

# PETROLEUM DEVELOPMENT CORP DJ Basin

Well Name: **Bihain 26G-312**

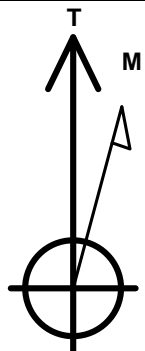
Surface Location: Bihain 5N64W26GK Pad Sec.26-T5N-R64W  
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone  
Ground Elevation: 4604.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1379524.56	3271750.96	40.371094	-104.524666	

RKB - 13' WELL @ 4617.0ft (RKB - 13')

## DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 2378'FNL & 484'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 2402'FNL & 2140'FWL, Sec.25	6583.0	-73.3	6934.3	Point



Azimuths to True North  
Magnetic North: 8.14°

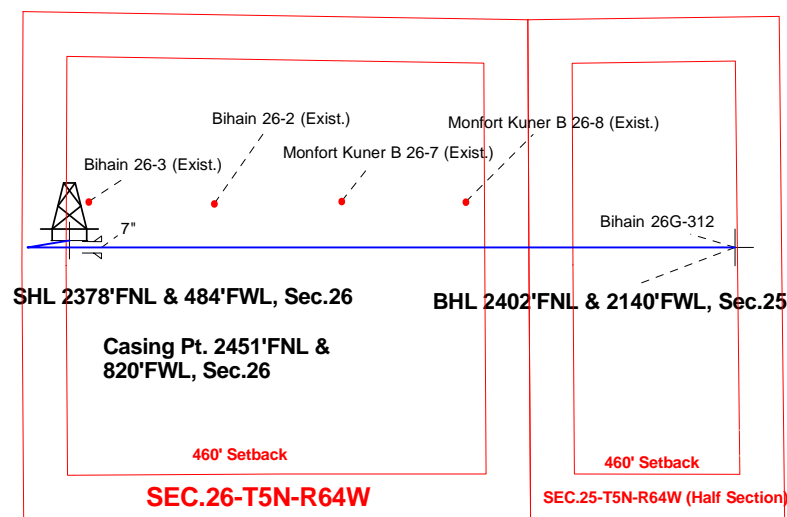
Magnetic Field  
Strength: 52680.8snT  
Dip Angle: 66.91°  
Date: 11/2/2015  
Model: IGRF2010

Bihain 5N64W26GK Pad Sec.26-T5N-R64W  
Bihain 26G-312  
Plan #1 (11-2-15)  
14:49, November 04 2015

## ANNOTATIONS

TVD	MD	Annotation
2000.0	2000.0	KOP - Start Build 1.00
5296.2	5324.0	Start Drop -2.00
5874.4	5903.5	KOP #2 - Start Build 7.50
6638.3	7109.9	Start 6598.2 hold at 7109.9 MD
6583.0	13708.1	TD at 13708.1

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



West(-)/East(+) (2000 ft/in)

**ENSIGN**  
Directional

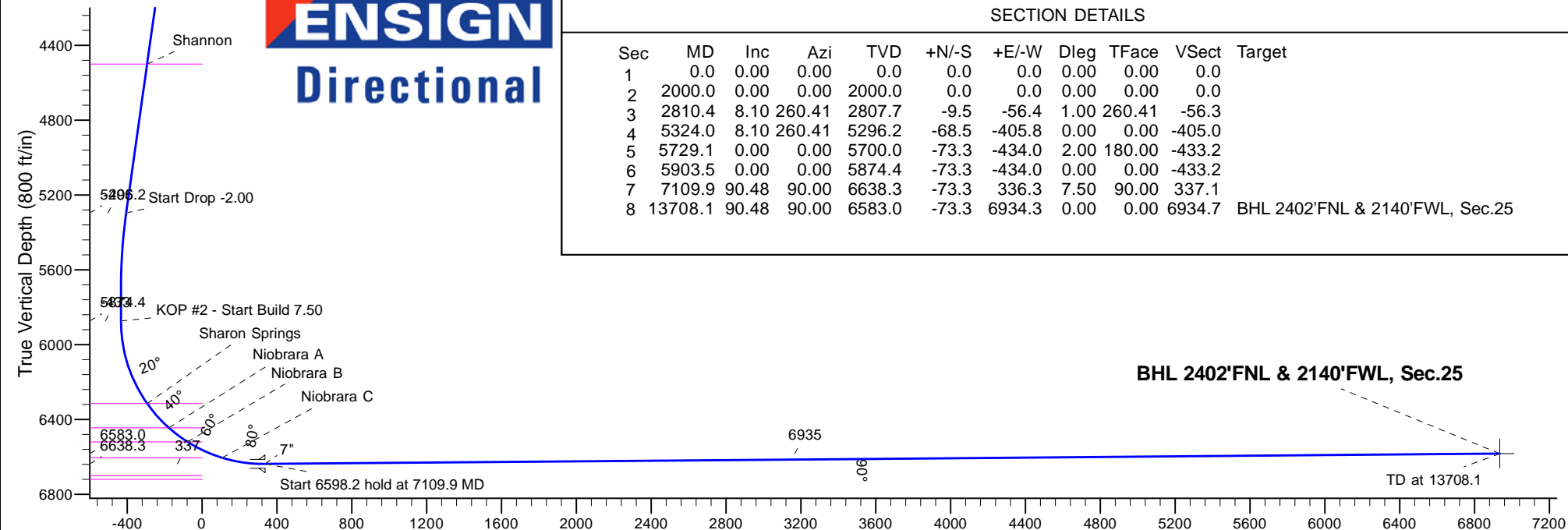
## SECTION DETAILS

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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2810.4	8.10	260.41	2807.7	-9.5	-56.4	1.00	260.41	-56.3	
4	5324.0	8.10	260.41	5296.2	-68.5	-405.8	0.00	0.00	-405.0	
5	5729.1	0.00	0.00	5700.0	-73.3	-434.0	2.00	180.00	-433.2	
6	5903.5	0.00	0.00	5874.4	-73.3	-434.0	0.00	0.00	-433.2	
7	7109.9	90.48	90.00	6638.3	-73.3	336.3	7.50	90.00	337.1	
8	13708.1	90.48	90.00	6583.0	-73.3	6934.3	0.00	0.00	6934.7	BHL 2402'FNL & 2140'FWL, Sec.25

**BHL 2402'FNL & 2140'FWL, Sec.25**

TD at 13708.1

Vertical Section at 90.61° (800 ft/in)





# Directional

## PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Bihain 5N64W26GK Pad Sec.26-T5N-R64W

Bihain 26G-312

Wellbore #1

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

## Standard Planning Report

04 November, 2015

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Project:</b>	SEC.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-2-15)		

