00
5877.8	5937.4	KOP #2 - Start Build 7.50
6641.8	7144.4	Start 6584.8 hold at 7144.4 MD
6582.0	13729.2	TD at 13729.2

SHL 527'FNL & 245'FWL, Sec.26

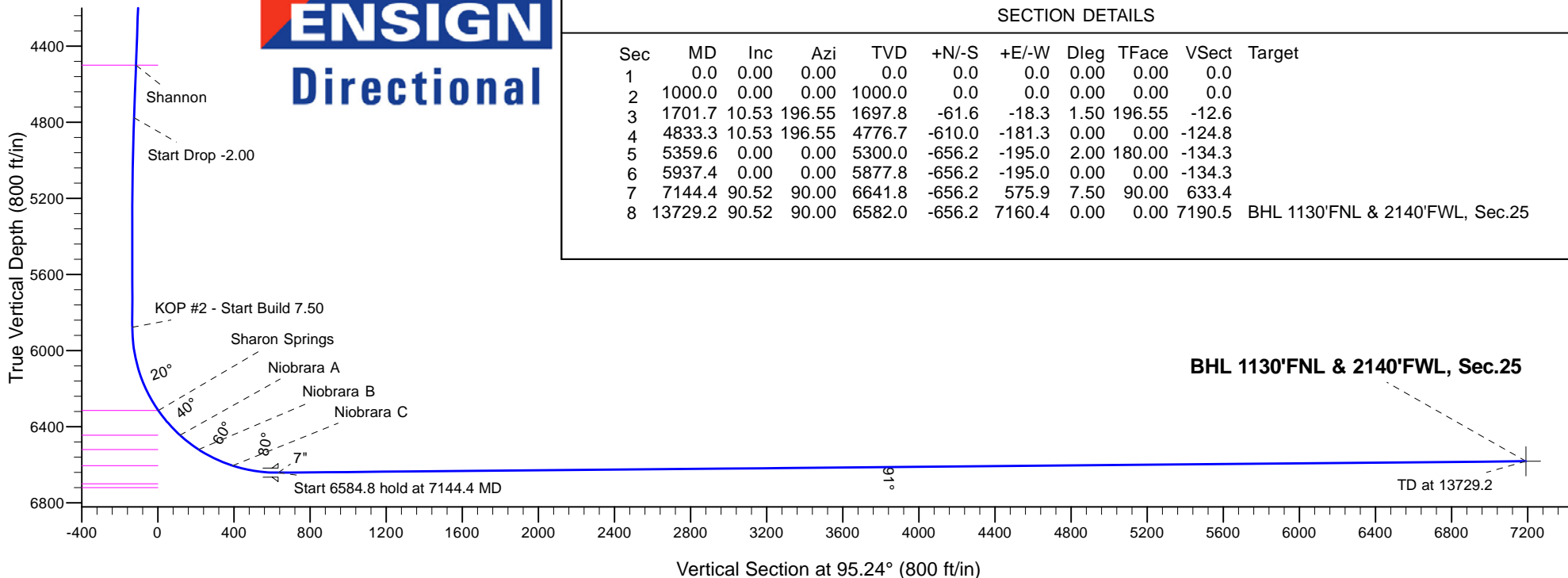
South(-)/North(+) (2000 ft/in)



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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1701.7	10.53	196.55	1697.8	-61.6	-18.3	1.50	196.55	-12.6	
4	4833.3	10.53	196.55	4776.7	-610.0	-181.3	0.00	0.00	-124.8	
5	5359.6	0.00	0.00	5300.0	-656.2	-195.0	2.00	180.00	-134.3	
6	5937.4	0.00	0.00	5877.8	-656.2	-195.0	0.00	0.00	-134.3	
7	7144.4	90.52	90.00	6641.8	-656.2	575.9	7.50	90.00	633.4	
8	13729.2	90.52	90.00	6582.0	-656.2	7160.4	0.00	0.00	7190.5	BHL 1130'FNL & 2140'FWL, Sec.25

ENSIGN
Directional





Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Connie 5N64W26EF Pad Sec.26-T5N-R64W

Connie 26F-302

Wellbore #1

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

Standard Planning Report

05 November, 2015

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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-302					
Well Position	+N/-S	12.4 ft	Northing:	1,381,376.89 usft	Latitude:	40.376186
	+E/-W	8.6 ft	Easting:	3,271,499.05 usft	Longitude:	-104.525497
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	95.24

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,701.7	10.53	196.55	1,697.8	-61.6	-18.3	1.50	1.50	0.00	196.55	
4,833.3	10.53	196.55	4,776.7	-610.0	-181.3	0.00	0.00	0.00	0.00	
5,359.6	0.00	0.00	5,300.0	-656.2	-195.0	2.00	-2.00	0.00	180.00	
5,937.4	0.00	0.00	5,877.8	-656.2	-195.0	0.00	0.00	0.00	0.00	
7,144.4	90.52	90.00	6,641.8	-656.2	575.9	7.50	7.50	0.00	90.00	
13,729.2	90.52	90.00	6,582.0	-656.2	7,160.4	0.00	0.00	0.00	0.00	BHL 1130'FNL & 214C

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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-302	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 527'FNL & 245'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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
1,100.0	1.50	196.55	1,100.0	-1.3	-0.4	-0.3	1.50	1.50	0.00
1,200.0	3.00	196.55	1,199.9	-5.0	-1.5	-1.0	1.50	1.50	0.00
1,300.0	4.50	196.55	1,299.7	-11.3	-3.4	-2.3	1.50	1.50	0.00
1,400.0	6.00	196.55	1,399.3	-20.1	-6.0	-4.1	1.50	1.50	0.00
1,500.0	7.50	196.55	1,498.6	-31.3	-9.3	-6.4	1.50	1.50	0.00
1,600.0	9.00	196.55	1,597.5	-45.1	-13.4	-9.2	1.50	1.50	0.00
1,700.0	10.50	196.55	1,696.1	-61.3	-18.2	-12.5	1.50	1.50	0.00
1,701.7	10.53	196.55	1,697.8	-61.6	-18.3	-12.6	1.50	1.50	0.00
1,800.0	10.53	196.55	1,794.4	-78.8	-23.4	-16.1	0.00	0.00	0.00
1,900.0	10.53	196.55	1,892.7	-96.3	-28.6	-19.7	0.00	0.00	0.00
2,000.0	10.53	196.55	1,991.0	-113.8	-33.8	-23.3	0.00	0.00	0.00
2,100.0	10.53	196.55	2,089.4	-131.4	-39.0	-26.9	0.00	0.00	0.00
2,200.0	10.53	196.55	2,187.7	-148.9	-44.2	-30.5	0.00	0.00	0.00
2,300.0	10.53	196.55	2,286.0	-166.4	-49.4	-34.1	0.00	0.00	0.00
2,400.0	10.53	196.55	2,384.3	-183.9	-54.6	-37.6	0.00	0.00	0.00
2,500.0	10.53	196.55	2,482.6	-201.4	-59.8	-41.2	0.00	0.00	0.00
2,600.0	10.53	196.55	2,580.9	-218.9	-65.1	-44.8	0.00	0.00	0.00
2,700.0	10.53	196.55	2,679.3	-236.4	-70.3	-48.4	0.00	0.00	0.00
2,800.0	10.53	196.55	2,777.6	-253.9	-75.5	-52.0	0.00	0.00	0.00
2,900.0	10.53	196.55	2,875.9	-271.4	-80.7	-55.6	0.00	0.00	0.00
3,000.0	10.53	196.55	2,974.2	-289.0	-85.9	-59.1	0.00	0.00	0.00
3,100.0	10.53	196.55	3,072.5	-306.5	-91.1	-62.7	0.00	0.00	0.00
3,200.0	10.53	196.55	3,170.8	-324.0	-96.3	-66.3	0.00	0.00	0.00
3,300.0	10.53	196.55	3,269.2	-341.5	-101.5	-69.9	0.00	0.00	0.00
3,400.0	10.53	196.55	3,367.5	-359.0	-106.7	-73.5	0.00	0.00	0.00
3,433.1	10.53	196.55	3,400.0	-364.8	-108.4	-74.7	0.00	0.00	0.00
Parkman									
3,500.0	10.53	196.55	3,465.8	-376.5	-111.9	-77.1	0.00	0.00	0.00
3,600.0	10.53	196.55	3,564.1	-394.0	-117.1	-80.6	0.00	0.00	0.00
3,700.0	10.53	196.55	3,662.4	-411.5	-122.3	-84.2	0.00	0.00	0.00
3,800.0	10.53	196.55	3,760.8	-429.0	-127.5	-87.8	0.00	0.00	0.00
3,900.0	10.53	196.55	3,859.1	-446.6	-132.7	-91.4	0.00	0.00	0.00
4,000.0	10.53	196.55	3,957.4	-464.1	-137.9	-95.0	0.00	0.00	0.00
4,100.0	10.53	196.55	4,055.7	-481.6	-143.1	-98.6	0.00	0.00	0.00
4,150.1	10.53	196.55	4,105.0	-490.4	-145.7	-100.4	0.00	0.00	0.00
Sussex									
4,200.0	10.53	196.55	4,154.0	-499.1	-148.3	-102.1	0.00	0.00	0.00
4,300.0	10.53	196.55	4,252.3	-516.6	-153.5	-105.7	0.00	0.00	0.00
4,400.0	10.53	196.55	4,350.7	-534.1	-158.7	-109.3	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-302	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	10.53	196.55	4,449.0	-551.6	-163.9	-112.9	0.00	0.00	0.00
4,551.9	10.53	196.55	4,500.0	-560.7	-166.6	-114.8	0.00	0.00	0.00
Shannon									
4,600.0	10.53	196.55	4,547.3	-569.1	-169.1	-116.5	0.00	0.00	0.00
4,700.0	10.53	196.55	4,645.6	-586.6	-174.3	-120.1	0.00	0.00	0.00
4,800.0	10.53	196.55	4,743.9	-604.2	-179.5	-123.7	0.00	0.00	0.00
4,833.3	10.53	196.55	4,776.7	-610.0	-181.3	-124.8	0.00	0.00	0.00
Start Drop -2.00									
4,900.0	9.19	196.55	4,842.4	-620.9	-184.5	-127.1	2.00	-2.00	0.00
5,000.0	7.19	196.55	4,941.4	-634.6	-188.6	-129.9	2.00	-2.00	0.00
5,100.0	5.19	196.55	5,040.8	-644.9	-191.7	-132.0	2.00	-2.00	0.00
5,200.0	3.19	196.55	5,140.5	-651.9	-193.7	-133.4	2.00	-2.00	0.00
5,300.0	1.19	196.55	5,240.4	-655.6	-194.8	-134.2	2.00	-2.00	0.00
5,359.6	0.00	0.00	5,300.0	-656.2	-195.0	-134.3	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,340.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,500.0	0.00	0.00	5,440.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,600.0	0.00	0.00	5,540.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,700.0	0.00	0.00	5,640.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,740.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,900.0	0.00	0.00	5,840.4	-656.2	-195.0	-134.3	0.00	0.00	0.00
5,937.4	0.00	0.00	5,877.8	-656.2	-195.0	-134.3	0.00	0.00	0.00
KOP #2 - Start Build 7.50									
6,000.0	4.69	90.00	5,940.3	-656.2	-192.4	-131.8	7.50	7.50	0.00
6,100.0	12.19	90.00	6,039.2	-656.2	-177.8	-117.1	7.50	7.50	0.00
6,200.0	19.69	90.00	6,135.3	-656.2	-150.3	-89.8	7.50	7.50	0.00
6,300.0	27.19	90.00	6,226.9	-656.2	-110.6	-50.2	7.50	7.50	0.00
6,400.0	34.69	90.00	6,312.7	-656.2	-59.2	0.9	7.50	7.50	0.00
6,402.9	34.91	90.00	6,315.0	-656.2	-57.6	2.6	7.50	7.50	0.00
Sharon Springs									
6,500.0	42.19	90.00	6,390.9	-656.2	2.9	62.8	7.50	7.50	0.00
6,576.6	47.94	90.00	6,445.0	-656.2	57.1	116.8	7.50	7.50	0.00
Niobrara A									
6,600.0	49.69	90.00	6,460.4	-656.2	74.8	134.3	7.50	7.50	0.00
6,700.0	57.19	90.00	6,519.9	-656.2	155.0	214.3	7.50	7.50	0.00
6,700.1	57.19	90.00	6,520.0	-656.2	155.1	214.4	0.00	0.00	0.00
Niobrara B									
6,800.0	64.69	90.00	6,568.5	-656.2	242.4	301.2	7.51	7.51	0.00
6,899.4	72.15	90.00	6,605.0	-656.2	334.7	393.2	7.50	7.50	0.00
Niobrara C									
6,900.0	72.19	90.00	6,605.2	-656.2	335.3	393.8	7.50	7.50	0.00
7,000.0	79.69	90.00	6,629.5	-656.2	432.2	490.3	7.50	7.50	0.00
7,100.0	87.19	90.00	6,640.9	-656.2	531.5	589.2	7.50	7.50	0.00
7,144.4	90.52	90.00	6,641.8	-656.2	575.9	633.4	7.50	7.50	0.00
Start 6584.8 hold at 7144.4 MD - 7"									
7,200.0	90.52	90.00	6,641.3	-656.2	631.5	688.7	0.00	0.00	0.00
7,300.0	90.52	90.00	6,640.3	-656.2	731.5	788.3	0.00	0.00	0.00
7,400.0	90.52	90.00	6,639.4	-656.2	831.5	887.9	0.00	0.00	0.00
7,500.0	90.52	90.00	6,638.5	-656.2	931.5	987.5	0.00	0.00	0.00
7,600.0	90.52	90.00	6,637.6	-656.2	1,031.5	1,087.1	0.00	0.00	0.00
7,700.0	90.52	90.00	6,636.7	-656.2	1,131.5	1,186.6	0.00	0.00	0.00
7,800.0	90.52	90.00	6,635.8	-656.2	1,231.5	1,286.2	0.00	0.00	0.00
7,900.0	90.52	90.00	6,634.9	-656.2	1,331.5	1,385.8	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-302	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)
8,000.0	90.52	90.00	6,634.0	-656.2	1,431.5	1,485.4	0.00	0.00	0.00
8,100.0	90.52	90.00	6,633.1	-656.2	1,531.5	1,585.0	0.00	0.00	0.00
8,200.0	90.52	90.00	6,632.2	-656.2	1,631.5	1,684.5	0.00	0.00	0.00
8,300.0	90.52	90.00	6,631.3	-656.2	1,731.5	1,784.1	0.00	0.00	0.00
8,400.0	90.52	90.00	6,630.4	-656.2	1,831.5	1,883.7	0.00	0.00	0.00
8,500.0	90.52	90.00	6,629.5	-656.2	1,931.4	1,983.3	0.00	0.00	0.00
8,600.0	90.52	90.00	6,628.6	-656.2	2,031.4	2,082.8	0.00	0.00	0.00
8,700.0	90.52	90.00	6,627.6	-656.2	2,131.4	2,182.4	0.00	0.00	0.00
8,800.0	90.52	90.00	6,626.7	-656.2	2,231.4	2,282.0	0.00	0.00	0.00
8,900.0	90.52	90.00	6,625.8	-656.2	2,331.4	2,381.6	0.00	0.00	0.00
9,000.0	90.52	90.00	6,624.9	-656.2	2,431.4	2,481.2	0.00	0.00	0.00
9,100.0	90.52	90.00	6,624.0	-656.2	2,531.4	2,580.7	0.00	0.00	0.00
9,200.0	90.52	90.00	6,623.1	-656.2	2,631.4	2,680.3	0.00	0.00	0.00
9,300.0	90.52	90.00	6,622.2	-656.2	2,731.4	2,779.9	0.00	0.00	0.00
9,400.0	90.52	90.00	6,621.3	-656.2	2,831.4	2,879.5	0.00	0.00	0.00
9,500.0	90.52	90.00	6,620.4	-656.2	2,931.4	2,979.1	0.00	0.00	0.00
9,600.0	90.52	90.00	6,619.5	-656.2	3,031.4	3,078.6	0.00	0.00	0.00
9,700.0	90.52	90.00	6,618.6	-656.2	3,131.4	3,178.2	0.00	0.00	0.00
9,800.0	90.52	90.00	6,617.7	-656.2	3,231.4	3,277.8	0.00	0.00	0.00
9,900.0	90.52	90.00	6,616.8	-656.2	3,331.4	3,377.4	0.00	0.00	0.00
10,000.0	90.52	90.00	6,615.8	-656.2	3,431.4	3,476.9	0.00	0.00	0.00
10,100.0	90.52	90.00	6,614.9	-656.2	3,531.4	3,576.5	0.00	0.00	0.00
10,200.0	90.52	90.00	6,614.0	-656.2	3,631.4	3,676.1	0.00	0.00	0.00
10,300.0	90.52	90.00	6,613.1	-656.2	3,731.4	3,775.7	0.00	0.00	0.00
10,400.0	90.52	90.00	6,612.2	-656.2	3,831.4	3,875.3	0.00	0.00	0.00
10,500.0	90.52	90.00	6,611.3	-656.2	3,931.4	3,974.8	0.00	0.00	0.00
10,600.0	90.52	90.00	6,610.4	-656.2	4,031.4	4,074.4	0.00	0.00	0.00
10,700.0	90.52	90.00	6,609.5	-656.2	4,131.4	4,174.0	0.00	0.00	0.00
10,800.0	90.52	90.00	6,608.6	-656.2	4,231.4	4,273.6	0.00	0.00	0.00
10,900.0	90.52	90.00	6,607.7	-656.2	4,331.3	4,373.2	0.00	0.00	0.00
11,000.0	90.52	90.00	6,606.8	-656.2	4,431.3	4,472.7	0.00	0.00	0.00
11,100.0	90.52	90.00	6,605.9	-656.2	4,531.3	4,572.3	0.00	0.00	0.00
11,200.0	90.52	90.00	6,605.0	-656.2	4,631.3	4,671.9	0.00	0.00	0.00
11,300.0	90.52	90.00	6,604.0	-656.2	4,731.3	4,771.5	0.00	0.00	0.00
11,400.0	90.52	90.00	6,603.1	-656.2	4,831.3	4,871.0	0.00	0.00	0.00
11,500.0	90.52	90.00	6,602.2	-656.2	4,931.3	4,970.6	0.00	0.00	0.00
11,600.0	90.52	90.00	6,601.3	-656.2	5,031.3	5,070.2	0.00	0.00	0.00
11,700.0	90.52	90.00	6,600.4	-656.2	5,131.3	5,169.8	0.00	0.00	0.00
11,800.0	90.52	90.00	6,599.5	-656.2	5,231.3	5,269.4	0.00	0.00	0.00
11,900.0	90.52	90.00	6,598.6	-656.2	5,331.3	5,368.9	0.00	0.00	0.00
12,000.0	90.52	90.00	6,597.7	-656.2	5,431.3	5,468.5	0.00	0.00	0.00
12,100.0	90.52	90.00	6,596.8	-656.2	5,531.3	5,568.1	0.00	0.00	0.00
12,200.0	90.52	90.00	6,595.9	-656.2	5,631.3	5,667.7	0.00	0.00	0.00
12,300.0	90.52	90.00	6,595.0	-656.2	5,731.3	5,767.3	0.00	0.00	0.00
12,400.0	90.52	90.00	6,594.1	-656.2	5,831.3	5,866.8	0.00	0.00	0.00
12,500.0	90.52	90.00	6,593.2	-656.2	5,931.3	5,966.4	0.00	0.00	0.00
12,600.0	90.52	90.00	6,592.2	-656.2	6,031.3	6,066.0	0.00	0.00	0.00
12,700.0	90.52	90.00	6,591.3	-656.2	6,131.3	6,165.6	0.00	0.00	0.00
12,800.0	90.52	90.00	6,590.4	-656.2	6,231.3	6,265.1	0.00	0.00	0.00
12,900.0	90.52	90.00	6,589.5	-656.2	6,331.3	6,364.7	0.00	0.00	0.00
13,000.0	90.52	90.00	6,588.6	-656.2	6,431.3	6,464.3	0.00	0.00	0.00
13,100.0	90.52	90.00	6,587.7	-656.2	6,531.3	6,563.9	0.00	0.00	0.00
13,200.0	90.52	90.00	6,586.8	-656.2	6,631.3	6,663.5	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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)
13,300.0	90.52	90.00	6,585.9	-656.2	6,731.2	6,763.0	0.00	0.00	0.00
13,400.0	90.52	90.00	6,585.0	-656.2	6,831.2	6,862.6	0.00	0.00	0.00
13,500.0	90.52	90.00	6,584.1	-656.2	6,931.2	6,962.2	0.00	0.00	0.00
13,600.0	90.52	90.00	6,583.2	-656.2	7,031.2	7,061.8	0.00	0.00	0.00
13,700.0	90.52	90.00	6,582.3	-656.2	7,131.2	7,161.4	0.00	0.00	0.00
13,729.2	90.52	90.00	6,582.0	-656.2	7,160.4	7,190.4	0.00	0.00	0.00
TD at 13729.2 - BHL 1130'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 527'FNL & 245'FWL - plan hits target center - Point	0.00	0.63	1.0	0.0	0.0	1,381,376.90	3,271,499.05	40.376186	-104.525497
BHL 1130'FNL & 2140'FNL - plan hits target center - Point	0.00	0.65	6,582.0	-656.2	7,160.4	1,380,799.47	3,278,665.98	40.374382	-104.499798