<b>Project</b>	SEC.26-T5N-R64W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W		
<b>Site Position:</b>		<b>Northing:</b>	1,379,524.57 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,271,750.97 usft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	40.371094
		<b>Longitude:</b>	-104.524666
		<b>Grid Convergence:</b>	0.63 °

<b>Well</b>	Bihain 26G-312		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b> 1,379,524.56 usft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b> 3,271,750.97 usft
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b>	0.0 ft
		<b>Latitude:</b>	40.371094
		<b>Longitude:</b>	-104.524666
		<b>Ground Level:</b>	4,604.0 ft

<b>Wellbore</b>	Wellbore #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	IGRF2010	11/2/2015	8.14
			<b>Dip Angle (°)</b>
			66.91
			<b>Field Strength (nT)</b>
			52,681

<b>Design</b>	Plan #1 (11-2-15)		
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b> 0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>
	0.0	0.0	0.0
			<b>Direction (°)</b>
			90.61

<b>Plan Sections</b>										
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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,810.4	8.10	260.41	2,807.7	-9.5	-56.4	1.00	1.00	0.00	260.41	
5,324.0	8.10	260.41	5,296.2	-68.5	-405.8	0.00	0.00	0.00	0.00	
5,729.1	0.00	0.00	5,700.0	-73.3	-434.0	2.00	-2.00	0.00	180.00	
5,903.5	0.00	0.00	5,874.4	-73.3	-434.0	0.00	0.00	0.00	0.00	
7,109.9	90.48	90.00	6,638.3	-73.3	336.3	7.50	7.50	0.00	90.00	
13,708.1	90.48	90.00	6,583.0	-73.3	6,934.3	0.00	0.00	0.00	0.00	BHL 2402'FNL & 214C

Database:	US_EDM	Local Co-ordinate Reference:	Well Bihain 26G-312
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4617.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4617.0ft (RKB - 13')
Site:	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Bihain 26G-312	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 2378'FNL & 484'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
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.00									
2,100.0	1.00	260.41	2,100.0	-0.1	-0.9	-0.9	1.00	1.00	0.00
2,200.0	2.00	260.41	2,200.0	-0.6	-3.4	-3.4	1.00	1.00	0.00
2,300.0	3.00	260.41	2,299.9	-1.3	-7.7	-7.7	1.00	1.00	0.00
2,400.0	4.00	260.41	2,399.7	-2.3	-13.8	-13.7	1.00	1.00	0.00
2,500.0	5.00	260.41	2,499.4	-3.6	-21.5	-21.5	1.00	1.00	0.00
2,600.0	6.00	260.41	2,598.9	-5.2	-30.9	-30.9	1.00	1.00	0.00
2,700.0	7.00	260.41	2,698.3	-7.1	-42.1	-42.0	1.00	1.00	0.00
2,800.0	8.00	260.41	2,797.4	-9.3	-55.0	-54.9	1.00	1.00	0.00
2,810.4	8.10	260.41	2,807.7	-9.5	-56.4	-56.3	1.00	1.00	0.00
2,900.0	8.10	260.41	2,896.4	-11.6	-68.9	-68.7	0.00	0.00	0.00
3,000.0	8.10	260.41	2,995.4	-14.0	-82.8	-82.6	0.00	0.00	0.00
3,100.0	8.10	260.41	3,094.4	-16.3	-96.7	-96.5	0.00	0.00	0.00
3,200.0	8.10	260.41	3,193.4	-18.7	-110.6	-110.4	0.00	0.00	0.00
3,300.0	8.10	260.41	3,292.4	-21.0	-124.5	-124.2	0.00	0.00	0.00
3,400.0	8.10	260.41	3,391.4	-23.4	-138.4	-138.1	0.00	0.00	0.00
3,408.7	8.10	260.41	3,400.0	-23.6	-139.6	-139.3	0.00	0.00	0.00
Parkman									
3,500.0	8.10	260.41	3,490.4	-25.7	-152.3	-152.0	0.00	0.00	0.00
3,600.0	8.10	260.41	3,589.4	-28.1	-166.2	-165.9	0.00	0.00	0.00
3,700.0	8.10	260.41	3,688.4	-30.4	-180.1	-179.7	0.00	0.00	0.00
3,800.0	8.10	260.41	3,787.4	-32.8	-194.0	-193.6	0.00	0.00	0.00
3,900.0	8.10	260.41	3,886.4	-35.1	-207.9	-207.5	0.00	0.00	0.00
4,000.0	8.10	260.41	3,985.4	-37.5	-221.8	-221.4	0.00	0.00	0.00
4,100.0	8.10	260.41	4,084.4	-39.8	-235.7	-235.2	0.00	0.00	0.00
4,120.8	8.10	260.41	4,105.0	-40.3	-238.6	-238.1	0.00	0.00	0.00
Sussex									
4,200.0	8.10	260.41	4,183.4	-42.2	-249.6	-249.1	0.00	0.00	0.00
4,300.0	8.10	260.41	4,282.4	-44.5	-263.5	-263.0	0.00	0.00	0.00
4,400.0	8.10	260.41	4,381.4	-46.8	-277.4	-276.9	0.00	0.00	0.00