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
7,144.4	6,641.8	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,433.1	3,400.0	Parkman		0.00	
4,150.1	4,105.0	Sussex		0.00	
4,551.9	4,500.0	Shannon		0.00	
6,402.9	6,315.0	Sharon Springs		0.00	
6,576.6	6,445.0	Niobrara A		0.00	
6,700.1	6,520.0	Niobrara B		0.00	
6,899.4	6,605.0	Niobrara C		0.00	

Database:	US_EDM	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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)	
1,000.0	1,000.0	0.0	0.0	KOP - Start Build 1.50
4,833.3	4,776.7	-61.6	-18.3	Start Drop -2.00
5,937.4	5,877.8	-610.0	-181.3	KOP #2 - Start Build 7.50
7,144.4	6,641.8	-656.2	-195.0	Start 6584.8 hold at 7144.4 MD
13,729.2	6,582.0	-656.2	-195.0	TD at 13729.2



Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Connie 5N64W26EF Pad Sec.26-T5N-R64W

Connie 26F-302

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-302
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-302	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	13,729.2	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						
Connie 5N64W26EF Pad Sec.26-T5N-R64W						
Connie 26E-202 - Wellbore #1 - Plan #1 (11-3-15)	1,000.0	999.0	45.0	40.7	10.544	CC, ES
Connie 26E-202 - Wellbore #1 - Plan #1 (11-3-15)	13,729.2	13,628.6	984.6	580.8	2.439	SF
Connie 26E-332 - Wellbore #1 - Plan #1 (11-3-15)	1,000.0	999.0	29.9	25.6	7.006	CC, ES
Connie 26E-332 - Wellbore #1 - Plan #1 (11-3-15)	13,729.2	13,676.6	704.9	300.1	1.741	SF
Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)	1,000.0	999.0	14.8	10.5	3.468	CC
Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)	13,729.2	13,629.7	273.7	-118.6	0.698	Level 1, ES, SF
Connie 26F-402 - Wellbore #1 - Plan #1 (11-2-15)	800.0	800.0	15.1	11.7	4.479	CC
Connie 26F-402 - Wellbore #1 - Plan #1 (11-2-15)	13,729.2	13,864.7	319.2	-66.2	0.828	Level 1, ES, SF
Existing Wells Pad Sec.26-T5N-R64W						
Bihain 26-1 (Exist.) - Wellbore #1 - Wellbore #1	8,307.7	6,613.2	527.3	343.3	2.865	CC, ES, SF
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	1,371.0	1,357.5	432.0	425.8	69.370	CC
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	1,500.0	1,486.5	432.2	425.4	63.530	ES
Bihain 26-4 (Exist.) - Wellbore #1 - Wellbore #1	7,100.0	6,634.4	492.4	457.4	14.054	SF
Bihain 5 (Exist.) - Wellbore #1 - Wellbore #1	7,601.1	6,625.0	149.9	104.3	3.288	CC, ES, SF

Offset Design Connie 5N64W26EF Pad Sec.26-T5N-R64W - Connie 26E-202 - Wellbore #1 - Plan #1 (11-3-15)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
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	
900.0	900.0	899.0	899.0	1.9	1.9	35.15	36.8	25.9	45.0	41.2	3.82	11.785	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	35.15	36.8	25.9	45.0	40.7	4.27	10.544 CC, ES	
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.4	-161.91	36.8	25.9	46.2	41.6	4.69	9.860	

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-302
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-302	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		
1,200.0	1,199.9	1,198.9	1,198.9	2.5	2.6	-163.29	36.8	25.9	50.0	44.9	5.09	9.821		
1,300.0	1,299.7	1,298.7	1,298.7	2.7	2.8	-165.18	36.8	25.9	56.3	50.8	5.50	10.241		
1,400.0	1,399.3	1,398.3	1,398.3	2.9	3.0	-167.21	36.8	25.9	65.2	59.3	5.91	11.035		
1,500.0	1,498.6	1,497.6	1,497.6	3.1	3.3	-169.12	36.8	25.9	76.7	70.4	6.32	12.137		
1,600.0	1,597.5	1,596.5	1,596.5	3.4	3.5	-170.79	36.8	25.9	90.8	84.1	6.73	13.491		
1,701.7	1,697.8	1,695.5	1,695.5	3.7	3.7	-172.77	37.7	25.2	108.5	101.3	7.15	15.175		
1,800.0	1,794.4	1,790.2	1,790.1	4.0	3.9	-175.18	40.6	23.0	128.1	120.6	7.57	16.934		
1,900.0	1,892.7	1,885.7	1,885.5	4.3	4.1	-177.75	45.3	19.4	149.7	141.7	8.00	18.711		
2,000.0	1,991.0	1,980.4	1,979.8	4.7	4.3	-179.68	51.8	14.4	172.9	164.4	8.44	20.484		
2,100.0	2,089.4	2,074.2	2,072.9	5.0	4.6	-177.18	60.1	8.1	197.8	188.9	8.89	22.256		
2,200.0	2,187.7	2,169.4	2,167.3	5.4	4.8	-174.85	70.0	0.6	224.2	214.9	9.35	23.977		
2,300.0	2,286.0	2,265.4	2,262.6	5.7	5.0	-172.98	79.9	-7.1	250.9	241.1	9.82	25.548		
2,400.0	2,384.3	2,361.5	2,357.8	6.1	5.3	-171.47	89.9	-14.7	277.9	267.6	10.30	26.973		
2,500.0	2,482.6	2,457.6	2,453.1	6.5	5.6	-170.22	99.9	-22.3	305.0	294.2	10.79	28.272		
2,600.0	2,580.9	2,553.6	2,548.3	6.9	5.8	-169.18	109.9	-29.9	332.2	320.9	11.28	29.455		
2,700.0	2,679.3	2,649.7	2,643.6	7.3	6.1	-168.30	119.8	-37.5	359.4	347.7	11.77	30.535		
2,800.0	2,777.6	2,745.8	2,738.8	7.7	6.4	-167.54	129.8	-45.2	386.8	374.5	12.27	31.522		
2,900.0	2,875.9	2,841.8	2,834.1	8.1	6.7	-166.88	139.8	-52.8	414.2	401.4	12.77	32.428		
3,000.0	2,974.2	2,937.9	2,929.3	8.5	6.9	-166.30	149.8	-60.4	441.6	428.4	13.28	33.261		
3,100.0	3,072.5	3,034.0	3,024.5	8.9	7.2	-165.79	159.7	-68.0	469.1	455.3	13.79	34.029		
3,200.0	3,170.8	3,130.1	3,119.8	9.3	7.5	-165.34	169.7	-75.7	496.7	482.4	14.30	34.739		
3,300.0	3,269.2	3,226.1	3,215.0	9.7	7.8	-164.93	179.7	-83.3	524.2	509.4	14.81	35.396		
3,400.0	3,367.5	3,322.2	3,310.3	10.1	8.1	-164.56	189.7	-90.9	551.8	536.4	15.32	36.006		
3,500.0	3,465.8	3,418.3	3,405.5	10.5	8.4	-164.23	199.6	-98.5	579.3	563.5	15.84	36.574		
3,600.0	3,564.1	3,514.3	3,500.8	10.9	8.7	-163.93	209.6	-106.2	606.9	590.6	16.36	37.103		
3,700.0	3,662.4	3,610.4	3,596.0	11.3	9.0	-163.66	219.6	-113.8	634.6	617.7	16.88	37.597		
3,800.0	3,760.8	3,706.5	3,691.3	11.7	9.3	-163.40	229.6	-121.4	662.2	644.8	17.40	38.060		
3,900.0	3,859.1	3,802.5	3,786.5	12.1	9.6	-163.17	239.5	-129.0	689.8	671.9	17.92	38.494		
4,000.0	3,957.4	3,898.6	3,881.8	12.5	9.9	-162.96	249.5	-136.6	717.5	699.0	18.44	38.901		
4,100.0	4,055.7	3,994.7	3,977.0	12.9	10.2	-162.76	259.5	-144.3	745.1	726.2	18.97	39.285		
4,200.0	4,154.0	4,090.7	4,072.2	13.3	10.5	-162.58	269.5	-151.9	772.8	753.3	19.49	39.646		
4,300.0	4,252.3	4,186.8	4,167.5	13.8	10.8	-162.41	279.4	-159.5	800.5	780.5	20.02	39.987		
4,400.0	4,350.7	4,282.9	4,262.7	14.2	11.1	-162.25	289.4	-167.1	828.1	807.6	20.54	40.310		
4,500.0	4,449.0	4,378.9	4,358.0	14.6	11.4	-162.10	299.4	-174.8	855.8	834.8	21.07	40.615		
4,600.0	4,547.3	4,484.2	4,462.4	15.0	11.7	-161.95	310.1	-183.0	883.4	861.8	21.61	40.878		
4,700.0	4,645.6	4,613.7	4,591.3	15.4	12.0	-161.95	319.9	-190.5	908.3	886.2	22.13	41.051		
4,800.0	4,743.9	4,745.4	4,722.8	15.8	12.3	-162.18	325.2	-194.5	929.7	907.0	22.62	41.104		
4,833.3	4,776.7	4,789.6	4,767.0	16.0	12.4	-162.30	325.8	-195.0	936.0	913.2	22.78	41.093		
4,900.0	4,842.4	4,864.0	4,841.4	16.2	12.5	-162.60	326.0	-195.1	947.0	923.9	23.12	40.956		
5,000.0	4,941.4	4,963.0	4,940.4	16.4	12.7	-162.94	326.0	-195.1	960.6	937.0	23.60	40.708		
5,100.0	5,040.8	5,062.4	5,039.8	16.7	12.9	-163.18	326.0	-195.1	970.9	946.9	24.05	40.373		
5,200.0	5,140.5	5,162.1	5,139.5	16.9	13.0	-163.35	326.0	-195.1	977.9	953.5	24.47	39.968		
5,300.0	5,240.4	5,262.0	5,239.4	17.0	13.2	-163.43	326.0	-195.1	981.6	956.7	24.85	39.497		
5,359.6	5,300.0	5,321.6	5,299.0	17.1	13.3	-0.01	326.0	-195.1	982.2	952.7	29.48	33.317		
5,400.0	5,340.4	5,362.0	5,339.4	17.2	13.4	-0.01	326.0	-195.1	982.2	952.6	29.62	33.164		
5,500.0	5,440.4	5,462.0	5,439.4	17.3	13.6	-0.01	326.0	-195.1	982.2	952.3	29.94	32.804		
5,600.0	5,540.4	5,562.0	5,539.4	17.4	13.8	-0.01	326.0	-195.1	982.2	951.9	30.27	32.448		
5,700.0	5,640.4	5,662.0	5,639.4	17.5	14.0	-0.01	326.0	-195.1	982.2	951.6	30.60	32.098		
5,800.0	5,740.4	5,762.0	5,739.4	17.7	14.2	-0.01	326.0	-195.1	982.2	951.3	30.93	31.752		
5,864.5	5,804.9	5,826.5	5,803.9	17.7	14.3	-0.01	326.0	-195.1	982.2	951.0	31.15	31.531		
5,900.0	5,840.4	5,862.0	5,839.4	17.8	14.4	0.01	326.0	-194.8	982.2	950.9	31.26	31.415		

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-302
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-302	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		
5,937.4	5,877.8	5,899.4	5,876.7	17.8	14.4	0.13	326.0	-192.8	982.2	950.8	31.38	31.298		
5,950.0	5,890.4	5,911.8	5,889.1	17.9	14.5	-89.82	326.0	-191.8	982.2	954.9	27.30	35.981		
6,000.0	5,940.3	5,961.4	5,938.2	17.9	14.5	-89.60	326.0	-185.6	982.2	954.8	27.44	35.798		
6,050.0	5,990.0	6,010.7	5,986.6	18.0	14.6	-89.38	326.0	-176.3	982.3	954.7	27.55	35.649		
6,100.0	6,039.2	6,059.7	6,034.1	18.0	14.6	-89.16	326.0	-163.9	982.3	954.7	27.65	35.526		
6,150.0	6,087.7	6,108.5	6,080.5	18.1	14.6	-88.95	326.0	-148.6	982.4	954.6	27.73	35.420		
6,200.0	6,135.3	6,157.2	6,125.6	18.1	14.7	-88.74	326.0	-130.5	982.4	954.6	27.81	35.322		
6,250.0	6,181.8	6,205.6	6,169.2	18.1	14.7	-88.54	326.0	-109.6	982.5	954.6	27.90	35.218		
6,300.0	6,226.9	6,253.7	6,211.3	18.1	14.7	-88.34	326.0	-86.2	982.6	954.6	28.00	35.093		
6,350.0	6,270.6	6,301.8	6,251.7	18.2	14.7	-88.15	326.0	-60.2	982.7	954.6	28.13	34.929		
6,400.0	6,312.7	6,350.0	6,290.5	18.2	14.7	-87.97	326.0	-31.6	982.8	954.5	28.32	34.705		
6,450.0	6,352.8	6,397.2	6,326.7	18.2	14.8	-87.80	326.0	-1.2	982.9	954.3	28.57	34.403		
6,500.0	6,390.9	6,444.7	6,361.1	18.2	14.8	-87.64	326.0	31.5	983.0	954.1	28.91	34.004		
6,550.0	6,426.8	6,492.0	6,393.3	18.3	14.9	-87.49	326.0	66.1	983.1	953.8	29.35	33.493		
6,600.0	6,460.4	6,539.2	6,423.3	18.3	15.1	-87.34	326.0	102.6	983.3	953.3	29.92	32.864		
6,650.0	6,491.5	6,586.3	6,450.9	18.4	15.5	-87.21	326.0	140.7	983.4	952.7	30.62	32.111		
6,700.0	6,519.9	6,633.3	6,476.0	18.5	16.0	-87.09	326.0	180.4	983.5	952.0	31.47	31.246		
6,750.0	6,545.6	6,680.1	6,498.5	18.6	16.5	-86.98	326.0	221.4	983.6	951.1	32.48	30.282		
6,800.0	6,568.5	6,726.9	6,518.5	18.8	17.1	-86.89	326.0	263.7	983.6	950.0	33.64	29.240		
6,850.0	6,588.4	6,773.5	6,535.8	19.1	17.8	-86.80	326.0	307.0	983.7	948.8	34.96	28.142		
6,900.0	6,605.2	6,820.1	6,550.5	19.6	18.5	-86.73	326.0	351.3	983.8	947.4	36.41	27.016		
6,950.0	6,618.9	6,866.7	6,562.3	20.2	19.3	-86.68	326.0	396.3	983.8	945.8	38.01	25.885		
7,000.0	6,629.5	6,913.2	6,571.5	20.9	20.2	-86.63	326.0	441.9	983.9	944.2	39.72	24.769		
7,050.0	6,636.8	6,959.6	6,577.8	21.7	21.0	-86.60	326.0	487.9	983.9	942.4	41.54	23.685		
7,100.0	6,640.9	7,006.1	6,581.3	22.6	22.0	-86.58	326.0	534.2	983.9	940.5	43.45	22.648		
7,144.4	6,641.8	7,048.9	6,582.0	23.5	22.8	-86.58	326.0	577.0	983.9	938.7	45.23	21.757		
7,156.5	6,641.7	7,059.3	6,581.9	23.8	23.1	-86.58	326.0	587.4	983.9	938.2	45.70	21.529		
7,200.0	6,641.3	7,102.8	6,581.5	24.6	24.0	-86.57	326.0	630.9	984.0	936.4	47.55	20.693		
7,300.0	6,640.3	7,202.8	6,580.4	26.8	26.2	-86.57	326.0	730.9	984.0	932.0	52.00	18.924		
7,400.0	6,639.4	7,302.8	6,579.3	29.1	28.5	-86.56	326.0	830.9	984.0	927.3	56.65	17.370		
7,500.0	6,638.5	7,402.8	6,578.3	31.4	30.9	-86.55	326.0	930.9	984.0	922.5	61.46	16.010		
7,600.0	6,637.6	7,502.8	6,577.2	33.9	33.4	-86.54	326.0	1,030.8	984.0	917.6	66.40	14.820		
7,700.0	6,636.7	7,602.8	6,576.2	36.3	35.9	-86.53	326.0	1,130.8	984.0	912.6	71.43	13.775		
7,800.0	6,635.8	7,702.8	6,575.1	38.9	38.5	-86.52	326.0	1,230.8	984.0	907.5	76.55	12.855		
7,900.0	6,634.9	7,802.8	6,574.0	41.4	41.0	-86.51	326.0	1,330.8	984.0	902.3	81.73	12.040		
8,000.0	6,634.0	7,902.8	6,573.0	44.0	43.7	-86.50	326.0	1,430.8	984.0	897.1	86.96	11.315		
8,100.0	6,633.1	8,002.8	6,571.9	46.7	46.3	-86.49	326.0	1,530.8	984.0	891.8	92.24	10.668		
8,200.0	6,632.2	8,102.8	6,570.8	49.3	49.0	-86.48	326.0	1,630.8	984.0	886.5	97.56	10.087		
8,300.0	6,631.3	8,202.8	6,569.8	52.0	51.6	-86.47	326.0	1,730.8	984.1	881.1	102.90	9.563		
8,400.0	6,630.4	8,302.8	6,568.7	54.6	54.3	-86.47	326.0	1,830.8	984.1	875.8	108.28	9.088		
8,500.0	6,629.5	8,402.8	6,567.6	57.3	57.0	-86.46	326.0	1,930.8	984.1	870.4	113.67	8.657		
8,600.0	6,628.6	8,502.8	6,566.6	60.0	59.7	-86.45	326.0	2,030.8	984.1	865.0	119.09	8.263		
8,700.0	6,627.6	8,602.8	6,565.5	62.7	62.4	-86.44	326.0	2,130.8	984.1	859.6	124.52	7.903		
8,800.0	6,626.7	8,702.8	6,564.4	65.5	65.2	-86.43	326.0	2,230.8	984.1	854.1	129.97	7.572		
8,900.0	6,625.8	8,802.8	6,563.4	68.2	67.9	-86.42	326.0	2,330.8	984.1	848.7	135.43	7.267		
9,000.0	6,624.9	8,902.8	6,562.3	70.9	70.6	-86.41	326.0	2,430.8	984.1	843.2	140.90	6.984		
9,100.0	6,624.0	9,002.8	6,561.2	73.6	73.4	-86.40	326.0	2,530.8	984.1	837.7	146.38	6.723		
9,200.0	6,623.1	9,102.8	6,560.2	76.4	76.1	-86.39	326.0	2,630.8	984.1	832.3	151.87	6.480		
9,300.0	6,622.2	9,202.8	6,559.1	79.1	78.9	-86.38	326.0	2,730.8	984.1	826.8	157.37	6.254		
9,400.0	6,621.3	9,302.8	6,558.1	81.9	81.6	-86.37	326.0	2,830.7	984.2	821.3	162.88	6.042		
9,500.0	6,620.4	9,402.8	6,557.0	84.6	84.4	-86.36	326.0	2,930.7	984.2	815.8	168.39	5.844		

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-302
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-302	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	
9,600.0	6,619.5	9,502.8	6,555.9	87.4	87.2	-86.36	326.0	3,030.7	984.2	810.3	173.91	5.659	
9,700.0	6,618.6	9,602.8	6,554.9	90.2	89.9	-86.35	326.0	3,130.7	984.2	804.7	179.44	5.485	
9,800.0	6,617.7	9,702.8	6,553.8	92.9	92.7	-86.34	326.0	3,230.7	984.2	799.2	184.97	5.321	
9,900.0	6,616.8	9,802.8	6,552.7	95.7	95.5	-86.33	326.0	3,330.7	984.2	793.7	190.50	5.166	
10,000.0	6,615.8	9,902.8	6,551.7	98.5	98.2	-86.32	326.0	3,430.7	984.2	788.2	196.04	5.020	
10,100.0	6,614.9	10,002.8	6,550.6	101.2	101.0	-86.31	326.0	3,530.7	984.2	782.6	201.58	4.882	
10,200.0	6,614.0	10,102.8	6,549.5	104.0	103.8	-86.30	326.0	3,630.7	984.2	777.1	207.13	4.752	
10,300.0	6,613.1	10,202.8	6,548.5	106.8	106.6	-86.29	326.0	3,730.7	984.2	771.6	212.68	4.628	
10,400.0	6,612.2	10,302.8	6,547.4	109.6	109.4	-86.28	326.0	3,830.7	984.3	766.0	218.23	4.510	
10,500.0	6,611.3	10,402.8	6,546.3	112.3	112.1	-86.27	326.0	3,930.7	984.3	760.5	223.78	4.398	
10,600.0	6,610.4	10,502.8	6,545.3	115.1	114.9	-86.26	326.0	4,030.7	984.3	754.9	229.34	4.292	
10,700.0	6,609.5	10,602.8	6,544.2	117.9	117.7	-86.26	326.0	4,130.7	984.3	749.4	234.90	4.190	
10,800.0	6,608.6	10,702.8	6,543.1	120.7	120.5	-86.25	326.0	4,230.7	984.3	743.8	240.46	4.093	
10,900.0	6,607.7	10,802.8	6,542.1	123.5	123.3	-86.24	326.0	4,330.7	984.3	738.3	246.02	4.001	
11,000.0	6,606.8	10,902.8	6,541.0	126.3	126.1	-86.23	326.0	4,430.7	984.3	732.7	251.59	3.912	
11,100.0	6,605.9	11,002.8	6,540.0	129.0	128.9	-86.22	326.0	4,530.6	984.3	727.2	257.15	3.828	
11,200.0	6,605.0	11,102.8	6,538.9	131.8	131.6	-86.21	326.0	4,630.6	984.3	721.6	262.72	3.747	
11,300.0	6,604.0	11,202.8	6,537.8	134.6	134.4	-86.20	326.0	4,730.6	984.3	716.1	268.29	3.669	
11,400.0	6,603.1	11,302.8	6,536.8	137.4	137.2	-86.19	326.0	4,830.6	984.4	710.5	273.86	3.594	
11,500.0	6,602.2	11,402.8	6,535.7	140.2	140.0	-86.18	326.0	4,930.6	984.4	704.9	279.44	3.523	
11,600.0	6,601.3	11,502.8	6,534.6	143.0	142.8	-86.17	326.0	5,030.6	984.4	699.4	285.01	3.454	
11,700.0	6,600.4	11,602.8	6,533.6	145.8	145.6	-86.16	326.0	5,130.6	984.4	693.8	290.58	3.388	
11,800.0	6,599.5	11,702.8	6,532.5	148.6	148.4	-86.16	326.0	5,230.6	984.4	688.2	296.16	3.324	
11,900.0	6,598.6	11,802.8	6,531.4	151.4	151.2	-86.15	326.0	5,330.6	984.4	682.7	301.74	3.262	
12,000.0	6,597.7	11,902.8	6,530.4	154.2	154.0	-86.14	326.0	5,430.6	984.4	677.1	307.31	3.203	
12,100.0	6,596.8	12,002.8	6,529.3	157.0	156.8	-86.13	326.0	5,530.6	984.4	671.5	312.89	3.146	
12,200.0	6,595.9	12,102.8	6,528.2	159.7	159.6	-86.12	326.0	5,630.6	984.4	666.0	318.47	3.091	
12,300.0	6,595.0	12,202.8	6,527.2	162.5	162.4	-86.11	326.0	5,730.6	984.5	660.4	324.05	3.038	
12,400.0	6,594.1	12,302.8	6,526.1	165.3	165.2	-86.10	326.0	5,830.6	984.5	654.8	329.63	2.987	
12,500.0	6,593.2	12,402.8	6,525.0	168.1	168.0	-86.09	326.0	5,930.6	984.5	649.3	335.21	2.937	
12,600.0	6,592.2	12,502.8	6,524.0	170.9	170.8	-86.08	326.0	6,030.6	984.5	643.7	340.80	2.889	
12,700.0	6,591.3	12,602.8	6,522.9	173.7	173.6	-86.07	326.0	6,130.6	984.5	638.1	346.38	2.842	
12,800.0	6,590.4	12,702.8	6,521.9	176.5	176.4	-86.06	326.0	6,230.5	984.5	632.5	351.96	2.797	
12,900.0	6,589.5	12,802.8	6,520.8	179.3	179.2	-86.05	326.0	6,330.5	984.5	627.0	357.55	2.754	
13,000.0	6,588.6	12,902.8	6,519.7	182.1	182.0	-86.05	326.0	6,430.5	984.5	621.4	363.13	2.711	
13,100.0	6,587.7	13,002.8	6,518.7	184.9	184.8	-86.04	326.0	6,530.5	984.5	615.8	368.72	2.670	
13,200.0	6,586.8	13,102.8	6,517.6	187.7	187.6	-86.03	326.0	6,630.5	984.5	610.2	374.30	2.630	
13,300.0	6,585.9	13,202.8	6,516.5	190.5	190.4	-86.02	326.0	6,730.5	984.6	604.7	379.89	2.592	
13,400.0	6,585.0	13,302.8	6,515.5	193.3	193.2	-86.01	326.0	6,830.5	984.6	599.1	385.47	2.554	
13,500.0	6,584.1	13,402.8	6,514.4	196.1	196.0	-86.00	326.0	6,930.5	984.6	593.5	391.06	2.518	
13,600.0	6,583.2	13,502.8	6,513.3	198.9	198.8	-85.99	326.0	7,030.5	984.6	587.9	396.65	2.482	
13,700.0	6,582.3	13,602.8	6,512.3	201.7	201.6	-85.98	326.0	7,130.5	984.6	582.4	402.24	2.448	
13,712.1	6,582.2	13,614.8	6,512.1	202.1	201.9	-85.98	326.0	7,142.5	984.6	581.7	402.91	2.444	
13,729.2	6,582.0	13,626.6	6,512.0	202.5	202.3	-85.98	326.0	7,156.3	984.6	580.8	403.77	2.439 SF	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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	35.29	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		
900.0	900.0	899.0	899.0	1.9	1.9	35.29	24.4	17.3	29.9	26.1	3.82	7.831		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	35.29	24.4	17.3	29.9	25.6	4.27	7.006 CC, ES		
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.4	-162.03	24.4	17.3	31.1	26.5	4.69	6.640		
1,200.0	1,199.9	1,198.9	1,198.9	2.5	2.6	-164.00	24.4	17.3	34.9	29.8	5.09	6.856		
1,300.0	1,299.7	1,298.7	1,298.7	2.7	2.8	-166.49	24.4	17.3	41.2	35.7	5.50	7.501		
1,400.0	1,399.3	1,398.3	1,398.3	2.9	3.0	-168.90	24.4	17.3	50.2	44.3	5.91	8.495		
1,500.0	1,498.6	1,497.6	1,497.6	3.1	3.3	-170.97	24.4	17.3	61.7	55.4	6.32	9.773		
1,600.0	1,597.5	1,596.5	1,596.5	3.4	3.5	-172.64	24.4	17.3	76.0	69.2	6.73	11.285		
1,701.7	1,697.8	1,696.8	1,696.8	3.7	3.7	-173.98	24.4	17.3	93.1	85.9	7.15	13.018		
1,800.0	1,794.4	1,793.4	1,793.4	4.0	3.9	-174.95	24.4	17.3	111.0	103.4	7.58	14.645		
1,900.0	1,892.7	1,891.7	1,891.7	4.3	4.1	-175.66	24.4	17.3	129.2	121.2	8.01	16.117		
2,000.0	1,991.0	1,990.0	1,990.0	4.7	4.4	-176.20	24.4	17.3	147.4	138.9	8.46	17.428		
2,100.0	2,089.4	2,088.4	2,088.4	5.0	4.6	-176.62	24.4	17.3	165.6	156.7	8.90	18.602		
2,200.0	2,187.7	2,186.7	2,186.7	5.4	4.8	-176.95	24.4	17.3	183.9	174.5	9.35	19.658		
2,300.0	2,286.0	2,285.0	2,285.0	5.7	5.0	-177.23	24.4	17.3	202.1	192.3	9.81	20.611		
2,400.0	2,384.3	2,383.3	2,383.3	6.1	5.2	-177.46	24.4	17.3	220.4	210.1	10.26	21.476		
2,500.0	2,482.6	2,481.6	2,481.6	6.5	5.5	-177.65	24.4	17.3	238.6	227.9	10.72	22.264		
2,600.0	2,580.9	2,580.7	2,580.7	6.9	5.7	-177.95	24.5	16.7	256.8	245.6	11.17	22.990		
2,700.0	2,679.3	2,680.0	2,680.0	7.3	5.9	-178.55	24.7	14.5	274.6	263.0	11.61	23.650		
2,800.0	2,777.6	2,779.3	2,779.2	7.7	6.1	-179.42	25.2	10.5	292.1	280.0	12.05	24.233		
2,900.0	2,875.9	2,878.5	2,878.3	8.1	6.3	-179.49	25.8	4.9	309.4	296.9	12.50	24.744		
3,000.0	2,974.2	2,977.7	2,977.1	8.5	6.5	-178.22	26.7	-2.5	326.5	313.5	12.96	25.191		
3,100.0	3,072.5	3,076.6	3,075.7	8.9	6.7	-176.79	27.7	-11.5	343.6	330.1	13.43	25.583		
3,200.0	3,170.8	3,174.9	3,173.4	9.3	7.0	-175.33	28.9	-21.6	360.7	346.8	13.91	25.933		
3,300.0	3,269.2	3,273.0	3,271.0	9.7	7.2	-174.00	30.0	-31.7	378.0	363.6	14.40	26.258		
3,400.0	3,367.5	3,371.1	3,368.6	10.1	7.4	-172.79	31.2	-41.7	395.6	380.7	14.89	26.559		
3,500.0	3,465.8	3,469.2	3,466.1	10.5	7.7	-171.68	32.4	-51.8	413.3	397.9	15.40	26.838		
3,600.0	3,564.1	3,567.3	3,563.7	10.9	7.9	-170.66	33.5	-61.9	431.1	415.2	15.91	27.096		
3,700.0	3,662.4	3,665.5	3,661.3	11.3	8.1	-169.72	34.7	-71.9	449.0	432.6	16.43	27.335		
3,800.0	3,760.8	3,763.6	3,758.9	11.7	8.4	-168.85	35.8	-82.0	467.1	450.2	16.95	27.557		
3,900.0	3,859.1	3,861.7	3,856.5	12.1	8.6	-168.05	37.0	-92.1	485.3	467.8	17.48	27.764		
4,000.0	3,957.4	3,959.8	3,954.1	12.5	8.9	-167.31	38.2	-102.1	503.5	485.5	18.01	27.956		
4,100.0	4,055.7	4,057.9	4,051.7	12.9	9.1	-166.61	39.3	-112.2	521.8	503.3	18.55	28.134		
4,200.0	4,154.0	4,156.0	4,149.3	13.3	9.4	-165.97	40.5	-122.3	540.2	521.1	19.09	28.301		
4,300.0	4,252.3	4,254.2	4,246.9	13.8	9.7	-165.37	41.6	-132.3	558.7	539.0	19.63	28.457		
4,400.0	4,350.7	4,352.3	4,344.5	14.2	9.9	-164.80	42.8	-142.4	577.2	557.0	20.18	28.602		
4,500.0	4,449.0	4,450.4	4,442.1	14.6	10.2	-164.27	43.9	-152.5	595.7	575.0	20.73	28.739		
4,600.0	4,547.3	4,548.5	4,539.7	15.0	10.5	-163.77	45.1	-162.5	614.3	593.0	21.28	28.867		
4,700.0	4,645.6	4,646.6	4,637.3	15.4	10.7	-163.31	46.3	-172.6	633.0	611.1	21.84	28.987		
4,800.0	4,743.9	4,745.6	4,735.7	15.8	11.0	-162.88	47.4	-182.6	651.6	629.2	22.38	29.111		
4,833.3	4,776.7	4,779.2	4,769.2	16.0	11.1	-162.78	47.7	-185.5	657.8	635.2	22.56	29.159		
4,900.0	4,842.4	4,846.9	4,836.7	16.2	11.2	-162.74	48.3	-190.1	669.3	646.3	22.91	29.209		