Database:	US_EDM	Local Co-ordinate Reference:	Well Bihain 26G-312
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	TVD Reference:	WELL @ 4617.0ft (RKB - 13')
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4617.0ft (RKB - 13')
Site:	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Bihain 26G-312	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	8.10	260.41	4,480.4	-49.2	-291.3	-290.7	0.00	0.00	0.00
4,519.8	8.10	260.41	4,500.0	-49.7	-294.0	-293.5	0.00	0.00	0.00
<b>Shannon</b>									
4,600.0	8.10	260.41	4,579.4	-51.5	-305.2	-304.6	0.00	0.00	0.00
4,700.0	8.10	260.41	4,678.4	-53.9	-319.1	-318.5	0.00	0.00	0.00
4,800.0	8.10	260.41	4,777.4	-56.2	-333.0	-332.4	0.00	0.00	0.00
4,900.0	8.10	260.41	4,876.4	-58.6	-346.9	-346.2	0.00	0.00	0.00
5,000.0	8.10	260.41	4,975.4	-60.9	-360.8	-360.1	0.00	0.00	0.00
5,100.0	8.10	260.41	5,074.4	-63.3	-374.7	-374.0	0.00	0.00	0.00
5,200.0	8.10	260.41	5,173.4	-65.6	-388.6	-387.8	0.00	0.00	0.00
5,300.0	8.10	260.41	5,272.4	-68.0	-402.5	-401.7	0.00	0.00	0.00
5,324.0	8.10	260.41	5,296.2	-68.5	-405.8	-405.1	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
5,400.0	6.58	260.41	5,371.6	-70.2	-415.4	-414.6	2.00	-2.00	0.00
5,500.0	4.58	260.41	5,471.1	-71.8	-425.0	-424.2	2.00	-2.00	0.00
5,600.0	2.58	260.41	5,570.9	-72.8	-431.1	-430.3	2.00	-2.00	0.00
5,700.0	0.58	260.41	5,670.9	-73.3	-433.9	-433.1	2.00	-2.00	0.00
5,729.1	0.00	0.00	5,700.0	-73.3	-434.0	-433.2	2.00	-2.00	0.00
5,800.0	0.00	0.00	5,770.9	-73.3	-434.0	-433.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,870.9	-73.3	-434.0	-433.2	0.00	0.00	0.00
5,903.5	0.00	0.00	5,874.4	-73.3	-434.0	-433.2	0.00	0.00	0.00
<b>KOP #2 - Start Build 7.50</b>									
6,000.0	7.24	90.00	5,970.6	-73.3	-427.9	-427.1	7.50	7.50	0.00
6,100.0	14.74	90.00	6,068.7	-73.3	-408.9	-408.1	7.50	7.50	0.00
6,200.0	22.24	90.00	6,163.5	-73.3	-377.2	-376.4	7.50	7.50	0.00
6,300.0	29.74	90.00	6,253.3	-73.3	-333.4	-332.6	7.50	7.50	0.00
6,373.2	35.23	90.00	6,315.0	-73.3	-294.1	-293.3	7.50	7.50	0.00
<b>Sharon Springs</b>									
6,400.0	37.24	90.00	6,336.6	-73.3	-278.3	-277.5	7.50	7.50	0.00
6,500.0	44.74	90.00	6,412.1	-73.3	-212.7	-211.9	7.50	7.50	0.00
6,547.9	48.33	90.00	6,445.0	-73.3	-178.0	-177.2	7.50	7.50	0.00
<b>Niobrara A</b>									
6,600.0	52.24	90.00	6,478.3	-73.3	-137.9	-137.1	7.50	7.50	0.00
6,672.7	57.69	90.00	6,520.0	-73.3	-78.4	-77.6	7.50	7.50	0.00
<b>Niobrara B</b>									
6,700.0	59.74	90.00	6,534.2	-73.3	-55.1	-54.3	7.50	7.50	0.00
6,800.0	67.24	90.00	6,578.8	-73.3	34.4	35.1	7.50	7.50	0.00
6,877.1	73.02	90.00	6,605.0	-73.3	106.8	107.6	7.50	7.50	0.00
<b>Niobrara C</b>									
6,900.0	74.74	90.00	6,611.4	-73.3	128.8	129.6	7.50	7.50	0.00
7,000.0	82.24	90.00	6,631.3	-73.3	226.8	227.5	7.50	7.50	0.00
7,100.0	89.74	90.00	6,638.3	-73.3	326.4	327.2	7.50	7.50	0.00
7,109.9	90.48	90.00	6,638.3	-73.3	336.3	337.1	7.50	7.50	0.00
<b>Start 6598.2 hold at 7109.9 MD - 7"</b>									
7,200.0	90.48	90.00	6,637.5	-73.3	426.4	427.2	0.00	0.00	0.00
7,300.0	90.48	90.00	6,636.7	-73.3	526.4	527.2	0.00	0.00	0.00
7,400.0	90.48	90.00	6,635.8	-73.3	626.4	627.2	0.00	0.00	0.00
7,500.0	90.48	90.00	6,635.0	-73.3	726.4	727.2	0.00	0.00	0.00
7,600.0	90.48	90.00	6,634.2	-73.3	826.4	827.1	0.00	0.00	0.00
7,700.0	90.48	90.00	6,633.3	-73.3	926.4	927.1	0.00	0.00	0.00
7,800.0	90.48	90.00	6,632.5	-73.3	1,026.4	1,027.1	0.00	0.00	0.00
7,900.0	90.48	90.00	6,631.7	-73.3	1,126.4	1,127.1	0.00	0.00	0.00