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-302
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-302	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	4,941.4	4,948.8	4,938.6	16.4	11.4	162.86	48.7	-194.1	683.4	660.0	23.37	29.243		
5,100.0	5,040.8	5,050.0	5,039.8	16.7	11.6	163.13	48.8	-194.7	693.7	670.0	23.77	29.182		
5,200.0	5,140.5	5,149.7	5,139.5	16.9	11.8	163.34	48.8	-194.7	700.7	676.6	24.16	29.009		
5,300.0	5,240.4	5,249.7	5,239.4	17.0	12.0	163.45	48.8	-194.7	704.4	679.9	24.52	28.729		
5,359.6	5,300.0	5,309.3	5,299.0	17.1	12.1	0.02	48.8	-194.7	705.0	676.8	28.21	24.987		
5,400.0	5,340.4	5,349.7	5,339.4	17.2	12.2	0.02	48.8	-194.7	705.0	676.7	28.36	24.861		
5,500.0	5,440.4	5,449.7	5,439.4	17.3	12.4	0.02	48.8	-194.7	705.0	676.3	28.70	24.564		
5,600.0	5,540.4	5,549.7	5,539.4	17.4	12.6	0.02	48.8	-194.7	705.0	676.0	29.05	24.272		
5,700.0	5,640.4	5,649.7	5,639.4	17.5	12.8	0.02	48.8	-194.7	705.0	675.6	29.39	23.985		
5,800.0	5,740.4	5,749.7	5,739.4	17.7	13.0	0.02	48.8	-194.7	705.0	675.3	29.74	23.703		
5,900.0	5,840.4	5,849.7	5,839.4	17.8	13.3	0.02	48.8	-194.7	705.0	674.9	30.10	23.426		
5,937.4	5,877.8	5,887.1	5,876.8	17.8	13.3	0.02	48.8	-194.7	705.0	674.8	30.23	23.324		
5,950.0	5,890.4	5,899.7	5,889.4	17.9	13.4	-89.98	48.8	-194.6	705.0	678.0	27.00	26.113		
6,000.0	5,940.3	5,949.6	5,939.3	17.9	13.4	-89.98	48.8	-192.2	705.0	677.8	27.16	25.958		
6,050.0	5,990.0	5,999.6	5,989.0	18.0	13.5	-89.99	48.8	-186.6	705.0	677.7	27.30	25.828		
6,100.0	6,039.2	6,049.6	6,038.2	18.0	13.6	-89.99	48.8	-177.7	705.0	677.6	27.41	25.719		
6,150.0	6,087.7	6,099.6	6,086.7	18.1	13.6	-90.00	48.8	-165.6	705.0	677.5	27.51	25.627		
6,200.0	6,135.3	6,149.6	6,134.3	18.1	13.7	-90.01	48.8	-150.4	705.0	677.4	27.60	25.544		
6,250.0	6,181.8	6,199.6	6,180.8	18.1	13.7	-90.01	48.8	-132.1	705.0	677.3	27.69	25.462		
6,300.0	6,226.9	6,249.6	6,226.0	18.1	13.8	-90.02	48.8	-110.7	705.0	677.2	27.79	25.369		
6,350.0	6,270.6	6,299.7	6,269.8	18.2	13.9	-90.02	48.8	-86.5	705.0	677.1	27.92	25.254		
6,400.0	6,312.7	6,349.7	6,311.8	18.2	14.0	-90.03	48.8	-59.5	705.0	676.9	28.09	25.101		
6,450.0	6,352.8	6,399.7	6,352.1	18.2	14.1	-90.03	48.8	-29.7	705.0	676.7	28.32	24.894		
6,500.0	6,390.9	6,449.7	6,390.2	18.2	14.3	-90.04	48.8	2.6	705.0	676.4	28.64	24.619		
6,550.0	6,426.8	6,499.8	6,426.2	18.3	14.5	-90.04	48.8	37.4	705.0	675.9	29.06	24.262		
6,600.0	6,460.4	6,549.8	6,459.8	18.3	14.8	-90.05	48.8	74.4	705.0	675.4	29.60	23.815		
6,650.0	6,491.5	6,599.8	6,491.0	18.4	15.1	-90.05	48.8	113.5	705.0	674.7	30.29	23.274		
6,700.0	6,519.9	6,649.9	6,519.5	18.5	15.6	-90.05	48.8	154.7	705.0	673.9	31.14	22.643		
6,750.0	6,545.6	6,699.9	6,545.3	18.6	16.1	-90.06	48.8	197.6	705.0	672.9	32.15	21.931		
6,800.0	6,568.5	6,750.0	6,568.2	18.8	16.7	-90.06	48.8	242.0	705.0	671.7	33.33	21.154		
6,850.0	6,588.4	6,800.0	6,588.1	19.1	17.4	-90.07	48.8	287.9	705.0	670.3	34.68	20.331		
6,900.0	6,605.2	6,850.1	6,605.0	19.6	18.2	-90.07	48.8	335.1	705.0	668.8	36.18	19.484		
6,950.0	6,618.9	6,900.1	6,618.8	20.2	19.0	-90.07	48.8	383.2	705.0	667.2	37.84	18.631		
7,000.0	6,629.5	6,950.2	6,629.4	20.9	19.9	-90.07	48.8	432.1	705.0	665.4	39.63	17.790		
7,050.0	6,636.8	7,000.3	6,636.7	21.7	20.8	-90.08	48.8	481.6	705.0	663.5	41.53	16.975		
7,100.0	6,640.9	7,050.3	6,640.8	22.6	21.8	-90.08	48.8	531.5	705.0	661.5	43.53	16.197		
7,144.4	6,641.8	7,094.7	6,641.7	23.5	22.8	-90.08	48.8	575.9	705.0	659.6	45.36	15.543		
7,200.0	6,641.3	7,150.4	6,641.2	24.6	24.0	-90.08	48.8	631.5	705.0	657.3	47.75	14.766		
7,300.0	6,640.3	7,250.4	6,640.3	26.8	26.2	-90.08	48.8	731.5	705.0	652.8	52.21	13.504		
7,400.0	6,639.4	7,350.4	6,639.4	29.1	28.5	-90.08	48.8	831.5	705.0	648.1	56.87	12.397		
7,500.0	6,638.5	7,450.4	6,638.5	31.4	30.9	-90.08	48.8	931.5	705.0	643.3	61.70	11.427		
7,600.0	6,637.6	7,550.4	6,637.6	33.9	33.4	-90.08	48.8	1,031.5	705.0	638.4	66.65	10.578		
7,700.0	6,636.7	7,650.4	6,636.7	36.3	35.9	-90.08	48.8	1,131.5	705.0	633.3	71.70	9.833		
7,800.0	6,635.8	7,750.4	6,635.8	38.9	38.5	-90.08	48.8	1,231.5	705.0	628.2	76.82	9.177		
7,900.0	6,634.9	7,850.4	6,634.9	41.4	41.1	-90.08	48.8	1,331.5	705.0	623.0	82.02	8.596		
8,000.0	6,634.0	7,950.4	6,634.0	44.0	43.7	-90.08	48.8	1,431.5	705.0	617.7	87.26	8.079		
8,100.0	6,633.1	8,050.4	6,633.1	46.7	46.3	-90.08	48.8	1,531.5	705.0	612.4	92.55	7.617		
8,200.0	6,632.2	8,150.4	6,632.2	49.3	49.0	-90.08	48.8	1,631.5	705.0	607.1	97.88	7.203		
8,300.0	6,631.3	8,250.4	6,631.2	52.0	51.7	-90.08	48.8	1,731.5	705.0	601.8	103.24	6.829		
8,400.0	6,630.4	8,350.4	6,630.3	54.6	54.4	-90.08	48.8	1,831.5	705.0	596.4	108.62	6.490		
8,500.0	6,629.5	8,450.4	6,629.4	57.3	57.1	-90.08	48.8	1,931.5	705.0	591.0	114.03	6.183		

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-302
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-302	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		
8,600.0	6,628.6	8,550.4	6,628.5	60.0	59.8	-90.08	48.8	2,031.5	705.0	585.5	119.46	5.902		
8,700.0	6,627.6	8,650.4	6,627.6	62.7	62.5	-90.08	48.8	2,131.5	705.0	580.1	124.90	5.644		
8,800.0	6,626.7	8,750.4	6,626.7	65.5	65.2	-90.08	48.8	2,231.4	705.0	574.6	130.36	5.408		
8,900.0	6,625.8	8,850.4	6,625.8	68.2	68.0	-90.08	48.8	2,331.4	705.0	569.2	135.83	5.190		
9,000.0	6,624.9	8,950.4	6,624.9	70.9	70.7	-90.08	48.8	2,431.4	705.0	563.7	141.31	4.989		
9,100.0	6,624.0	9,050.4	6,624.0	73.6	73.5	-90.08	48.8	2,531.4	705.0	558.2	146.81	4.802		
9,200.0	6,623.1	9,150.4	6,623.1	76.4	76.2	-90.08	48.8	2,631.4	705.0	552.7	152.31	4.629		
9,300.0	6,622.2	9,250.4	6,622.2	79.1	79.0	-90.08	48.8	2,731.4	705.0	547.2	157.82	4.467		
9,400.0	6,621.3	9,350.4	6,621.3	81.9	81.7	-90.08	48.8	2,831.4	705.0	541.6	163.34	4.316		
9,500.0	6,620.4	9,450.4	6,620.4	84.6	84.5	-90.08	48.8	2,931.4	705.0	536.1	168.87	4.175		
9,600.0	6,619.5	9,550.4	6,619.4	87.4	87.2	-90.08	48.8	3,031.4	705.0	530.6	174.40	4.042		
9,700.0	6,618.6	9,650.4	6,618.5	90.2	90.0	-90.08	48.8	3,131.4	705.0	525.0	179.93	3.918		
9,800.0	6,617.7	9,750.4	6,617.6	92.9	92.8	-90.08	48.8	3,231.4	705.0	519.5	185.48	3.801		
9,900.0	6,616.8	9,850.4	6,616.7	95.7	95.6	-90.08	48.8	3,331.4	705.0	514.0	191.02	3.691		
10,000.0	6,615.8	9,950.4	6,615.8	98.5	98.3	-90.08	48.8	3,431.4	705.0	508.4	196.57	3.586		
10,100.0	6,614.9	10,050.4	6,614.9	101.2	101.1	-90.08	48.8	3,531.4	705.0	502.8	202.13	3.488		
10,200.0	6,614.0	10,150.4	6,614.0	104.0	103.9	-90.08	48.8	3,631.4	705.0	497.3	207.69	3.394		
10,300.0	6,613.1	10,250.4	6,613.1	106.8	106.7	-90.08	48.8	3,731.4	705.0	491.7	213.25	3.306		
10,400.0	6,612.2	10,350.4	6,612.2	109.6	109.5	-90.08	48.8	3,831.4	705.0	486.2	218.81	3.222		
10,500.0	6,611.3	10,450.4	6,611.3	112.3	112.2	-90.08	48.8	3,931.4	705.0	480.6	224.38	3.142		
10,600.0	6,610.4	10,550.4	6,610.4	115.1	115.0	-90.08	48.8	4,031.4	705.0	475.0	229.95	3.066		
10,700.0	6,609.5	10,650.4	6,609.5	117.9	117.8	-90.08	48.8	4,131.4	705.0	469.4	235.52	2.993		
10,800.0	6,608.6	10,750.4	6,608.6	120.7	120.6	-90.08	48.8	4,231.4	705.0	463.9	241.09	2.924		
10,900.0	6,607.7	10,850.4	6,607.6	123.5	123.4	-90.08	48.8	4,331.4	705.0	458.3	246.67	2.858		
11,000.0	6,606.8	10,950.4	6,606.7	126.3	126.2	-90.08	48.8	4,431.4	705.0	452.7	252.25	2.795		
11,100.0	6,605.9	11,050.4	6,605.8	129.0	129.0	-90.08	48.8	4,531.4	705.0	447.1	257.83	2.734		
11,200.0	6,605.0	11,150.4	6,604.9	131.8	131.7	-90.08	48.8	4,631.3	705.0	441.6	263.41	2.676		
11,300.0	6,604.0	11,250.4	6,604.0	134.6	134.5	-90.08	48.8	4,731.3	705.0	436.0	268.99	2.621		
11,400.0	6,603.1	11,350.4	6,603.1	137.4	137.3	-90.08	48.8	4,831.3	705.0	430.4	274.58	2.567		
11,500.0	6,602.2	11,450.4	6,602.2	140.2	140.1	-90.08	48.8	4,931.3	705.0	424.8	280.16	2.516		
11,600.0	6,601.3	11,550.4	6,601.3	143.0	142.9	-90.08	48.8	5,031.3	705.0	419.2	285.75	2.467		
11,700.0	6,600.4	11,650.4	6,600.4	145.8	145.7	-90.08	48.8	5,131.3	705.0	413.6	291.34	2.420		
11,800.0	6,599.5	11,750.4	6,599.5	148.6	148.5	-90.08	48.8	5,231.3	705.0	408.0	296.93	2.374		
11,900.0	6,598.6	11,850.4	6,598.6	151.4	151.3	-90.08	48.8	5,331.3	705.0	402.4	302.52	2.330		
12,000.0	6,597.7	11,950.4	6,597.7	154.2	154.1	-90.08	48.8	5,431.3	705.0	396.8	308.11	2.288		
12,100.0	6,596.8	12,050.4	6,596.8	157.0	156.9	-90.08	48.8	5,531.3	705.0	391.3	313.71	2.247		
12,200.0	6,595.9	12,150.4	6,595.9	159.7	159.7	-90.08	48.8	5,631.3	705.0	385.7	319.30	2.208		
12,300.0	6,595.0	12,250.4	6,594.9	162.5	162.5	-90.08	48.8	5,731.3	705.0	380.1	324.89	2.170		
12,400.0	6,594.1	12,350.4	6,594.0	165.3	165.3	-90.08	48.8	5,831.3	705.0	374.5	330.49	2.133		
12,500.0	6,593.2	12,450.4	6,593.1	168.1	168.1	-90.08	48.8	5,931.3	705.0	368.9	336.09	2.098		
12,600.0	6,592.2	12,550.4	6,592.2	170.9	170.9	-90.08	48.8	6,031.3	705.0	363.3	341.68	2.063		
12,700.0	6,591.3	12,650.4	6,591.3	173.7	173.7	-90.08	48.8	6,131.3	705.0	357.7	347.28	2.030		
12,800.0	6,590.4	12,750.4	6,590.4	176.5	176.5	-90.08	48.8	6,231.3	704.9	352.1	352.88	1.998		
12,900.0	6,589.5	12,850.4	6,589.5	179.3	179.3	-90.08	48.8	6,331.3	704.9	346.5	358.48	1.966		
13,000.0	6,588.6	12,950.4	6,588.6	182.1	182.1	-90.08	48.8	6,431.3	704.9	340.9	364.08	1.936		
13,100.0	6,587.7	13,050.4	6,587.7	184.9	184.9	-90.08	48.8	6,531.3	704.9	335.3	369.68	1.907		
13,200.0	6,586.8	13,150.4	6,586.8	187.7	187.7	-90.08	48.8	6,631.3	704.9	329.7	375.28	1.878		
13,300.0	6,585.9	13,250.4	6,585.9	190.5	190.5	-90.08	48.8	6,731.3	704.9	324.1	380.88	1.851		
13,400.0	6,585.0	13,350.4	6,585.0	193.3	193.3	-90.08	48.8	6,831.3	704.9	318.5	386.49	1.824		
13,500.0	6,584.1	13,450.4	6,584.1	196.1	196.1	-90.08	48.8	6,931.3	704.9	312.9	392.09	1.798		
13,600.0	6,583.2	13,550.4	6,583.1	198.9	198.9	-90.08	48.8	7,031.2	704.9	307.3	397.69	1.773		