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Project:</b>	SEC.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	90.48	90.00	6,630.8	-73.3	1,226.4	1,227.1	0.00	0.00	0.00
8,100.0	90.48	90.00	6,630.0	-73.3	1,326.4	1,327.1	0.00	0.00	0.00
8,200.0	90.48	90.00	6,629.1	-73.3	1,426.4	1,427.1	0.00	0.00	0.00
8,300.0	90.48	90.00	6,628.3	-73.3	1,526.4	1,527.1	0.00	0.00	0.00
8,400.0	90.48	90.00	6,627.5	-73.3	1,626.4	1,627.1	0.00	0.00	0.00
8,500.0	90.48	90.00	6,626.6	-73.3	1,726.4	1,727.1	0.00	0.00	0.00
8,600.0	90.48	90.00	6,625.8	-73.3	1,826.4	1,827.1	0.00	0.00	0.00
8,700.0	90.48	90.00	6,625.0	-73.3	1,926.4	1,927.0	0.00	0.00	0.00
8,800.0	90.48	90.00	6,624.1	-73.3	2,026.4	2,027.0	0.00	0.00	0.00
8,900.0	90.48	90.00	6,623.3	-73.3	2,126.4	2,127.0	0.00	0.00	0.00
9,000.0	90.48	90.00	6,622.4	-73.3	2,226.4	2,227.0	0.00	0.00	0.00
9,100.0	90.48	90.00	6,621.6	-73.3	2,326.4	2,327.0	0.00	0.00	0.00
9,200.0	90.48	90.00	6,620.8	-73.3	2,426.4	2,427.0	0.00	0.00	0.00
9,300.0	90.48	90.00	6,619.9	-73.3	2,526.4	2,527.0	0.00	0.00	0.00
9,400.0	90.48	90.00	6,619.1	-73.3	2,626.4	2,627.0	0.00	0.00	0.00
9,500.0	90.48	90.00	6,618.3	-73.3	2,726.4	2,727.0	0.00	0.00	0.00
9,600.0	90.48	90.00	6,617.4	-73.3	2,826.3	2,827.0	0.00	0.00	0.00
9,700.0	90.48	90.00	6,616.6	-73.3	2,926.3	2,927.0	0.00	0.00	0.00
9,800.0	90.48	90.00	6,615.7	-73.3	3,026.3	3,026.9	0.00	0.00	0.00
9,900.0	90.48	90.00	6,614.9	-73.3	3,126.3	3,126.9	0.00	0.00	0.00
10,000.0	90.48	90.00	6,614.1	-73.3	3,226.3	3,226.9	0.00	0.00	0.00
10,100.0	90.48	90.00	6,613.2	-73.3	3,326.3	3,326.9	0.00	0.00	0.00
10,200.0	90.48	90.00	6,612.4	-73.3	3,426.3	3,426.9	0.00	0.00	0.00
10,300.0	90.48	90.00	6,611.6	-73.3	3,526.3	3,526.9	0.00	0.00	0.00
10,400.0	90.48	90.00	6,610.7	-73.3	3,626.3	3,626.9	0.00	0.00	0.00
10,500.0	90.48	90.00	6,609.9	-73.3	3,726.3	3,726.9	0.00	0.00	0.00
10,600.0	90.48	90.00	6,609.0	-73.3	3,826.3	3,826.9	0.00	0.00	0.00
10,700.0	90.48	90.00	6,608.2	-73.3	3,926.3	3,926.9	0.00	0.00	0.00
10,800.0	90.48	90.00	6,607.4	-73.3	4,026.3	4,026.9	0.00	0.00	0.00
10,900.0	90.48	90.00	6,606.5	-73.3	4,126.3	4,126.8	0.00	0.00	0.00
11,000.0	90.48	90.00	6,605.7	-73.3	4,226.3	4,226.8	0.00	0.00	0.00
11,100.0	90.48	90.00	6,604.8	-73.3	4,326.3	4,326.8	0.00	0.00	0.00
11,200.0	90.48	90.00	6,604.0	-73.3	4,426.3	4,426.8	0.00	0.00	0.00
11,300.0	90.48	90.00	6,603.2	-73.3	4,526.3	4,526.8	0.00	0.00	0.00
11,400.0	90.48	90.00	6,602.3	-73.3	4,626.3	4,626.8	0.00	0.00	0.00
11,500.0	90.48	90.00	6,601.5	-73.3	4,726.3	4,726.8	0.00	0.00	0.00
11,600.0	90.48	90.00	6,600.7	-73.3	4,826.3	4,826.8	0.00	0.00	0.00
11,700.0	90.48	90.00	6,599.8	-73.3	4,926.3	4,926.8	0.00	0.00	0.00
11,800.0	90.48	90.00	6,599.0	-73.3	5,026.3	5,026.8	0.00	0.00	0.00
11,900.0	90.48	90.00	6,598.1	-73.3	5,126.3	5,126.8	0.00	0.00	0.00
12,000.0	90.48	90.00	6,597.3	-73.3	5,226.3	5,226.7	0.00	0.00	0.00
12,100.0	90.48	90.00	6,596.5	-73.3	5,326.3	5,326.7	0.00	0.00	0.00
12,200.0	90.48	90.00	6,595.6	-73.3	5,426.3	5,426.7	0.00	0.00	0.00
12,300.0	90.48	90.00	6,594.8	-73.3	5,526.3	5,526.7	0.00	0.00	0.00
12,400.0	90.48	90.00	6,594.0	-73.3	5,626.3	5,626.7	0.00	0.00	0.00
12,500.0	90.48	90.00	6,593.1	-73.3	5,726.2	5,726.7	0.00	0.00	0.00
12,600.0	90.48	90.00	6,592.3	-73.3	5,826.2	5,826.7	0.00	0.00	0.00
12,700.0	90.48	90.00	6,591.4	-73.3	5,926.2	5,926.7	0.00	0.00	0.00
12,800.0	90.48	90.00	6,590.6	-73.3	6,026.2	6,026.7	0.00	0.00	0.00
12,900.0	90.48	90.00	6,589.8	-73.3	6,126.2	6,126.7	0.00	0.00	0.00
13,000.0	90.48	90.00	6,588.9	-73.3	6,226.2	6,226.7	0.00	0.00	0.00
13,100.0	90.48	90.00	6,588.1	-73.3	6,326.2	6,326.6	0.00	0.00	0.00
13,200.0	90.48	90.00	6,587.3	-73.3	6,426.2	6,426.6	0.00	0.00	0.00

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Project:</b>	SEC.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	90.48	90.00	6,586.4	-73.3	6,526.2	6,526.6	0.00	0.00	0.00
13,400.0	90.48	90.00	6,585.6	-73.3	6,626.2	6,626.6	0.00	0.00	0.00
13,500.0	90.48	90.00	6,584.7	-73.3	6,726.2	6,726.6	0.00	0.00	0.00
13,600.0	90.48	90.00	6,583.9	-73.3	6,826.2	6,826.6	0.00	0.00	0.00
13,700.0	90.48	90.00	6,583.1	-73.3	6,926.2	6,926.6	0.00	0.00	0.00
13,708.1	90.48	90.00	6,583.0	-73.3	6,934.3	6,934.7	0.00	0.00	0.00
TD at 13708.1 - BHL 2402'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 2378'FNL & 484'FM - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,379,524.57	3,271,750.97	40.371094	-104.524666
BHL 2402'FNL & 2140'F - plan hits target center - Point	0.00	0.00	6,583.0	-73.3	6,934.3	1,379,527.49	3,278,685.34	40.370890	-104.499780

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,109.9	6,638.3	7"	7	8-3/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,408.7	3,400.0	Parkman		0.00	
4,120.8	4,105.0	Sussex		0.00	
4,519.8	4,500.0	Shannon		0.00	
6,373.2	6,315.0	Sharon Springs		0.00	
6,547.9	6,445.0	Niobrara A		0.00	
6,672.7	6,520.0	Niobrara B		0.00	
6,877.1	6,605.0	Niobrara C		0.00	

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Project:</b>	SEC.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>North Reference:</b>	True
<b>Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (11-2-15)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,000.0	2,000.0	0.0	0.0	KOP - Start Build 1.00
5,324.0	5,296.2	-9.5	-56.4	Start Drop -2.00
5,903.5	5,874.4	-68.5	-405.8	KOP #2 - Start Build 7.50
7,109.9	6,638.3	-73.3	-434.0	Start 6598.2 hold at 7109.9 MD
13,708.1	6,583.0	-73.3	-434.0	TD at 13708.1





# Directional

## PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.26-T5N-R64W

Bihain 5N64W26GK Pad Sec.26-T5N-R64W

Bihain 26G-312

Wellbore #1

Plan #1 (11-2-15)