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-302
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-302	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	
13,700.0	6,582.3	13,650.4	6,582.2	201.7	201.7	-90.08	48.8	7,131.2	704.9	301.6	403.29	1.748		
13,723.4	6,582.1	13,673.8	6,582.0	202.4	202.3	-90.08	48.8	7,154.7	704.9	300.3	404.61	1.742		
13,729.2	6,582.0	13,676.6	6,582.0	202.5	202.4	-90.08	48.8	7,157.5	704.9	300.1	404.85	1.741 SF		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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						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	35.69	12.0	8.6	14.8	14.8	0.00	N/A		
100.0	100.0	99.0	99.0	0.1	0.1	35.69	12.0	8.6	14.8	14.6	0.22	66.191		
200.0	200.0	199.0	199.0	0.3	0.3	35.69	12.0	8.6	14.8	14.1	0.67	22.027		
300.0	300.0	299.0	299.0	0.6	0.6	35.69	12.0	8.6	14.8	13.7	1.12	13.199		
400.0	400.0	399.0	399.0	0.8	0.8	35.69	12.0	8.6	14.8	13.2	1.57	9.422		
500.0	500.0	499.0	499.0	1.0	1.0	35.69	12.0	8.6	14.8	12.8	2.02	7.326		
600.0	600.0	599.0	599.0	1.2	1.2	35.69	12.0	8.6	14.8	12.3	2.47	5.993		
700.0	700.0	699.0	699.0	1.5	1.5	35.69	12.0	8.6	14.8	11.9	2.92	5.070		
800.0	800.0	799.0	799.0	1.7	1.7	35.69	12.0	8.6	14.8	11.4	3.37	4.394		
900.0	900.0	899.0	899.0	1.9	1.9	35.69	12.0	8.6	14.8	11.0	3.82	3.876		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	35.69	12.0	8.6	14.8	10.5	4.27	3.468 CC		
1,100.0	1,100.0	1,099.0	1,099.0	2.3	2.4	-162.38	12.0	8.6	16.0	11.4	4.69	3.421		
1,200.0	1,199.9	1,198.9	1,198.9	2.5	2.6	-165.80	12.0	8.6	19.8	14.7	5.09	3.894		
1,300.0	1,299.7	1,298.7	1,298.7	2.7	2.8	-169.29	12.0	8.6	26.2	20.7	5.50	4.769		
1,400.0	1,399.3	1,398.3	1,398.3	2.9	3.0	-172.04	12.0	8.6	35.2	29.3	5.91	5.968		
1,500.0	1,498.6	1,498.8	1,498.8	3.1	3.2	-174.15	10.9	8.1	45.7	39.4	6.29	7.257		
1,600.0	1,597.5	1,599.5	1,599.4	3.4	3.4	-175.97	7.4	6.3	56.1	49.4	6.66	8.429		
1,701.7	1,697.8	1,702.3	1,702.0	3.7	3.6	-177.65	1.4	3.2	66.8	59.7	7.03	9.489		
1,800.0	1,794.4	1,802.0	1,801.3	4.0	3.8	-179.18	-6.8	-0.9	75.8	68.4	7.43	10.205		
1,900.0	1,892.7	1,903.8	1,902.4	4.3	4.0	-179.26	-17.6	-6.3	82.5	74.7	7.85	10.516		
2,000.0	1,991.0	2,004.7	2,002.2	4.7	4.2	-177.63	-30.3	-12.7	87.1	78.8	8.28	10.518		
2,100.0	2,089.4	2,104.6	2,101.1	5.0	4.5	-176.13	-43.0	-19.2	91.4	82.7	8.72	10.484		
2,200.0	2,187.7	2,204.5	2,199.9	5.4	4.8	-174.78	-55.8	-25.7	95.8	86.6	9.17	10.447		
2,300.0	2,286.0	2,304.3	2,298.8	5.7	5.0	-173.54	-68.6	-32.1	100.2	90.6	9.63	10.407		
2,400.0	2,384.3	2,404.2	2,397.6	6.1	5.3	-172.40	-81.4	-38.6	104.7	94.6	10.10	10.365		
2,500.0	2,482.6	2,504.1	2,496.5	6.5	5.6	-171.36	-94.2	-45.1	109.2	98.7	10.58	10.323		
2,600.0	2,580.9	2,604.0	2,595.3	6.9	5.9	-170.41	-107.0	-51.5	113.8	102.7	11.07	10.279		
2,700.0	2,679.3	2,703.8	2,694.2	7.3	6.2	-169.52	-119.7	-58.0	118.4	106.8	11.57	10.234		
2,800.0	2,777.6	2,803.7	2,793.0	7.7	6.6	-168.71	-132.5	-64.5	123.0	110.9	12.07	10.189		
2,900.0	2,875.9	2,903.6	2,891.8	8.1	6.9	-167.95	-145.3	-70.9	127.6	115.1	12.58	10.145		
3,000.0	2,974.2	3,003.5	2,990.7	8.5	7.2	-167.25	-158.1	-77.4	132.3	119.2	13.10	10.101		
3,100.0	3,072.5	3,103.4	3,089.5	8.9	7.5	-166.59	-170.9	-83.9	137.0	123.3	13.62	10.057		
3,200.0	3,170.8	3,203.2	3,188.4	9.3	7.8	-165.98	-183.7	-90.4	141.6	127.5	14.15	10.014		
3,300.0	3,269.2	3,303.1	3,287.2	9.7	8.2	-165.40	-196.5	-96.8	146.4	131.7	14.68	9.972		
3,400.0	3,367.5	3,403.0	3,386.1	10.1	8.5	-164.86	-209.2	-103.3	151.1	135.9	15.21	9.931		
3,500.0	3,465.8	3,502.9	3,484.9	10.5	8.8	-164.36	-222.0	-109.8	155.8	140.1	15.75	9.891		
3,600.0	3,564.1	3,602.8	3,583.8	10.9	9.2	-163.88	-234.8	-116.2	160.5	144.3	16.30	9.851		
3,700.0	3,662.4	3,702.6	3,682.6	11.3	9.5	-163.44	-247.6	-122.7	165.3	148.5	16.84	9.813		
3,800.0	3,760.8	3,802.5	3,781.5	11.7	9.9	-163.01	-260.4	-129.2	170.1	152.7	17.40	9.776		
3,900.0	3,859.1	3,902.4	3,880.3	12.1	10.2	-162.61	-273.2	-135.6	174.8	156.9	17.95	9.741		
4,000.0	3,957.4	4,002.3	3,979.1	12.5	10.5	-162.23	-286.0	-142.1	179.6	161.1	18.51	9.706		
4,100.0	4,055.7	4,102.2	4,078.0	12.9	10.9	-161.87	-298.7	-148.6	184.4	165.3	19.07	9.672		
4,200.0	4,154.0	4,202.0	4,176.8	13.3	11.2	-161.53	-311.5	-155.0	189.2	169.6	19.63	9.640		
4,300.0	4,252.3	4,301.9	4,275.7	13.8	11.6	-161.21	-324.3	-161.5	194.0	173.8	20.19	9.608		
4,400.0	4,350.7	4,401.8	4,374.5	14.2	11.9	-160.90	-337.1	-168.0	198.8	178.0	20.76	9.577		
4,500.0	4,449.0	4,501.7	4,473.4	14.6	12.3	-160.61	-349.9	-174.4	203.6	182.3	21.33	9.548		
4,600.0	4,547.3	4,601.5	4,572.2	15.0	12.6	-160.33	-362.7	-180.9	208.4	186.5	21.90	9.519		
4,700.0	4,645.6	4,696.4	4,666.2	15.4	12.9	-160.21	-373.9	-186.6	214.2	191.8	22.42	9.556		
4,800.0	4,743.9	4,789.8	4,759.2	15.8	13.1	-160.50	-382.2	-190.8	222.8	199.9	22.87	9.744		
4,833.3	4,776.7	4,820.8	4,790.1	16.0	13.2	-160.67	-384.4	-191.9	226.3	203.3	23.00	9.837		
4,900.0	4,842.4	4,882.8	4,851.9	16.2	13.3	-161.12	-387.9	-193.6	233.5	210.2	23.27	10.032		

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-302
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-302	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	4,941.4	4,975.4	4,944.5	16.4	13.5	161.82	-390.8	-195.1	243.9	220.3	23.62	10.329		
5,100.0	5,040.8	5,070.7	5,039.8	16.7	13.6	162.54	-391.3	-195.4	253.7	229.8	23.92	10.604		
5,200.0	5,140.5	5,170.4	5,139.5	16.9	13.8	163.07	-391.3	-195.4	260.7	236.4	24.22	10.762		
5,300.0	5,240.4	5,270.3	5,239.4	17.0	13.9	163.33	-391.3	-195.4	264.3	239.8	24.51	10.785		
5,359.6	5,300.0	5,329.9	5,299.0	17.1	14.0	-0.08	-391.3	-195.4	264.9	234.6	30.30	8.744		
5,400.0	5,340.4	5,370.3	5,339.4	17.2	14.1	-0.08	-391.3	-195.4	264.9	234.5	30.42	8.709		
5,500.0	5,440.4	5,470.3	5,439.4	17.3	14.2	-0.08	-391.3	-195.4	264.9	234.2	30.71	8.628		
5,600.0	5,540.4	5,570.3	5,539.4	17.4	14.4	-0.08	-391.3	-195.4	264.9	233.9	31.00	8.547		
5,700.0	5,640.4	5,670.3	5,639.4	17.5	14.6	-0.08	-391.3	-195.4	264.9	233.6	31.29	8.466		
5,800.0	5,740.4	5,770.3	5,739.4	17.7	14.7	-0.08	-391.3	-195.4	264.9	233.3	31.59	8.386		
5,868.0	5,808.4	5,838.3	5,807.4	17.8	14.8	-0.08	-391.3	-195.4	264.9	233.1	31.80	8.332		
5,900.0	5,840.4	5,870.3	5,839.4	17.8	14.9	0.06	-391.3	-194.7	264.9	233.0	31.90	8.304		
5,937.4	5,877.8	5,907.6	5,876.6	17.8	14.9	0.59	-391.3	-192.3	264.9	232.9	32.05	8.266		
5,950.0	5,890.4	5,920.1	5,889.0	17.9	15.0	-89.16	-391.3	-191.0	265.0	238.2	26.73	9.913		
6,000.0	5,940.3	5,969.5	5,937.9	17.9	15.0	-88.20	-391.3	-184.2	265.1	238.3	26.79	9.894		
6,050.0	5,990.0	6,018.6	5,986.0	18.0	15.1	-87.25	-391.3	-174.3	265.2	238.4	26.83	9.885		
6,100.0	6,039.2	6,067.4	6,033.1	18.0	15.1	-86.31	-391.3	-161.4	265.5	238.6	26.86	9.883		
6,150.0	6,087.7	6,116.0	6,079.1	18.1	15.1	-85.39	-391.3	-145.6	265.8	238.9	26.89	9.885		
6,200.0	6,135.3	6,164.4	6,123.7	18.1	15.1	-84.50	-391.3	-127.0	266.2	239.2	26.92	9.887		
6,250.0	6,181.8	6,212.5	6,166.8	18.1	15.2	-83.63	-391.3	-105.8	266.6	239.6	26.96	9.887		
6,300.0	6,226.9	6,260.3	6,208.3	18.1	15.2	-82.79	-391.3	-82.0	267.0	240.0	27.03	9.878		
6,350.0	6,270.6	6,308.0	6,248.1	18.2	15.2	-81.99	-391.3	-55.7	267.5	240.4	27.14	9.857		
6,400.0	6,312.7	6,355.4	6,286.0	18.2	15.2	-81.23	-391.3	-27.2	268.1	240.8	27.30	9.819		
6,450.0	6,352.8	6,402.7	6,321.9	18.2	15.2	-80.50	-391.3	3.5	268.6	241.1	27.53	9.758		
6,500.0	6,390.9	6,450.0	6,355.9	18.2	15.3	-79.81	-391.3	36.4	269.2	241.3	27.84	9.669		
6,550.0	6,426.8	6,496.6	6,387.3	18.3	15.3	-79.17	-391.3	70.8	269.7	241.5	28.25	9.548		
6,600.0	6,460.4	6,543.3	6,416.7	18.3	15.4	-78.57	-391.3	107.1	270.3	241.5	28.77	9.396		
6,650.0	6,491.5	6,589.9	6,443.7	18.4	15.5	-78.03	-391.3	145.1	270.8	241.4	29.42	9.206		
6,700.0	6,519.9	6,636.3	6,468.2	18.5	15.7	-77.53	-391.3	184.5	271.3	241.1	30.20	8.985		
6,750.0	6,545.6	6,682.7	6,490.3	18.6	16.2	-77.08	-391.3	225.2	271.8	240.7	31.12	8.736		
6,800.0	6,568.5	6,728.9	6,509.8	18.8	16.8	-76.68	-391.3	267.1	272.3	240.1	32.17	8.462		
6,850.0	6,588.4	6,775.0	6,526.7	19.1	17.5	-76.33	-391.3	310.0	272.6	239.3	33.37	8.171		
6,900.0	6,605.2	6,821.1	6,541.0	19.6	18.2	-76.04	-391.3	353.8	273.0	238.3	34.70	7.868		
6,950.0	6,618.9	6,867.1	6,552.6	20.2	19.0	-75.80	-391.3	398.3	273.3	237.1	36.15	7.560		
7,000.0	6,629.5	6,913.0	6,561.5	20.9	19.8	-75.62	-391.3	443.4	273.5	235.8	37.71	7.252		
7,050.0	6,636.8	6,958.9	6,567.6	21.7	20.7	-75.49	-391.3	488.8	273.6	234.3	39.38	6.949		
7,100.0	6,640.9	7,004.8	6,571.0	22.6	21.7	-75.42	-391.3	534.6	273.7	232.6	41.13	6.655		
7,144.4	6,641.8	7,045.7	6,571.8	23.5	22.5	-75.40	-391.3	575.5	273.8	231.0	42.76	6.402		
7,163.3	6,641.6	7,064.3	6,571.6	23.9	22.9	-75.40	-391.3	594.1	273.8	230.2	43.54	6.287		
7,200.0	6,641.3	7,101.1	6,571.3	24.6	23.7	-75.40	-391.3	630.9	273.8	228.7	45.08	6.073		
7,300.0	6,640.3	7,201.1	6,570.3	26.8	26.0	-75.40	-391.3	730.9	273.8	224.3	49.45	5.536		
7,400.0	6,639.4	7,301.1	6,569.4	29.1	28.3	-75.40	-391.3	830.9	273.8	219.7	54.02	5.067		
7,500.0	6,638.5	7,401.1	6,568.5	31.4	30.7	-75.40	-391.3	930.9	273.8	215.0	58.74	4.660		
7,600.0	6,637.6	7,501.1	6,567.6	33.9	33.2	-75.40	-391.3	1,030.9	273.8	210.2	63.58	4.305		
7,700.0	6,636.7	7,601.1	6,566.7	36.3	35.7	-75.40	-391.3	1,130.9	273.8	205.2	68.51	3.996		
7,800.0	6,635.8	7,701.1	6,565.8	38.9	38.3	-75.40	-391.3	1,230.9	273.7	200.2	73.52	3.723		
7,900.0	6,634.9	7,801.1	6,564.9	41.4	40.9	-75.40	-391.3	1,330.8	273.7	195.2	78.58	3.484		
8,000.0	6,634.0	7,901.1	6,564.0	44.0	43.5	-75.40	-391.3	1,430.8	273.7	190.0	83.70	3.271		
8,100.0	6,633.1	8,001.1	6,563.1	46.7	46.2	-75.40	-391.3	1,530.8	273.7	184.9	88.85	3.081		
8,200.0	6,632.2	8,101.1	6,562.2	49.3	48.9	-75.40	-391.3	1,630.8	273.7	179.7	94.04	2.911		
8,300.0	6,631.3	8,201.1	6,561.3	52.0	51.5	-75.40	-391.3	1,730.8	273.7	174.5	99.26	2.758		

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-302
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-302	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		Connie 5N64W26EF Pad Sec.26-T5N-R64W - Connie 26F-212 - Wellbore #1 - Plan #1 (11-3-15)											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 (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	6,630.4	8,301.1	6,560.4	54.6	54.2	-75.40	-391.3	1,830.8	273.7	169.2	104.50	2.620			
8,500.0	6,629.5	8,401.1	6,559.5	57.3	56.9	-75.40	-391.3	1,930.8	273.7	164.0	109.76	2.494			
8,600.0	6,628.6	8,501.1	6,558.5	60.0	59.7	-75.40	-391.3	2,030.8	273.7	158.7	115.04	2.380			
8,700.0	6,627.6	8,601.1	6,557.6	62.7	62.4	-75.40	-391.3	2,130.8	273.7	153.4	120.33	2.275			
8,800.0	6,626.7	8,701.1	6,556.7	65.5	65.1	-75.40	-391.3	2,230.8	273.7	148.1	125.64	2.179			
8,900.0	6,625.8	8,801.1	6,555.8	68.2	67.8	-75.40	-391.3	2,330.8	273.7	142.8	130.96	2.090			
9,000.0	6,624.9	8,901.1	6,554.9	70.9	70.6	-75.40	-391.3	2,430.8	273.7	137.4	136.29	2.008			
9,100.0	6,624.0	9,001.1	6,554.0	73.6	73.3	-75.40	-391.3	2,530.8	273.7	132.1	141.63	1.933			
9,200.0	6,623.1	9,101.1	6,553.1	76.4	76.1	-75.40	-391.3	2,630.8	273.7	126.8	146.98	1.862			
9,300.0	6,622.2	9,201.1	6,552.2	79.1	78.8	-75.40	-391.3	2,730.8	273.7	121.4	152.34	1.797			
9,400.0	6,621.3	9,301.1	6,551.3	81.9	81.6	-75.40	-391.3	2,830.8	273.7	116.0	157.70	1.736			
9,500.0	6,620.4	9,401.1	6,550.4	84.6	84.4	-75.40	-391.3	2,930.8	273.7	110.7	163.07	1.679			
9,600.0	6,619.5	9,501.1	6,549.5	87.4	87.1	-75.40	-391.3	3,030.8	273.7	105.3	168.44	1.625			
9,700.0	6,618.6	9,601.1	6,548.6	90.2	89.9	-75.40	-391.3	3,130.8	273.7	99.9	173.82	1.575			
9,800.0	6,617.7	9,701.1	6,547.7	92.9	92.7	-75.40	-391.3	3,230.8	273.7	94.5	179.20	1.527			
9,900.0	6,616.8	9,801.1	6,546.7	95.7	95.4	-75.40	-391.3	3,330.8	273.7	89.1	184.59	1.483 Level 3			
10,000.0	6,615.8	9,901.1	6,545.8	98.5	98.2	-75.40	-391.3	3,430.8	273.7	83.7	189.98	1.441 Level 3			
10,100.0	6,614.9	10,001.1	6,544.9	101.2	101.0	-75.40	-391.3	3,530.8	273.7	78.3	195.38	1.401 Level 3			
10,200.0	6,614.0	10,101.1	6,544.0	104.0	103.8	-75.40	-391.3	3,630.8	273.7	73.0	200.78	1.363 Level 3			
10,300.0	6,613.1	10,201.1	6,543.1	106.8	106.6	-75.40	-391.3	3,730.7	273.7	67.5	206.18	1.328 Level 3			
10,400.0	6,612.2	10,301.1	6,542.2	109.6	109.3	-75.40	-391.3	3,830.7	273.7	62.1	211.58	1.294 Level 3			
10,500.0	6,611.3	10,401.1	6,541.3	112.3	112.1	-75.40	-391.3	3,930.7	273.7	56.7	216.99	1.261 Level 3			
10,600.0	6,610.4	10,501.1	6,540.4	115.1	114.9	-75.40	-391.3	4,030.7	273.7	51.3	222.40	1.231 Level 2			
10,700.0	6,609.5	10,601.1	6,539.5	117.9	117.7	-75.40	-391.3	4,130.7	273.7	45.9	227.81	1.202 Level 2			
10,800.0	6,608.6	10,701.1	6,538.6	120.7	120.5	-75.40	-391.3	4,230.7	273.7	40.5	233.22	1.174 Level 2			
10,900.0	6,607.7	10,801.1	6,537.7	123.5	123.3	-75.40	-391.3	4,330.7	273.7	35.1	238.63	1.147 Level 2			
11,000.0	6,606.8	10,901.1	6,536.8	126.3	126.1	-75.40	-391.3	4,430.7	273.7	29.7	244.05	1.122 Level 2			
11,100.0	6,605.9	11,001.1	6,535.9	129.0	128.9	-75.40	-391.3	4,530.7	273.7	24.3	249.47	1.097 Level 2			
11,200.0	6,605.0	11,101.1	6,534.9	131.8	131.6	-75.40	-391.3	4,630.7	273.7	18.8	254.89	1.074 Level 2			
11,300.0	6,604.0	11,201.1	6,534.0	134.6	134.4	-75.40	-391.3	4,730.7	273.7	13.4	260.31	1.052 Level 2			
11,400.0	6,603.1	11,301.1	6,533.1	137.4	137.2	-75.40	-391.3	4,830.7	273.7	8.0	265.73	1.030 Level 2			
11,500.0	6,602.2	11,401.1	6,532.2	140.2	140.0	-75.40	-391.3	4,930.7	273.7	2.6	271.15	1.009 Level 2			
11,600.0	6,601.3	11,501.1	6,531.3	143.0	142.8	-75.40	-391.3	5,030.7	273.7	-2.9	276.58	0.990 Level 1			
11,700.0	6,600.4	11,601.1	6,530.4	145.8	145.6	-75.40	-391.3	5,130.7	273.7	-8.3	282.00	0.971 Level 1			
11,800.0	6,599.5	11,701.1	6,529.5	148.6	148.4	-75.40	-391.3	5,230.7	273.7	-13.7	287.43	0.952 Level 1			
11,900.0	6,598.6	11,801.1	6,528.6	151.4	151.2	-75.40	-391.3	5,330.7	273.7	-19.1	292.86	0.935 Level 1			
12,000.0	6,597.7	11,901.1	6,527.7	154.2	154.0	-75.40	-391.3	5,430.7	273.7	-24.6	298.29	0.918 Level 1			
12,100.0	6,596.8	12,001.1	6,526.8	157.0	156.8	-75.40	-391.3	5,530.7	273.7	-30.0	303.72	0.901 Level 1			
12,200.0	6,595.9	12,101.1	6,525.9	159.7	159.6	-75.40	-391.3	5,630.7	273.7	-35.4	309.15	0.885 Level 1			
12,300.0	6,595.0	12,201.1	6,525.0	162.5	162.4	-75.40	-391.3	5,730.7	273.7	-40.9	314.58	0.870 Level 1			
12,400.0	6,594.1	12,301.1	6,524.1	165.3	165.2	-75.40	-391.3	5,830.7	273.7	-46.3	320.01	0.855 Level 1			
12,500.0	6,593.2	12,401.1	6,523.2	168.1	168.0	-75.40	-391.3	5,930.7	273.7	-51.7	325.44	0.841 Level 1			
12,600.0	6,592.2	12,501.1	6,522.2	170.9	170.8	-75.40	-391.3	6,030.7	273.7	-57.2	330.88	0.827 Level 1			
12,700.0	6,591.3	12,601.1	6,521.3	173.7	173.6	-75.40	-391.3	6,130.6	273.7	-62.6	336.31	0.814 Level 1			
12,800.0	6,590.4	12,701.1	6,520.4	176.5	176.4	-75.40	-391.3	6,230.6	273.7	-68.0	341.75	0.801 Level 1			
12,900.0	6,589.5	12,801.1	6,519.5	179.3	179.2	-75.40	-391.3	6,330.6	273.7	-73.5	347.18	0.788 Level 1			
13,000.0	6,588.6	12,901.1	6,518.6	182.1	182.0	-75.40	-391.3	6,430.6	273.7	-78.9	352.62	0.776 Level 1			
13,100.0	6,587.7	13,001.1	6,517.7	184.9	184.8	-75.40	-391.3	6,530.6	273.7	-84.4	358.05	0.764 Level 1			
13,200.0	6,586.8	13,101.1	6,516.8	187.7	187.6	-75.40	-391.3	6,630.6	273.7	-89.8	363.49	0.753 Level 1			
13,300.0	6,585.9	13,201.1	6,515.9	190.5	190.4	-75.40	-391.3	6,730.6	273.7	-95.2	368.93	0.742 Level 1			
13,400.0	6,585.0	13,301.1	6,515.0	193.3	193.2	-75.40	-391.3	6,830.6	273.7	-100.7	374.37	0.731 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-302
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-302	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	6,584.1	13,401.1	6,514.1	196.1	196.0	-75.40	-391.3	6,930.6	273.7	-106.1	379.80	0.721	Level 1	
13,600.0	6,583.2	13,501.1	6,513.2	198.9	198.8	-75.40	-391.3	7,030.6	273.7	-111.5	385.24	0.710	Level 1	
13,700.0	6,582.3	13,601.1	6,512.3	201.7	201.6	-75.40	-391.3	7,130.6	273.7	-117.0	390.68	0.701	Level 1	
13,724.4	6,582.0	13,625.4	6,512.0	202.4	202.3	-75.40	-391.3	7,155.0	273.7	-118.3	392.01	0.698	Level 1	
13,729.2	6,582.0	13,629.7	6,512.0	202.5	202.4	-75.40	-391.3	7,159.3	273.7	-118.6	392.26	0.698	Level 1, ES, SF	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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	-145.11	-12.4	-8.6	15.1	15.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-145.11	-12.4	-8.6	15.1	14.9	0.22	67.184		
200.0	200.0	200.0	200.0	0.3	0.3	-145.11	-12.4	-8.6	15.1	14.4	0.67	22.395		
300.0	300.0	300.0	300.0	0.6	0.6	-145.11	-12.4	-8.6	15.1	14.0	1.12	13.437		
400.0	400.0	400.0	400.0	0.8	0.8	-145.11	-12.4	-8.6	15.1	13.5	1.57	9.598		
500.0	500.0	500.0	500.0	1.0	1.0	-145.11	-12.4	-8.6	15.1	13.1	2.02	7.465		
600.0	600.0	600.0	600.0	1.2	1.2	-145.11	-12.4	-8.6	15.1	12.6	2.47	6.108		
700.0	700.0	700.0	700.0	1.5	1.5	-145.11	-12.4	-8.6	15.1	12.2	2.92	5.168		
800.0	800.0	800.0	800.0	1.7	1.7	-145.11	-12.4	-8.6	15.1	11.7	3.37	4.479 CC		
900.0	900.0	899.6	899.6	1.9	1.9	-146.88	-13.6	-8.9	16.3	12.5	3.79	4.293		
1,000.0	1,000.0	999.1	999.0	2.1	2.1	-150.95	-17.4	-9.7	19.9	15.8	4.20	4.753		
1,100.0	1,100.0	1,098.4	1,098.1	2.3	2.3	8.71	-23.7	-11.0	24.9	20.3	4.58	5.441		
1,200.0	1,199.9	1,197.6	1,196.9	2.5	2.5	5.77	-32.5	-12.8	29.9	25.0	4.95	6.043		
1,300.0	1,299.7	1,296.6	1,295.2	2.7	2.7	3.32	-43.8	-15.1	34.9	29.6	5.33	6.548		
1,400.0	1,399.3	1,395.5	1,393.1	2.9	3.0	1.18	-57.6	-18.0	39.9	34.2	5.72	6.972		
1,500.0	1,498.6	1,494.3	1,490.5	3.1	3.2	-0.75	-73.8	-21.3	44.9	38.8	6.13	7.330		
1,600.0	1,597.5	1,592.9	1,587.3	3.4	3.6	-2.54	-92.5	-25.2	49.9	43.4	6.54	7.632		
1,701.7	1,697.8	1,693.3	1,685.2	3.7	4.0	-4.26	-114.0	-29.6	55.0	48.0	6.98	7.886		
1,800.0	1,794.4	1,791.5	1,780.8	4.0	4.4	-5.76	-135.9	-34.1	59.7	52.2	7.43	8.029		
1,900.0	1,892.7	1,891.4	1,878.0	4.3	4.8	-7.08	-158.2	-38.8	64.4	56.5	7.90	8.153		
2,000.0	1,991.0	1,991.2	1,975.3	4.7	5.2	-8.21	-180.5	-43.4	69.2	60.8	8.38	8.253		
2,100.0	2,089.4	2,091.1	2,072.5	5.0	5.7	-9.19	-202.9	-48.0	74.0	65.1	8.88	8.336		
2,200.0	2,187.7	2,191.0	2,169.8	5.4	6.1	-10.05	-225.2	-52.6	78.8	69.4	9.38	8.405		
2,300.0	2,286.0	2,290.9	2,267.0	5.7	6.6	-10.82	-247.5	-57.2	83.7	73.8	9.89	8.461		
2,400.0	2,384.3	2,390.7	2,364.3	6.1	7.0	-11.50	-269.8	-61.8	88.5	78.1	10.40	8.508		
2,500.0	2,482.6	2,490.6	2,461.5	6.5	7.5	-12.11	-292.1	-66.4	93.4	82.4	10.93	8.546		
2,600.0	2,580.9	2,590.5	2,558.7	6.9	8.0	-12.66	-314.4	-71.0	98.2	86.8	11.45	8.577		
2,700.0	2,679.3	2,690.4	2,656.0	7.3	8.4	-13.15	-336.7	-75.6	103.1	91.1	11.99	8.603		
2,800.0	2,777.6	2,790.2	2,753.2	7.7	8.9	-13.61	-359.1	-80.2	108.0	95.5	12.53	8.623		
2,900.0	2,875.9	2,890.1	2,850.5	8.1	9.4	-14.02	-381.4	-84.8	112.9	99.8	13.07	8.640		
3,000.0	2,974.2	2,990.0	2,947.7	8.5	9.9	-14.40	-403.7	-89.4	117.8	104.2	13.61	8.654		
3,100.0	3,072.5	3,089.9	3,045.0	8.9	10.3	-14.75	-426.0	-94.0	122.7	108.5	14.16	8.665		
3,200.0	3,170.8	3,189.8	3,142.2	9.3	10.8	-15.07	-448.3	-98.7	127.6	112.9	14.71	8.674		
3,300.0	3,269.2	3,289.6	3,239.4	9.7	11.3	-15.37	-470.6	-103.3	132.5	117.3	15.27	8.680		
3,400.0	3,367.5	3,389.5	3,336.7	10.1	11.8	-15.64	-492.9	-107.9	137.4	121.6	15.83	8.685		
3,500.0	3,465.8	3,489.4	3,433.9	10.5	12.3	-15.90	-515.3	-112.5	142.4	126.0	16.38	8.689		
3,600.0	3,564.1	3,589.3	3,531.2	10.9	12.7	-16.14	-537.6	-117.1	147.3	130.3	16.95	8.692		
3,700.0	3,662.4	3,689.1	3,628.4	11.3	13.2	-16.37	-559.9	-121.7	152.2	134.7	17.51	8.693		
3,800.0	3,760.8	3,789.0	3,725.7	11.7	13.7	-16.58	-582.2	-126.3	157.1	139.1	18.07	8.694		
3,900.0	3,859.1	3,888.9	3,822.9	12.1	14.2	-16.77	-604.5	-130.9	162.1	143.4	18.64	8.694		
4,000.0	3,957.4	3,988.8	3,920.1	12.5	14.7	-16.96	-626.8	-135.5	167.0	147.8	19.21	8.694		
4,100.0	4,055.7	4,088.6	4,017.4	12.9	15.2	-17.14	-649.2	-140.1	171.9	152.1	19.78	8.693		
4,200.0	4,154.0	4,188.5	4,114.6	13.3	15.6	-17.30	-671.5	-144.7	176.9	156.5	20.35	8.692		
4,300.0	4,252.3	4,288.4	4,211.9	13.8	16.1	-17.46	-693.8	-149.3	181.8	160.9	20.92	8.690		
4,400.0	4,350.7	4,388.3	4,309.1	14.2	16.6	-17.61	-716.1	-153.9	186.7	165.2	21.49	8.688		
4,500.0	4,449.0	4,488.2	4,406.4	14.6	17.1	-17.75	-738.4	-158.6	191.7	169.6	22.07	8.686		
4,600.0	4,547.3	4,588.0	4,503.6	15.0	17.6	-17.88	-760.7	-163.2	196.6	174.0	22.64	8.683		
4,700.0	4,645.6	4,687.9	4,600.8	15.4	18.1	-18.01	-783.0	-167.8	201.5	178.3	23.22	8.681		
4,800.0	4,743.9	4,787.8	4,698.1	15.8	18.6	-18.13	-805.4	-172.4	206.5	182.7	23.79	8.678		
4,833.3	4,776.7	4,821.0	4,730.5	16.0	18.7	-18.17	-812.8	-173.9	208.1	184.1	23.99	8.677		
4,900.0	4,842.4	4,887.6	4,795.3	16.2	19.1	-18.20	-827.7	-177.0	212.2	187.8	24.35	8.713		

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-302
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-302	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	4,941.4	4,987.2	4,892.3	16.4	19.5	-18.04	-849.9	-181.6	221.0	196.1	24.81	8.905		
5,100.0	5,040.8	5,086.5	4,988.9	16.7	20.0	-17.64	-872.1	-186.2	233.1	207.9	25.21	9.246		
5,200.0	5,140.5	5,188.9	5,088.7	16.9	20.5	-17.06	-894.7	-190.8	248.2	222.7	25.54	9.720		
5,300.0	5,240.4	5,297.1	5,194.8	17.0	20.8	-16.44	-915.3	-195.1	263.7	237.9	25.79	10.224		
5,359.6	5,300.0	5,361.9	5,258.8	17.1	21.0	-179.52	-925.8	-197.3	272.8	235.2	37.54	7.265		
5,400.0	5,340.4	5,406.1	5,302.4	17.2	21.1	-179.26	-932.1	-198.6	278.6	240.8	37.74	7.382		
5,500.0	5,440.4	5,516.1	5,411.7	17.3	21.4	-178.77	-945.0	-201.2	290.3	252.2	38.15	7.610		
5,600.0	5,540.4	5,627.0	5,522.2	17.4	21.6	-178.45	-953.9	-203.0	298.3	259.8	38.51	7.747		
5,700.0	5,640.4	5,738.4	5,633.5	17.5	21.8	-178.29	-958.5	-204.0	302.5	263.7	38.82	7.794		
5,800.0	5,740.4	5,845.3	5,740.4	17.7	21.9	-178.27	-959.3	-204.2	303.2	264.1	39.09	7.757		
5,900.0	5,840.4	5,945.3	5,840.4	17.8	22.0	-178.27	-959.3	-204.2	303.2	263.9	39.33	7.710		
5,937.4	5,877.8	5,982.8	5,877.8	17.8	22.0	-178.27	-959.3	-204.2	303.2	263.8	39.42	7.693		
5,950.0	5,890.4	5,995.3	5,890.4	17.9	22.0	91.75	-959.3	-204.2	303.2	275.3	27.97	10.840		
6,000.0	5,940.3	6,045.3	5,940.3	17.9	22.1	92.21	-959.3	-204.2	303.3	275.2	28.08	10.802		
6,050.0	5,990.0	6,095.7	5,990.7	18.0	22.2	93.15	-959.3	-203.5	303.6	275.4	28.12	10.794		
6,100.0	6,039.2	6,146.7	6,041.6	18.0	22.2	94.13	-959.3	-199.6	303.9	275.7	28.15	10.796		
6,150.0	6,087.7	6,198.1	6,092.4	18.1	22.2	95.09	-959.3	-192.3	304.3	276.1	28.17	10.804		
6,200.0	6,135.3	6,249.8	6,143.0	18.1	22.3	96.02	-959.3	-181.5	304.8	276.6	28.18	10.816		
6,250.0	6,181.8	6,301.9	6,193.1	18.1	22.3	96.94	-959.3	-167.2	305.3	277.1	28.20	10.828		
6,300.0	6,226.9	6,354.4	6,242.5	18.1	22.3	97.82	-959.3	-149.4	306.0	277.7	28.23	10.837		
6,350.0	6,270.6	6,407.3	6,290.8	18.2	22.3	98.66	-959.3	-128.0	306.6	278.3	28.29	10.838		
6,400.0	6,312.7	6,460.5	6,337.9	18.2	22.4	99.47	-959.3	-103.2	307.3	278.9	28.38	10.826		
6,450.0	6,352.8	6,514.0	6,383.4	18.2	22.4	100.24	-959.3	-75.0	308.0	279.5	28.53	10.796		
6,500.0	6,390.9	6,567.8	6,427.0	18.2	22.4	100.96	-959.3	-43.5	308.7	280.0	28.74	10.741		
6,550.0	6,426.8	6,622.0	6,468.6	18.3	22.4	101.62	-959.3	-8.8	309.5	280.4	29.05	10.655		
6,600.0	6,460.4	6,676.5	6,507.8	18.3	22.5	102.24	-959.3	29.0	310.2	280.7	29.45	10.532		
6,650.0	6,491.5	6,731.2	6,544.4	18.4	22.5	102.80	-959.3	69.7	310.8	280.9	29.96	10.375		
6,700.0	6,519.9	6,786.2	6,578.1	18.5	22.6	103.29	-959.3	113.1	311.5	280.8	30.63	10.170		
6,750.0	6,545.6	6,841.4	6,608.7	18.6	22.7	103.73	-959.3	159.0	312.0	280.6	31.44	9.925		
6,800.0	6,568.5	6,896.8	6,636.1	18.8	22.8	104.11	-959.3	207.2	312.5	280.1	32.41	9.643		
6,850.0	6,588.4	6,952.4	6,659.9	19.1	23.0	104.41	-959.3	257.4	312.9	279.4	33.55	9.327		
6,900.0	6,605.2	7,008.1	6,680.1	19.6	23.2	104.66	-959.3	309.3	313.3	278.4	34.86	8.987		
6,950.0	6,618.9	7,063.9	6,696.4	20.2	23.5	104.83	-959.3	362.7	313.5	277.2	36.33	8.630		
7,000.0	6,629.5	7,119.8	6,708.9	20.9	24.0	104.93	-959.3	417.1	313.7	275.7	37.94	8.267		
7,050.0	6,636.8	7,175.8	6,717.3	21.7	24.6	104.97	-959.3	472.4	313.7	274.0	39.69	7.905		
7,100.0	6,640.9	7,231.7	6,721.7	22.6	25.3	104.94	-959.3	528.2	313.7	272.1	41.55	7.550		
7,142.1	6,641.8	7,277.6	6,722.2	23.5	25.9	104.87	-959.3	574.1	313.6	270.4	43.16	7.265		
7,144.4	6,641.8	7,279.9	6,722.2	23.5	26.0	104.87	-959.3	576.4	313.6	270.3	43.25	7.251		
7,200.0	6,641.3	7,335.5	6,721.9	24.6	26.9	104.90	-959.3	632.0	313.6	268.1	45.54	6.886		
7,300.0	6,640.3	7,435.5	6,721.3	26.8	28.7	104.95	-959.3	732.0	313.7	263.9	49.85	6.294		
7,400.0	6,639.4	7,535.5	6,720.7	29.1	30.8	105.00	-959.3	832.0	313.8	259.4	54.35	5.773		
7,500.0	6,638.5	7,635.5	6,720.1	31.4	33.0	105.05	-959.3	932.0	313.9	254.9	59.01	5.319		
7,600.0	6,637.6	7,735.5	6,719.4	33.9	35.3	105.11	-959.3	1,032.0	313.9	250.2	63.79	4.922		
7,700.0	6,636.7	7,835.5	6,718.8	36.3	37.7	105.16	-959.3	1,132.0	314.0	245.4	68.66	4.574		
7,800.0	6,635.8	7,935.5	6,718.2	38.9	40.1	105.21	-959.3	1,232.0	314.1	240.5	73.61	4.267		
7,900.0	6,634.9	8,035.5	6,717.6	41.4	42.6	105.26	-959.3	1,332.0	314.2	235.6	78.61	3.996		
8,000.0	6,634.0	8,135.5	6,717.0	44.0	45.2	105.32	-959.3	1,432.0	314.3	230.6	83.67	3.756		
8,100.0	6,633.1	8,235.5	6,716.4	46.7	47.7	105.37	-959.3	1,532.0	314.3	225.6	88.77	3.541		
8,200.0	6,632.2	8,335.5	6,715.8	49.3	50.3	105.42	-959.3	1,632.0	314.4	220.5	93.90	3.348		
8,300.0	6,631.3	8,435.5	6,715.2	52.0	52.9	105.47	-959.3	1,732.0	314.5	215.4	99.06	3.175		
8,400.0	6,630.4	8,535.5	6,714.6	54.6	55.6	105.52	-959.3	1,832.0	314.6	210.3	104.24	3.018		