## Anticollision Report

04 November, 2015



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (11-2-15)		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	Stations	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 1,000.0 ft	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	11/4/2015		
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	13,708.1	Plan #1 (11-2-15) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Bihain 5N64W26GK Pad Sec.26-T5N-R64W						
Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)	1,000.0	1,000.0	45.0	40.7	10.529	CC, ES
Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)	13,708.1	13,675.2	759.8	358.7	1.894	SF
Bihain 26F-332 - Wellbore #1 - Plan #1 (11-2-15)	1,200.0	1,200.0	29.9	24.7	5.782	CC, ES
Bihain 26F-332 - Wellbore #1 - Plan #1 (11-2-15)	13,708.1	13,720.0	517.0	114.7	1.285	Level 3, SF
Bihain 26G-202 - Wellbore #1 - Plan #1 (11-2-15)	1,594.2	1,594.3	14.2	7.3	2.066	CC
Bihain 26G-202 - Wellbore #1 - Plan #1 (11-2-15)	13,708.1	13,647.3	227.6	-150.6	0.602	Level 1, ES, SF
Bihain 26G-212 - Wellbore #1 - Plan #1 (11-2-15)	1,600.0	1,600.0	14.8	7.9	2.129	CC
Bihain 26G-212 - Wellbore #1 - Plan #1 (11-2-15)	13,708.1	13,639.5	243.9	-140.7	0.634	Level 1, ES, SF
Existing Wells Pad Sec.26-T5N-R64W						
Bihain 26-2 (Exist.) - Wellbore #1 - Wellbore #1	8,284.4	6,608.4	457.7	274.8	2.503	CC
Bihain 26-2 (Exist.) - Wellbore #1 - Wellbore #1	8,300.0	6,608.3	458.0	274.7	2.498	ES, SF
Bihain 26-3 (Exist.) - Wellbore #1 - Wellbore #1	2,000.0	1,982.0	453.5	409.5	10.302	CC
Bihain 26-3 (Exist.) - Wellbore #1 - Wellbore #1	6,976.1	6,609.7	478.8	326.9	3.152	ES
Bihain 26-3 (Exist.) - Wellbore #1 - Wellbore #1	7,000.0	6,613.3	479.4	327.0	3.146	SF
Monfort Kuner B 26-7 (Exist.) - Wellbore #1 - Wellbore #1	9,612.1	6,593.3	485.1	266.4	2.218	CC, ES, SF
Monfort Kuner B 26-8 (Exist.) - Wellbore #1 - Wellbore #1	10,903.6	6,579.5	477.3	223.0	1.877	CC, ES, SF

<b>Offset Design</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)												<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b>	O-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	-50.21	28.8	-34.6	45.0					
100.0	100.0	100.0	100.0	0.1	0.1	-50.21	28.8	-34.6	45.0	44.7	0.22	200.054		
200.0	200.0	200.0	200.0	0.3	0.3	-50.21	28.8	-34.6	45.0	44.3	0.67	66.685		
300.0	300.0	300.0	300.0	0.6	0.6	-50.21	28.8	-34.6	45.0	43.8	1.12	40.011		
400.0	400.0	400.0	400.0	0.8	0.8	-50.21	28.8	-34.6	45.0	43.4	1.57	28.579		
500.0	500.0	500.0	500.0	1.0	1.0	-50.21	28.8	-34.6	45.0	42.9	2.02	22.228		
600.0	600.0	600.0	600.0	1.2	1.2	-50.21	28.8	-34.6	45.0	42.5	2.47	18.187		
700.0	700.0	700.0	700.0	1.5	1.5	-50.21	28.8	-34.6	45.0	42.0	2.92	15.389		
800.0	800.0	800.0	800.0	1.7	1.7	-50.21	28.8	-34.6	45.0	41.6	3.37	13.337		
900.0	900.0	900.0	900.0	1.9	1.9	-50.21	28.8	-34.6	45.0	41.1	3.82	11.768		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-50.21	28.8	-34.6	45.0	40.7	4.27	10.529	CC, ES	
1,100.0	1,100.0	1,098.9	1,098.9	2.4	2.4	-49.70	29.9	-35.2	46.2	41.5	4.72	9.796		
1,200.0	1,200.0	1,197.6	1,197.5	2.6	2.6	-48.32	33.1	-37.2	49.9	44.7	5.16	9.670		
1,300.0	1,300.0	1,296.1	1,295.8	2.8	2.8	-46.42	38.6	-40.5	56.1	50.5	5.61	10.006		
1,400.0	1,400.0	1,394.2	1,393.5	3.0	3.0	-44.39	46.1	-45.1	64.9	58.8	6.06	10.699		
1,500.0	1,500.0	1,491.8	1,490.4	3.3	3.3	-42.47	55.8	-51.0	76.2	69.7	6.53	11.667		
1,600.0	1,600.0	1,588.7	1,586.4	3.5	3.5	-40.78	67.4	-58.1	90.1	83.1	7.02	12.839		
1,700.0	1,700.0	1,684.9	1,681.2	3.7	3.8	-39.36	81.0	-66.5	106.5	99.0	7.52	14.157		
1,800.0	1,800.0	1,781.7	1,776.4	3.9	4.1	-38.19	96.5	-75.9	125.1	117.0	8.05	15.528		
1,900.0	1,900.0	1,879.9	1,872.7	4.2	4.5	-37.30	112.5	-85.7	144.0	135.4	8.61	16.723		
2,000.0	2,000.0	1,978.1	1,969.1	4.4	4.8	-36.61	128.4	-95.4	162.9	153.8	9.18	17.753		
2,100.0	2,100.0	2,076.3	2,065.5	4.6	5.2	63.60	144.4	-105.2	181.5	172.3	9.21	19.714		
2,200.0	2,200.0	2,174.6	2,162.1	4.8	5.5	64.54	160.4	-114.9	199.4	189.8	9.64	20.685		
2,300.0	2,299.9	2,273.0	2,258.7	5.0	5.9	65.73	176.3	-124.7	216.6	206.5	10.08	21.493		
2,400.0	2,399.7	2,371.4	2,355.3	5.2	6.3	67.12	192.3	-134.4	233.3	222.8	10.53	22.163		
2,500.0	2,499.4	2,469.9	2,451.9	5.4	6.7	68.69	208.3	-144.2	249.5	238.5	10.98	22.713		
2,600.0	2,598.9	2,568.3	2,548.5	5.6	7.0	70.40	224.3	-154.0	265.2	253.8	11.45	23.159		
2,700.0	2,698.3	2,666.6	2,645.0	5.9	7.4	72.24	240.3	-163.7	280.7	268.8	11.94	23.512		
2,800.0	2,797.4	2,764.9	2,741.5	6.1	7.8	74.19	256.2	-173.5	296.1	283.6	12.45	23.785		
2,810.4	2,807.7	2,775.0	2,751.5	6.1	7.9	74.40	257.9	-174.5	297.7	285.2	12.50	23.810		
2,900.0	2,896.4	2,863.0	2,837.9	6.4	8.2	76.26	272.2	-183.2	311.5	298.5	12.98	24.006		
3,000.0	2,995.4	2,961.2	2,934.3	6.6	8.6	78.15	288.1	-193.0	327.3	313.8	13.52	24.210		
3,100.0	3,094.4	3,059.4	3,030.7	6.9	9.0	79.86	304.1	-202.7	343.5	329.4	14.08	24.396		
3,200.0	3,193.4	3,157.6	3,127.1	7.2	9.4	81.42	320.0	-212.4	359.9	345.2	14.65	24.567		
3,300.0	3,292.4	3,255.8	3,223.5	7.5	9.8	82.84	336.0	-222.2	376.5	361.3	15.23	24.723		
3,400.0	3,391.4	3,354.0	3,319.9	7.8	10.2	84.15	351.9	-231.9	393.3	377.5	15.82	24.866		
3,500.0	3,490.4	3,452.2	3,416.3	8.1	10.6	85.34	367.9	-241.7	410.4	394.0	16.42	24.997		
3,600.0	3,589.4	3,550.4	3,512.6	8.4	11.0	86.44	383.8	-251.4	427.6	410.5	17.02	25.118		
3,700.0	3,688.4	3,648.6	3,609.0	8.7	11.4	87.46	399.8	-261.1	444.9	427.3	17.63	25.229		
3,800.0	3,787.4	3,746.7	3,705.4	9.0	11.8	88.40	415.7	-270.9	462.4	444.1	18.25	25.331		
3,900.0	3,886.4	3,844.9	3,801.8	9.3	12.2	89.27	431.7	-280.6	479.9	461.1	18.88	25.426		
4,000.0	3,985.4	3,943.1	3,898.2	9.6	12.6	90.08	447.6	-290.4	497.6	478.1	19.50	25.514		
4,100.0	4,084.4	4,041.3	3,994.6	9.9	13.0	90.84	463.6	-300.1	515.4	495.2	20.14	25.595		
4,200.0	4,183.4	4,139.5	4,091.0	10.3	13.4	91.54	479.5	-309.9	533.2	512.4	20.77	25.672		
4,300.0	4,282.4	4,237.7	4,187.4	10.6	13.8	92.20	495.5	-319.6	551.1	529.7	21.41	25.743		
4,400.0	4,381.4	4,335.9	4,283.8	10.9	14.3	92.82	511.4	-329.3	569.1	547.1	22.05	25.810		
4,500.0	4,480.4	4,434.1	4,380.2	11.2	14.7	93.40	527.4	-339.1	587.2	564.5	22.69	25.872		
4,600.0	4,579.4	4,532.3	4,476.6	11.6	15.1	93.95	543.3	-348.8	605.3	581.9	23.34	25.931		
4,700.0	4,678.4	4,630.4	4,573.0	11.9	15.5	94.46	559.3	-358.6	623.4	599.4	23.99	25.986		
4,800.0	4,777.4	4,728.6	4,669.4	12.2	15.9	94.94	575.2	-368.3	641.6	617.0	24.64	26.039		
4,900.0	4,876.4	4,826.8	4,765.8	12.6	16.3	95.40	591.2	-378.1	659.8	634.6	25.29	26.088		
5,000.0	4,975.4	4,925.0	4,862.2	12.9	16.7	95.84	607.1	-387.8	678.1	652.2	25.95	26.135		
5,100.0	5,074.4	5,023.2	4,958.6	13.2	17.1	96.25	623.1	-397.5	696.4	669.8	26.60	26.180		
5,200.0	5,173.4	5,121.5	5,055.0	13.6	17.5	96.64	639.0	-407.3	714.8	687.5	27.26	26.222		
5,300.0	5,272.4	5,247.6	5,179.3	13.9	17.9	97.22	657.2	-418.4	731.3	703.3	27.94	26.174		
5,324.0	5,296.2	5,278.0	5,209.4	14.0	18.0	97.39	660.9	-420.6	734.7	706.6	28.10	26.149		
5,400.0	5,371.6	5,374.9	5,305.7	14.2	18.3	98.08	670.7	-426.6	743.9	715.3	28.57	26.041		