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-302
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-302	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
8,500.0	6,629.5	8,635.5	6,713.9	57.3	58.2	105.58	-959.3	1,932.0	314.6	205.2	109.44	2.875	
8,600.0	6,628.6	8,735.5	6,713.3	60.0	60.9	105.63	-959.3	2,032.0	314.7	200.1	114.66	2.745	
8,700.0	6,627.6	8,835.5	6,712.7	62.7	63.6	105.68	-959.3	2,132.0	314.8	194.9	119.89	2.626	
8,800.0	6,626.7	8,935.5	6,712.1	65.5	66.3	105.73	-959.3	2,232.0	314.9	189.8	125.13	2.516	
8,900.0	6,625.8	9,035.5	6,711.5	68.2	69.0	105.78	-959.3	2,332.0	315.0	184.6	130.38	2.416	
9,000.0	6,624.9	9,135.5	6,710.9	70.9	71.7	105.84	-959.3	2,432.0	315.1	179.4	135.65	2.323	
9,100.0	6,624.0	9,235.5	6,710.3	73.6	74.4	105.89	-959.3	2,531.9	315.1	174.2	140.91	2.236	
9,200.0	6,623.1	9,335.5	6,709.7	76.4	77.1	105.94	-959.3	2,631.9	315.2	169.0	146.19	2.156	
9,300.0	6,622.2	9,435.5	6,709.1	79.1	79.8	105.99	-959.3	2,731.9	315.3	163.8	151.47	2.082	
9,400.0	6,621.3	9,535.5	6,708.4	81.9	82.6	106.04	-959.3	2,831.9	315.4	158.6	156.75	2.012	
9,500.0	6,620.4	9,635.5	6,707.8	84.6	85.3	106.10	-959.3	2,931.9	315.5	153.4	162.04	1.947	
9,600.0	6,619.5	9,735.5	6,707.2	87.4	88.1	106.15	-959.3	3,031.9	315.5	148.2	167.33	1.886	
9,700.0	6,618.6	9,835.5	6,706.6	90.2	90.8	106.20	-959.3	3,131.9	315.6	143.0	172.63	1.828	
9,800.0	6,617.7	9,935.5	6,706.0	92.9	93.6	106.25	-959.3	3,231.9	315.7	137.8	177.92	1.774	
9,900.0	6,616.8	10,035.5	6,705.4	95.7	96.3	106.30	-959.3	3,331.9	315.8	132.6	183.22	1.724	
10,000.0	6,615.8	10,135.5	6,704.8	98.5	99.1	106.35	-959.3	3,431.9	315.9	127.4	188.52	1.676	
10,100.0	6,614.9	10,235.5	6,704.2	101.2	101.8	106.41	-959.3	3,531.9	316.0	122.1	193.82	1.630	
10,200.0	6,614.0	10,335.5	6,703.6	104.0	104.6	106.46	-959.3	3,631.9	316.0	116.9	199.12	1.587	
10,300.0	6,613.1	10,435.5	6,703.0	106.8	107.4	106.51	-959.3	3,731.9	316.1	111.7	204.42	1.546	
10,400.0	6,612.2	10,535.5	6,702.3	109.6	110.1	106.56	-959.3	3,831.9	316.2	106.5	209.72	1.508	
10,500.0	6,611.3	10,635.5	6,701.7	112.3	112.9	106.61	-959.3	3,931.9	316.3	101.3	215.02	1.471	Level 3
10,600.0	6,610.4	10,735.5	6,701.1	115.1	115.7	106.66	-959.3	4,031.9	316.4	96.1	220.32	1.436	Level 3
10,700.0	6,609.5	10,835.5	6,700.5	117.9	118.4	106.71	-959.3	4,131.9	316.5	90.8	225.62	1.403	Level 3
10,800.0	6,608.6	10,935.5	6,699.9	120.7	121.2	106.77	-959.3	4,231.9	316.6	85.6	230.92	1.371	Level 3
10,900.0	6,607.7	11,035.5	6,699.3	123.5	124.0	106.82	-959.3	4,331.9	316.6	80.4	236.22	1.340	Level 3
11,000.0	6,606.8	11,135.5	6,698.7	126.3	126.8	106.87	-959.3	4,431.9	316.7	75.2	241.52	1.311	Level 3
11,100.0	6,605.9	11,235.5	6,698.1	129.0	129.6	106.92	-959.3	4,531.9	316.8	70.0	246.81	1.284	Level 3
11,200.0	6,605.0	11,335.5	6,697.5	131.8	132.3	106.97	-959.3	4,631.9	316.9	64.8	252.11	1.257	Level 3
11,300.0	6,604.0	11,435.5	6,696.8	134.6	135.1	107.02	-959.3	4,731.9	317.0	59.6	257.40	1.231	Level 2
11,400.0	6,603.1	11,535.5	6,696.2	137.4	137.9	107.07	-959.3	4,831.9	317.1	54.4	262.70	1.207	Level 2
11,500.0	6,602.2	11,635.5	6,695.6	140.2	140.7	107.12	-959.3	4,931.9	317.2	49.2	267.99	1.184	Level 2
11,600.0	6,601.3	11,735.5	6,695.0	143.0	143.5	107.18	-959.3	5,031.9	317.3	44.0	273.28	1.161	Level 2
11,700.0	6,600.4	11,835.5	6,694.4	145.8	146.3	107.23	-959.3	5,131.9	317.3	38.8	278.56	1.139	Level 2
11,800.0	6,599.5	11,935.5	6,693.8	148.6	149.1	107.28	-959.3	5,231.9	317.4	33.6	283.85	1.118	Level 2
11,900.0	6,598.6	12,035.5	6,693.2	151.4	151.8	107.33	-959.3	5,331.9	317.5	28.4	289.13	1.098	Level 2
12,000.0	6,597.7	12,135.5	6,692.6	154.2	154.6	107.38	-959.3	5,431.9	317.6	23.2	294.41	1.079	Level 2
12,100.0	6,596.8	12,235.5	6,692.0	157.0	157.4	107.43	-959.3	5,531.9	317.7	18.0	299.69	1.060	Level 2
12,200.0	6,595.9	12,335.5	6,691.3	159.7	160.2	107.48	-959.3	5,631.9	317.8	12.8	304.97	1.042	Level 2
12,300.0	6,595.0	12,435.5	6,690.7	162.5	163.0	107.53	-959.3	5,731.9	317.9	7.6	310.25	1.025	Level 2
12,400.0	6,594.1	12,535.5	6,690.1	165.3	165.8	107.58	-959.3	5,831.9	318.0	2.4	315.52	1.008	Level 2
12,500.0	6,593.2	12,635.5	6,689.5	168.1	168.6	107.64	-959.3	5,931.9	318.1	-2.7	320.79	0.991	Level 1
12,600.0	6,592.2	12,735.5	6,688.9	170.9	171.4	107.69	-959.3	6,031.9	318.1	-7.9	326.06	0.976	Level 1
12,700.0	6,591.3	12,835.5	6,688.3	173.7	174.2	107.74	-959.3	6,131.9	318.2	-13.1	331.33	0.960	Level 1
12,800.0	6,590.4	12,935.5	6,687.7	176.5	177.0	107.79	-959.3	6,231.9	318.3	-18.3	336.59	0.946	Level 1
12,900.0	6,589.5	13,035.5	6,687.1	179.3	179.8	107.84	-959.3	6,331.9	318.4	-23.4	341.86	0.931	Level 1
13,000.0	6,588.6	13,135.5	6,686.5	182.1	182.6	107.89	-959.3	6,431.9	318.5	-28.6	347.12	0.918	Level 1
13,100.0	6,587.7	13,235.5	6,685.8	184.9	185.3	107.94	-959.3	6,531.9	318.6	-33.8	352.37	0.904	Level 1
13,200.0	6,586.8	13,335.5	6,685.2	187.7	188.1	107.99	-959.3	6,631.9	318.7	-38.9	357.63	0.891	Level 1
13,300.0	6,585.9	13,435.5	6,684.6	190.5	190.9	108.04	-959.3	6,731.9	318.8	-44.1	362.88	0.878	Level 1
13,400.0	6,585.0	13,535.5	6,684.0	193.3	193.7	108.09	-959.3	6,831.8	318.9	-49.3	368.13	0.866	Level 1
13,500.0	6,584.1	13,635.5	6,683.4	196.1	196.5	108.14	-959.3	6,931.8	319.0	-54.4	373.38	0.854	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-302
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-302	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
Connie 5N64W26EF Pad Sec.26-T5N-R64W - Connie 26F-402 - 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	
13,600.0	6,583.2	13,735.5	6,682.8	198.9	199.3	108.19	-959.3	7,031.8	319.1	-59.6	378.62	0.843	Level 1	
13,700.0	6,582.3	13,835.5	6,682.2	201.7	202.1	108.24	-959.3	7,131.8	319.2	-64.7	383.86	0.831	Level 1	
13,729.2	6,582.0	13,864.7	6,682.0	202.5	202.9	108.26	-959.3	7,161.1	319.2	-66.2	385.39	0.828	Level 1, ES, SF	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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		
7,500.0	6,638.5	6,620.5	6,620.5	31.4	132.4	-90.80	-128.9	1,739.2	964.6	801.4	163.19	5.910		
7,600.0	6,637.6	6,619.6	6,619.6	33.9	132.4	-90.70	-128.9	1,739.2	882.5	716.9	165.65	5.327		
7,700.0	6,636.7	6,618.7	6,618.7	36.3	132.4	-90.60	-128.9	1,739.2	804.6	636.4	168.16	4.784		
7,800.0	6,635.8	6,617.8	6,617.8	38.9	132.4	-90.50	-128.9	1,739.2	732.0	561.3	170.71	4.288		
7,900.0	6,634.9	6,616.9	6,616.9	41.4	132.3	-90.40	-128.9	1,739.2	666.5	493.2	173.29	3.846		
8,000.0	6,634.0	6,616.0	6,616.0	44.0	132.3	-90.30	-128.9	1,739.2	610.5	434.6	175.90	3.471		
8,100.0	6,633.1	6,615.1	6,615.1	46.7	132.3	-90.20	-128.9	1,739.2	566.7	388.2	178.52	3.175		
8,200.0	6,632.2	6,614.2	6,614.2	49.3	132.3	-90.11	-128.9	1,739.2	538.2	357.0	181.17	2.971		
8,300.0	6,631.3	6,613.3	6,613.3	52.0	132.3	-90.01	-128.9	1,739.2	527.3	343.5	183.83	2.869		
8,307.7	6,631.2	6,613.2	6,613.2	52.2	132.3	-90.00	-128.9	1,739.2	527.3	343.3	184.03	2.865 CC, ES, SF		
8,400.0	6,630.4	6,612.4	6,612.4	54.6	132.2	-89.91	-128.9	1,739.2	535.3	348.8	186.50	2.870		
8,500.0	6,629.5	6,611.5	6,611.5	57.3	132.2	-89.81	-128.9	1,739.2	561.3	372.1	189.18	2.967		
8,600.0	6,628.6	6,610.6	6,610.6	60.0	132.2	-89.71	-128.9	1,739.2	602.9	411.0	191.87	3.142		
8,700.0	6,627.6	6,609.6	6,609.6	62.7	132.2	-89.61	-128.9	1,739.2	657.2	462.6	194.57	3.378		
8,800.0	6,626.7	6,608.7	6,608.7	65.5	132.2	-89.51	-128.9	1,739.2	721.4	524.1	197.28	3.657		
8,900.0	6,625.8	6,607.8	6,607.8	68.2	132.2	-89.42	-128.9	1,739.2	793.0	593.0	199.99	3.965		
9,000.0	6,624.9	6,606.9	6,606.9	70.9	132.1	-89.32	-128.9	1,739.2	870.2	667.5	202.71	4.293		
9,100.0	6,624.0	6,606.0	6,606.0	73.6	132.1	-89.22	-128.9	1,739.2	951.7	746.3	205.43	4.633		

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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	107.02	-127.1	415.4	434.7				
100.0	100.0	86.6	86.6	0.1	0.1	107.02	-127.2	415.4	434.4	434.2	0.23	1,910.805	
200.0	200.0	187.0	187.0	0.3	0.4	107.04	-127.2	415.1	434.2	433.5	0.70	620.279	
300.0	300.0	287.0	287.0	0.6	0.6	107.05	-127.3	414.9	434.0	432.8	1.19	365.028	
400.0	400.0	387.1	387.1	0.8	0.9	107.07	-127.3	414.6	433.7	432.1	1.68	258.493	
500.0	500.0	487.0	487.0	1.0	1.2	107.10	-127.4	414.3	433.5	431.3	2.17	200.205	
600.0	600.0	587.0	587.0	1.2	1.4	107.12	-127.6	414.0	433.3	430.6	2.65	163.347	
700.0	700.0	686.9	686.9	1.5	1.7	107.16	-127.7	413.8	433.0	429.9	3.14	137.979	
800.0	800.0	786.8	786.8	1.7	1.9	107.19	-127.9	413.5	432.8	429.2	3.62	119.572	
900.0	900.0	886.5	886.4	1.9	2.2	107.24	-128.2	413.2	432.7	428.6	4.09	105.754	
1,000.0	1,000.0	986.5	986.5	2.1	2.4	107.29	-128.5	413.0	432.6	428.0	4.56	94.822	
1,100.0	1,100.0	1,086.7	1,086.7	2.3	2.7	-89.39	-128.9	412.8	432.4	427.4	5.01	86.274	
1,200.0	1,199.9	1,186.6	1,186.6	2.5	2.9	-89.86	-129.2	412.5	432.2	426.8	5.45	79.362	
1,300.0	1,299.7	1,286.7	1,286.7	2.7	3.2	-90.69	-129.4	412.3	432.1	426.2	5.90	73.273	
1,371.0	1,370.5	1,357.5	1,357.5	2.8	3.4	-91.49	-129.6	412.0	432.0	425.8	6.23	69.370 CC	
1,400.0	1,399.3	1,386.4	1,386.4	2.9	3.5	-91.87	-129.6	411.9	432.0	425.7	6.36	67.901	
1,500.0	1,498.6	1,486.5	1,486.5	3.1	3.7	-93.42	-129.5	411.6	432.2	425.4	6.80	63.530 ES	
1,600.0	1,597.5	1,586.8	1,586.8	3.4	3.8	-95.38	-129.0	411.1	432.7	425.5	7.22	59.950	
1,701.7	1,697.8	1,689.3	1,689.3	3.7	4.0	-97.75	-128.0	410.2	433.7	426.0	7.68	56.484	
1,800.0	1,794.4	1,786.9	1,786.8	4.0	4.2	-100.18	-126.9	409.0	435.1	427.0	8.17	53.290	
1,900.0	1,892.7	1,887.5	1,887.4	4.3	4.4	-102.69	-125.7	407.4	437.1	428.4	8.69	50.272	
2,000.0	1,991.0	1,986.7	1,986.6	4.7	4.6	-105.12	-124.6	405.4	439.4	430.2	9.25	47.519	
2,100.0	2,089.4	2,087.5	2,087.4	5.0	4.9	-107.51	-123.9	402.9	442.2	432.4	9.83	44.992	
2,200.0	2,187.7	2,186.1	2,186.0	5.4	5.1	-109.72	-124.0	400.2	445.3	434.9	10.42	42.730	
2,300.0	2,286.0	2,283.9	2,283.7	5.7	5.4	-111.82	-124.5	397.6	449.1	438.1	11.02	40.774	
2,400.0	2,384.3	2,381.5	2,381.3	6.1	5.7	-113.87	-125.1	395.2	453.8	442.2	11.61	39.096	
2,500.0	2,482.6	2,480.1	2,479.8	6.5	5.9	-115.88	-125.8	392.9	459.1	446.9	12.20	37.642	
2,600.0	2,580.9	2,578.9	2,578.6	6.9	6.2	-117.84	-126.5	390.5	465.0	452.2	12.78	36.374	
2,700.0	2,679.3	2,677.7	2,677.4	7.3	6.4	-119.75	-127.4	388.1	471.3	458.0	13.36	35.268	
2,800.0	2,777.6	2,775.3	2,774.9	7.7	6.7	-121.58	-128.2	385.8	478.2	464.3	13.94	34.314	
2,900.0	2,875.9	2,873.5	2,873.1	8.1	7.0	-123.38	-128.9	383.7	485.8	471.3	14.51	33.493	
3,000.0	2,974.2	2,972.0	2,971.6	8.5	7.2	-125.11	-129.6	381.5	493.9	478.8	15.07	32.777	
3,100.0	3,072.5	3,067.6	3,067.2	8.9	7.5	-126.76	-130.2	379.6	502.6	487.0	15.62	32.185	
3,200.0	3,170.8	3,164.6	3,164.1	9.3	7.7	-128.42	-130.1	378.0	512.4	496.3	16.16	31.710	
3,300.0	3,269.2	3,262.6	3,262.2	9.7	8.0	-130.01	-130.3	376.6	522.7	506.0	16.69	31.312	
3,400.0	3,367.5	3,361.8	3,361.3	10.1	8.2	-131.44	-131.4	375.6	533.4	516.1	17.21	30.994	
3,500.0	3,465.8	3,460.6	3,460.1	10.5	8.4	-132.74	-133.3	374.8	544.2	526.5	17.70	30.741	
3,600.0	3,564.1	3,559.5	3,559.0	10.9	8.6	-133.97	-135.2	374.1	555.3	537.1	18.19	30.533	
3,700.0	3,662.4	3,658.5	3,658.0	11.3	8.8	-135.16	-137.2	373.3	566.6	547.9	18.67	30.345	
3,800.0	3,760.8	3,756.2	3,755.6	11.7	9.0	-136.27	-139.2	372.6	578.1	558.9	19.15	30.186	
3,900.0	3,859.1	3,850.6	3,850.0	12.1	9.2	-137.34	-140.7	372.1	590.2	570.6	19.62	30.090	
4,000.0	3,957.4	3,944.2	3,943.7	12.5	9.4	-138.41	-141.2	372.0	603.5	583.5	20.03	30.127	
4,100.0	4,055.7	4,039.5	4,038.9	12.9	9.5	-139.52	-140.9	372.0	617.6	597.2	20.39	30.294	
4,200.0	4,154.0	4,135.6	4,135.0	13.3	9.6	-140.66	-139.7	372.0	632.4	611.7	20.72	30.527	
4,300.0	4,252.3	4,233.8	4,233.2	13.8	9.6	-141.79	-138.2	371.9	647.5	626.4	21.06	30.750	
4,400.0	4,350.7	4,331.4	4,330.8	14.2	9.7	-142.86	-136.8	371.8	662.9	641.5	21.39	30.990	
4,500.0	4,449.0	4,428.9	4,428.4	14.6	9.8	-143.73	-136.7	373.0	678.6	656.9	21.70	31.271	
4,600.0	4,547.3	4,529.5	4,528.9	15.0	9.8	-144.47	-137.7	374.9	694.3	672.3	22.01	31.546	
4,700.0	4,645.6	4,633.4	4,632.8	15.4	9.9	-145.13	-139.9	377.0	709.6	687.2	22.36	31.733	
4,800.0	4,743.9	4,737.6	4,736.9	15.8	10.1	-145.67	-143.4	379.0	724.1	701.3	22.75	31.823	
4,833.3	4,776.7	4,771.5	4,770.7	16.0	10.1	-145.85	-144.7	379.6	728.8	705.9	22.89	31.841	