5,500.0	5,471.1	5,503.3	5,433.6	14.4	18.5	98.79	679.5	-432.0	752.3	723.2	29.09	25.860		
5,600.0	5,570.9	5,632.2	5,562.4	14.6	18.7	99.30	683.5	-434.4	756.3	726.8	29.55	25.599		
5,700.0	5,670.9	5,740.6	5,670.9	14.8	18.9	99.53	683.7	-434.6	757.0	727.0	29.93	25.295		
5,729.1	5,700.0	5,769.8	5,700.0	14.8	18.9	-0.04	683.7	-434.6	757.0	726.9	30.10	25.147		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	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	
5,800.0	5,770.9	5,840.6	5,770.9	15.0	19.0	-0.04	683.7	-434.6	757.0	726.6	30.35	24.942	
5,861.0	5,831.9	5,901.7	5,831.9	15.1	19.1	0.00	683.7	-434.0	757.0	726.4	30.56	24.768	
5,903.5	5,874.4	5,944.0	5,874.1	15.2	19.1	0.21	683.7	-431.3	757.0	726.3	30.69	24.663	
5,950.0	5,920.8	5,990.0	5,919.8	15.2	19.2	-89.47	683.7	-425.7	757.0	726.3	30.76	24.612	
6,000.0	5,970.6	6,039.2	5,968.1	15.3	19.2	-89.13	683.7	-416.6	757.1	726.2	30.85	24.541	
6,050.0	6,020.0	6,088.1	6,015.5	15.3	19.2	-88.79	683.7	-404.6	757.1	726.2	30.90	24.501	
6,100.0	6,068.7	6,136.7	6,061.8	15.3	19.2	-88.46	683.7	-389.6	757.3	726.3	30.92	24.487	
6,150.0	6,116.6	6,185.1	6,106.8	15.3	19.1	-88.13	683.7	-371.8	757.4	726.5	30.92	24.493	
6,200.0	6,163.5	6,233.2	6,150.3	15.3	19.1	-87.81	683.7	-351.3	757.5	726.6	30.90	24.512	
6,250.0	6,209.1	6,281.1	6,192.3	15.2	19.1	-87.51	683.7	-328.3	757.7	726.8	30.88	24.535	
6,300.0	6,253.3	6,328.8	6,232.5	15.2	19.0	-87.21	683.7	-302.8	757.9	727.0	30.87	24.550	
6,350.0	6,295.9	6,376.2	6,270.9	15.2	19.0	-86.92	683.7	-274.9	758.1	727.2	30.89	24.544	
6,400.0	6,336.6	6,423.5	6,307.4	15.2	18.9	-86.65	683.7	-244.9	758.3	727.3	30.94	24.504	
6,450.0	6,375.4	6,470.5	6,341.8	15.3	18.9	-86.40	683.7	-212.8	758.5	727.4	31.07	24.415	
6,500.0	6,412.1	6,517.4	6,374.0	15.3	18.8	-86.15	683.7	-178.8	758.7	727.4	31.27	24.262	
6,550.0	6,446.4	6,564.1	6,404.0	15.5	18.8	-85.93	683.7	-143.0	758.9	727.3	31.58	24.033	
6,600.0	6,478.3	6,610.6	6,431.6	15.7	18.7	-85.72	683.7	-105.6	759.1	727.1	32.01	23.718	
6,650.0	6,507.6	6,657.0	6,456.9	15.9	18.7	-85.52	683.7	-66.6	759.3	726.7	32.57	23.314	
6,700.0	6,534.2	6,703.3	6,479.6	16.3	18.6	-85.35	683.7	-26.4	759.5	726.2	33.28	22.820	
6,750.0	6,558.0	6,750.0	6,500.1	16.7	18.6	-85.19	683.7	15.6	759.7	725.5	34.16	22.241	
6,800.0	6,578.8	6,795.5	6,517.6	17.2	18.5	-85.06	683.7	57.7	759.8	724.6	35.18	21.596	
6,850.0	6,596.6	6,841.5	6,532.6	17.8	18.6	-84.94	683.7	101.1	759.9	723.6	36.37	20.895	
6,900.0	6,611.4	6,887.4	6,545.0	18.5	19.2	-84.84	683.7	145.3	760.1	722.4	37.71	20.156	
6,950.0	6,622.9	6,933.3	6,554.7	19.3	19.9	-84.76	683.7	190.1	760.2	721.0	39.18	19.403	
7,000.0	6,631.3	6,979.1	6,561.7	20.1	20.7	-84.71	683.7	235.4	760.2	719.5	40.77	18.648	
7,050.0	6,636.4	7,024.9	6,566.0	21.0	21.6	-84.67	683.7	281.0	760.3	717.8	42.46	17.905	
7,100.0	6,638.3	7,070.7	6,567.5	21.9	22.5	-84.66	683.7	326.7	760.3	716.0	44.24	17.187	
7,109.9	6,638.3	7,079.8	6,567.5	22.1	22.6	-84.66	683.7	335.8	760.3	715.7	44.60	17.047	
7,200.0	6,637.5	7,169.9	6,566.8	23.9	24.5	-84.66	683.7	425.9	760.3	712.1	48.18	15.779	
7,300.0	6,636.7	7,269.9	6,566.1	26.0	26.6	-84.67	683.7	525.9	760.3	707.8	52.43	14.501	
7,400.0	6,635.8	7,369.9	6,565.3	28.3	28.9	-84.68	683.7	625.9	760.3	703.4	56.91	13.360	
7,500.0	6,635.0	7,469.9	6,564.6	30.6	31.2	-84.68	683.7	725.9	760.3	698.7	61.57	12.348	
7,600.0	6,634.2	7,569.9	6,563.8	33.1	33.6	-84.69	683.7	825.9	760.2	693.9	66.38	11.454	
7,700.0	6,633.3	7,669.9	6,563.1	35.5	36.1	-84.70	683.7	925.9	760.2	688.9	71.30	10.663	
7,800.0	6,632.5	7,769.9	6,562.3	38.1	38.6	-84.70	683.7	1,025.9	760.2	683.9	76.32	9.962	
7,900.0	6,631.7	7,869.9	6,561.6	40.6	41.2	-84.71	683.7	1,125.9	760.2	678.8	81.41	9.338	
8,000.0	6,630.8	7,969.9	6,560.8	43.2	43.8	-84.72	683.7	1,225.9	760.2	673.7	86.56	8.782	
8,100.0	6,630.0	8,069.9	6,560.1	45.8	46.4	-84.72	683.7	1,325.9	760.2	668.4	91.77	8.284	
8,200.0	6,629.1	8,169.9	6,559.3	48.5	49.0	-84.73	683.7	1,425.9	760.2	663.2	97.02	7.835	
8,300.0	6,628.3	8,269.9	6,558.6	51.1	51.6	-84.74	683.7	1,525.9	760.2	657.9	102.31	7.430	
8,400.0	6,627.5	8,369.9	6,557.8	53.8	54.3	-84.74	683.7	1,625.9	760.2	652.6	107.63	7.063	
8,500.0	6,626.6	8,469.9	6,557.1	56.5	57.0	-84.75	683.7	1,725.9	760.2	647.2	112.98	6.728	
8,600.0	6,625.8	8,569.9	6,556.3	59.2	59.7	-84.76	683.7	1,825.9	760.2	641.8	118.35	6.423	
8,700.0	6,625.0	8,669.9	6,555.6	61.9	62.4	-84.76	683.7	1,925.9	760.2	636.4	123.74	6.143	
8,800.0	6,624.1	8,769.9	6,554.8	64.6	65.1	-84.77	683.7	2,025.9	760.2	631.0	129.15	5.886	
8,900.0	6,623.3	8,869.9	6,554.1	67.3	67.8	-84.78	683.7	2,125.9	760.2	625.6	134.58	5.649	
9,000.0	6,622.4	8,969.9	6,553.3	70.1	70.5	-84.78	683.7	2,225.9	760.1	620.1	140.01	5.429	
9,100.0	6,621.6	9,069.9	6,552.6	72.8	73.2	-84.79	683.7	2,325.8	760.1	614.7	145.47	5.226	
9,200.0	6,620.8	9,169.9	6,551.8	75.5	76.0	-84.80	683.7	2,425.8	760.1	609.2	150.93	5.036	
9,300.0	6,619.9	9,269.9	6,551.1	78.3	78.7	-84.80	683.7	2,525.8	760.1	603.7	156.40	4.860	