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-302
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-302	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		
4,900.0	4,842.4	4,838.9	4,838.1	16.2	10.2	-146.26	-147.1	380.5	737.5	714.3	23.16	31.840		
5,000.0	4,941.4	4,941.0	4,940.2	16.4	10.4	-146.76	-150.4	381.3	748.0	724.4	23.55	31.764		
5,100.0	5,040.8	5,044.7	5,043.8	16.7	10.6	-147.16	-153.1	380.9	755.0	731.0	23.95	31.527		
5,200.0	5,140.5	5,147.7	5,146.7	16.9	10.8	-147.44	-155.6	379.7	758.7	734.4	24.35	31.156		
5,300.0	5,240.4	5,251.0	5,250.0	17.0	11.1	-147.55	-158.0	377.9	759.0	734.3	24.75	30.672		
5,359.6	5,300.0	5,311.0	5,309.9	17.1	11.2	49.01	-159.5	376.6	757.6	730.6	27.06	28.001		
5,400.0	5,340.4	5,347.9	5,346.8	17.2	11.3	49.04	-160.5	376.0	756.5	729.3	27.20	27.810		
5,500.0	5,440.4	5,440.1	5,439.0	17.3	11.5	49.14	-162.8	375.4	754.3	726.8	27.53	27.398		
5,600.0	5,540.4	5,534.7	5,533.6	17.4	11.7	49.27	-164.8	375.6	753.0	725.2	27.84	27.046		
5,700.0	5,640.4	5,631.3	5,630.1	17.5	11.9	49.40	-166.6	376.2	752.3	724.2	28.14	26.737		
5,800.0	5,740.4	5,728.2	5,727.1	17.7	12.0	49.54	-168.2	377.2	752.1	723.7	28.41	26.470		
5,900.0	5,840.4	5,828.1	5,826.9	17.8	12.1	49.70	-169.8	378.5	752.0	723.3	28.68	26.217		
5,937.4	5,877.8	5,865.3	5,864.1	17.8	12.2	49.77	-170.5	379.1	752.0	723.2	28.79	26.123		
5,950.0	5,890.4	5,877.8	5,876.6	17.9	12.2	-40.22	-170.7	379.2	751.9	724.9	26.94	27.905		
6,000.0	5,940.3	5,927.8	5,926.6	17.9	12.3	-40.35	-171.6	380.0	750.0	723.0	26.97	27.808		
6,050.0	5,990.0	5,977.9	5,976.7	18.0	12.4	-40.75	-172.6	380.8	745.6	718.7	26.91	27.704		
6,100.0	6,039.2	6,027.0	6,025.8	18.0	12.4	-41.44	-173.6	381.5	738.8	712.0	26.78	27.590		
6,150.0	6,087.7	6,075.1	6,073.9	18.1	12.5	-42.44	-174.5	382.3	729.6	703.0	26.57	27.456		
6,200.0	6,135.3	6,122.9	6,121.6	18.1	12.6	-43.76	-175.4	383.1	718.1	691.8	26.32	27.286		
6,250.0	6,181.8	6,170.1	6,168.8	18.1	12.6	-45.42	-176.3	383.9	704.5	678.5	26.04	27.055		
6,300.0	6,226.9	6,215.7	6,214.4	18.1	12.7	-47.44	-177.2	384.6	688.9	663.2	25.77	26.736		
6,350.0	6,270.6	6,259.1	6,257.8	18.2	12.8	-49.81	-178.1	385.3	671.6	646.0	25.54	26.298		
6,400.0	6,312.7	6,301.0	6,299.7	18.2	12.8	-52.56	-178.9	386.1	652.8	627.4	25.39	25.705		
6,450.0	6,352.8	6,341.5	6,340.2	18.2	12.9	-55.69	-179.7	386.8	632.7	607.3	25.38	24.929		
6,500.0	6,390.9	6,380.0	6,378.7	18.2	13.0	-59.19	-180.4	387.6	611.8	586.3	25.53	23.961		
6,550.0	6,426.8	6,416.2	6,414.9	18.3	13.0	-62.98	-181.1	388.3	590.4	564.6	25.87	22.823		
6,600.0	6,460.4	6,449.8	6,448.5	18.3	13.1	-66.97	-181.7	388.9	569.1	542.7	26.38	21.569		
6,650.0	6,491.5	6,481.0	6,479.6	18.4	13.1	-71.08	-182.2	389.5	548.3	521.2	27.05	20.269		
6,700.0	6,519.9	6,509.6	6,508.3	18.5	13.2	-75.17	-182.6	390.1	528.7	500.9	27.82	19.001		
6,750.0	6,545.6	6,535.5	6,534.1	18.6	13.2	-79.07	-183.0	390.6	510.9	482.3	28.66	17.830		
6,800.0	6,568.5	6,558.5	6,557.1	18.8	13.2	-82.63	-183.3	391.0	495.7	466.2	29.51	16.798		
6,850.0	6,588.4	6,578.6	6,577.2	19.1	13.2	-85.74	-183.5	391.3	483.8	453.5	30.37	15.929		
6,900.0	6,605.2	6,595.7	6,594.3	19.6	13.3	-88.27	-183.6	391.6	475.9	444.7	31.25	15.231		
6,950.0	6,618.9	6,610.0	6,608.6	20.2	13.3	-90.19	-183.7	391.8	472.5	440.4	32.14	14.703		
6,959.7	6,621.2	6,612.5	6,611.1	20.3	13.3	-90.48	-183.8	391.8	472.5	440.1	32.32	14.618		
7,000.0	6,629.5	6,621.4	6,620.0	20.9	13.3	-91.41	-183.8	392.0	474.1	441.0	33.07	14.338		
7,050.0	6,636.8	6,629.5	6,628.1	21.7	13.3	-91.88	-183.9	392.1	480.7	446.7	34.03	14.125		
7,100.0	6,640.9	6,634.4	6,633.0	22.6	13.3	-91.57	-183.9	392.2	492.4	457.4	35.04	14.054 SF		
7,144.4	6,641.8	6,636.0	6,634.6	23.5	13.3	-90.63	-184.0	392.2	506.7	470.8	35.94	14.101		
7,200.0	6,641.3	6,636.4	6,635.0	24.6	13.3	-90.68	-184.0	392.2	529.4	492.3	37.13	14.261		
7,300.0	6,640.3	6,637.2	6,635.8	26.8	13.3	-90.77	-184.0	392.3	581.5	542.2	39.36	14.773		
7,400.0	6,639.4	6,637.9	6,636.5	29.1	13.3	-90.86	-184.0	392.3	645.0	603.3	41.70	15.467		
7,500.0	6,638.5	6,638.7	6,637.3	31.4	13.3	-90.95	-184.0	392.3	716.9	672.7	44.12	16.248		
7,600.0	6,637.6	6,639.4	6,638.0	33.9	13.3	-91.04	-184.0	392.3	794.8	748.2	46.60	17.056		
7,700.0	6,636.7	6,640.2	6,638.8	36.3	13.3	-91.13	-184.0	392.3	877.3	828.2	49.13	17.856		
7,800.0	6,635.8	6,640.9	6,639.5	38.9	13.3	-91.23	-184.0	392.3	963.1	911.4	51.70	18.629		

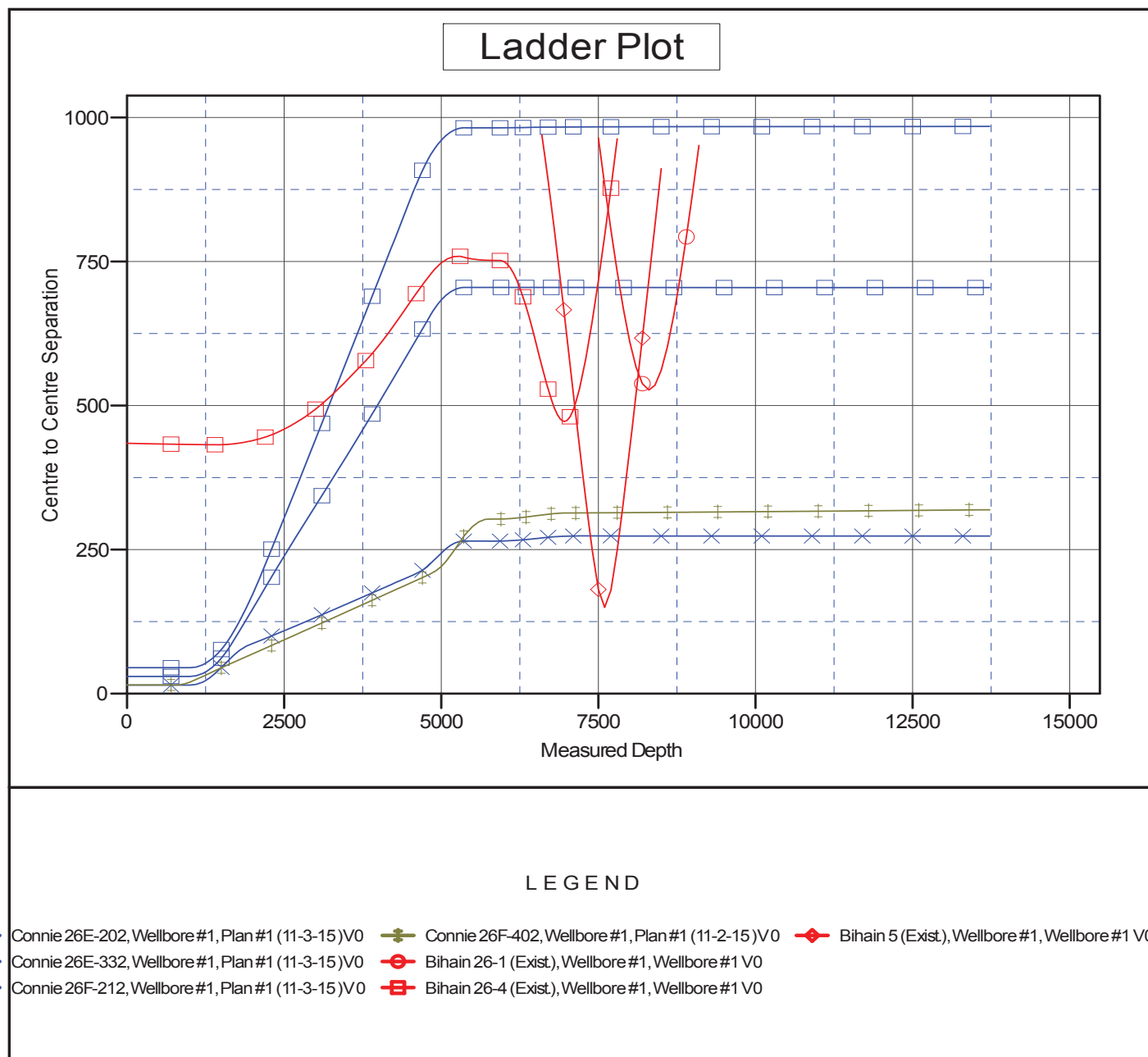
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4611.0ft (RKB - 13')
Reference Site:	Connie 5N64W26EF Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4611.0ft (RKB - 13')
Site Error:	0.0 ft	North Reference:	True
Reference Well:	Connie 26F-302	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	
6,600.0	6,460.4	6,450.5	6,449.9	18.3	12.2	13.73	-807.0	1,033.1	970.1	949.3	20.86	46.513	
6,650.0	6,491.5	6,481.5	6,480.8	18.4	12.2	15.46	-806.9	1,033.0	931.3	911.5	19.80	47.030	
6,700.0	6,519.9	6,509.8	6,509.2	18.5	12.2	17.66	-806.7	1,032.9	890.7	871.8	18.90	47.128	
6,750.0	6,545.6	6,535.4	6,534.7	18.6	12.3	20.48	-806.6	1,032.8	848.4	830.1	18.29	46.375	
6,800.0	6,568.5	6,558.1	6,557.5	18.8	12.3	24.15	-806.5	1,032.8	804.6	786.4	18.20	44.198	
6,850.0	6,588.4	6,577.9	6,577.2	19.1	12.3	29.00	-806.4	1,032.7	759.5	740.6	18.91	40.153	
6,900.0	6,605.2	6,594.6	6,593.9	19.6	12.3	35.47	-806.3	1,032.7	713.3	692.6	20.71	34.448	
6,950.0	6,618.9	6,608.2	6,607.5	20.2	12.3	44.03	-806.2	1,032.6	666.4	642.7	23.69	28.123	
7,000.0	6,629.5	6,618.6	6,617.9	20.9	12.3	55.00	-806.2	1,032.6	618.8	591.2	27.56	22.455	
7,050.0	6,636.8	6,625.8	6,625.1	21.7	12.3	67.99	-806.1	1,032.6	570.9	539.6	31.36	18.204	
7,100.0	6,640.9	6,629.7	6,629.1	22.6	12.3	81.51	-806.1	1,032.6	523.0	489.1	33.93	15.412	
7,144.4	6,641.8	6,630.5	6,629.8	23.5	12.3	92.37	-806.1	1,032.6	480.7	445.8	34.82	13.804	
7,200.0	6,641.3	6,629.8	6,629.2	24.6	12.3	92.12	-806.1	1,032.6	428.2	392.1	36.02	11.886	
7,300.0	6,640.3	6,628.6	6,628.0	26.8	12.3	91.66	-806.1	1,032.6	336.3	298.1	38.28	8.786	
7,400.0	6,639.4	6,627.4	6,626.8	29.1	12.3	91.21	-806.1	1,032.6	250.8	210.2	40.64	6.172	
7,500.0	6,638.5	6,626.2	6,625.6	31.4	12.3	90.76	-806.1	1,032.6	180.8	137.7	43.08	4.198	
7,600.0	6,637.6	6,625.1	6,624.4	33.9	12.3	90.31	-806.1	1,032.6	149.9	104.4	45.57	3.290	
7,601.1	6,637.6	6,625.0	6,624.4	33.9	12.3	90.30	-806.1	1,032.6	149.9	104.3	45.60	3.288	CC, ES, SF
7,700.0	6,636.7	6,623.9	6,623.2	36.3	12.3	89.85	-806.1	1,032.6	179.6	131.5	48.11	3.733	
7,800.0	6,635.8	6,622.7	6,622.0	38.9	12.3	89.40	-806.1	1,032.6	249.1	198.4	50.69	4.914	
7,900.0	6,634.9	6,621.5	6,620.9	41.4	12.3	88.95	-806.1	1,032.6	334.4	281.1	53.29	6.274	
8,000.0	6,634.0	6,620.3	6,619.7	44.0	12.3	88.49	-806.2	1,032.6	426.1	370.2	55.92	7.620	
8,100.0	6,633.1	6,619.1	6,618.5	46.7	12.3	88.04	-806.2	1,032.6	520.9	462.4	58.57	8.895	
8,200.0	6,632.2	6,617.9	6,617.3	49.3	12.3	87.59	-806.2	1,032.6	617.4	556.1	61.22	10.084	
8,300.0	6,631.3	6,616.8	6,616.1	52.0	12.3	87.13	-806.2	1,032.6	714.8	650.9	63.89	11.187	
8,400.0	6,630.4	6,615.6	6,614.9	54.6	12.3	86.68	-806.2	1,032.6	812.8	746.2	66.57	12.211	
8,500.0	6,629.5	6,614.4	6,613.7	57.3	12.3	86.23	-806.2	1,032.6	911.3	842.0	69.25	13.160	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	Local Co-ordinate Reference:	Well Connie 26F-302
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-302	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-302
 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-302
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-302	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-302

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.63°