9,400.0	6,619.1	9,369.9	6,550.3	81.0	81.5	-84.81	683.7	2,625.8	760.1	598.2	161.88	4.696	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-232 - Wellbore #1 - Plan #1 (11-2-15)		Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft			
Reference		Offset		Semi Major Axis			Distance					Warning			
Measured Depth (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		
9,500.0	6,618.3	9,469.9	6,549.6	83.8	84.2	-84.81	683.7	2,725.8	760.1	592.7	167.37	4.542			
9,600.0	6,617.4	9,569.9	6,548.8	86.6	87.0	-84.82	683.7	2,825.8	760.1	587.2	172.87	4.397			
9,700.0	6,616.6	9,669.9	6,548.1	89.3	89.7	-84.83	683.7	2,925.8	760.1	581.7	178.37	4.261			
9,800.0	6,615.7	9,769.9	6,547.3	92.1	92.5	-84.83	683.7	3,025.8	760.1	576.2	183.88	4.134			
9,900.0	6,614.9	9,869.9	6,546.6	94.9	95.2	-84.84	683.7	3,125.8	760.1	570.7	189.39	4.013			
10,000.0	6,614.1	9,969.9	6,545.8	97.6	98.0	-84.85	683.7	3,225.8	760.1	565.2	194.91	3.900			
10,100.0	6,613.2	10,069.9	6,545.1	100.4	100.8	-84.85	683.7	3,325.8	760.1	559.6	200.44	3.792			
10,200.0	6,612.4	10,169.9	6,544.3	103.2	103.5	-84.86	683.7	3,425.8	760.1	554.1	205.96	3.690			
10,300.0	6,611.6	10,269.9	6,543.6	105.9	106.3	-84.87	683.7	3,525.8	760.1	548.6	211.50	3.594			
10,400.0	6,610.7	10,369.9	6,542.8	108.7	109.1	-84.87	683.7	3,625.8	760.0	543.0	217.03	3.502			
10,500.0	6,609.9	10,469.9	6,542.1	111.5	111.9	-84.88	683.7	3,725.8	760.0	537.5	222.57	3.415			
10,600.0	6,609.0	10,569.9	6,541.3	114.3	114.6	-84.89	683.7	3,825.8	760.0	531.9	228.11	3.332			
10,700.0	6,608.2	10,669.9	6,540.6	117.1	117.4	-84.89	683.7	3,925.8	760.0	526.4	233.66	3.253			
10,800.0	6,607.4	10,769.9	6,539.8	119.9	120.2	-84.90	683.7	4,025.8	760.0	520.8	239.21	3.177			
10,900.0	6,606.5	10,869.9	6,539.1	122.6	123.0	-84.91	683.7	4,125.8	760.0	515.3	244.76	3.105			
11,000.0	6,605.7	10,969.9	6,538.3	125.4	125.8	-84.91	683.7	4,225.8	760.0	509.7	250.31	3.036			
11,100.0	6,604.8	11,069.9	6,537.6	128.2	128.5	-84.92	683.7	4,325.8	760.0	504.1	255.87	2.970			
11,200.0	6,604.0	11,169.9	6,536.8	131.0	131.3	-84.93	683.7	4,425.8	760.0	498.6	261.42	2.907			
11,300.0	6,603.2	11,269.9	6,536.1	133.8	134.1	-84.93	683.7	4,525.8	760.0	493.0	266.98	2.847			
11,400.0	6,602.3	11,369.9	6,535.3	136.6	136.9	-84.94	683.7	4,625.8	760.0	487.4	272.54	2.788			
11,500.0	6,601.5	11,469.9	6,534.6	139.4	139.7	-84.95	683.7	4,725.8	760.0	481.9	278.11	2.733			
11,600.0	6,600.7	11,569.9	6,533.8	142.2	142.5	-84.95	683.7	4,825.8	760.0	476.3	283.67	2.679			
11,700.0	6,599.8	11,669.9	6,533.0	144.9	145.3	-84.96	683.7	4,925.8	760.0	470.7	289.24	2.627			
11,800.0	6,599.0	11,769.9	6,532.3	147.7	148.1	-84.97	683.7	5,025.8	760.0	465.1	294.81	2.578			
11,900.0	6,598.1	11,869.9	6,531.5	150.5	150.9	-84.97	683.7	5,125.8	759.9	459.6	300.38	2.530			
12,000.0	6,597.3	11,969.9	6,530.8	153.3	153.6	-84.98	683.7	5,225.8	759.9	454.0	305.95	2.484			
12,100.0	6,596.5	12,069.9	6,530.0	156.1	156.4	-84.99	683.7	5,325.8	759.9	448.4	311.52	2.439			
12,200.0	6,595.6	12,169.9	6,529.3	158.9	159.2	-84.99	683.7	5,425.8	759.9	442.8	317.09	2.397			
12,300.0	6,594.8	12,269.9	6,528.5	161.7	162.0	-85.00	683.7	5,525.8	759.9	437.3	322.66	2.355			
12,400.0	6,594.0	12,369.9	6,527.8	164.5	164.8	-85.01	683.7	5,625.8	759.9	431.7	328.24	2.315			
12,500.0	6,593.1	12,469.9	6,527.0	167.3	167.6	-85.01	683.7	5,725.8	759.9	426.1	333.82	2.276			
12,600.0	6,592.3	12,569.9	6,526.3	170.1	170.4	-85.02	683.7	5,825.7	759.9	420.5	339.39	2.239			
12,700.0	6,591.4	12,669.9	6,525.5	172.9	173.2	-85.02	683.7	5,925.7	759.9	414.9	344.97	2.203			
12,800.0	6,590.6	12,769.9	6,524.8	175.7	176.0	-85.03	683.7	6,025.7	759.9	409.3	350.55	2.168			
12,900.0	6,589.8	12,869.9	6,524.0	178.5	178.8	-85.04	683.7	6,125.7	759.9	403.7	356.13	2.134			
13,000.0	6,588.9	12,969.9	6,523.3	181.3	181.6	-85.04	683.7	6,225.7	759.9	398.2	361.71	2.101			
13,100.0	6,588.1	13,069.9	6,522.5	184.1	184.4	-85.05	683.7	6,325.7	759.9	392.6	367.29	2.069			
13,200.0	6,587.3	13,169.9	6,521.8	186.9	187.2	-85.06	683.7	6,425.7	759.9	387.0	372.88	2.038			
13,300.0	6,586.4	13,269.9	6,521.0	189.7	190.0	-85.06	683.7	6,525.7	759.9	381.4	378.46	2.008			
13,400.0	6,585.6	13,369.9	6,520.3	192.5	192.8	-85.07	683.7	6,625.7	759.8	375.8	384.04	1.979			
13,500.0	6,584.7	13,469.9	6,519.5	195.3	195.6	-85.08	683.7	6,725.7	759.8	370.2	389.63	1.950			
13,600.0	6,583.9	13,569.9	6,518.8	198.1	198.4	-85.08	683.7	6,825.7	759.8	364.6	395.21	1.923			
13,677.1	6,583.3	13,647.0	6,518.2	200.3	200.5	-85.09	683.7	6,902.9	759.8	360.3	399.52	1.902			
13,708.1	6,583.0	13,675.2	6,518.0	201.1	201.3	-85.09	683.7	6,931.0	759.8	358.7	401.17	1.894 SF			

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-332 - 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
0.0	0.0	0.0	0.0	0.0	0.0	-50.68	18.9	-23.1	29.9				
100.0	100.0	100.0	100.0	0.1	0.1	-50.68	18.9	-23.1	29.9	29.7	0.22	132.996	
200.0	200.0	200.0	200.0	0.3	0.3	-50.68	18.9	-23.1	29.9	29.2	0.67	44.332	
300.0	300.0	300.0	300.0	0.6	0.6	-50.68	18.9	-23.1	29.9	28.8	1.12	26.599	
400.0	400.0	400.0	400.0	0.8	0.8	-50.68	18.9	-23.1	29.9	28.3	1.57	18.999	
500.0	500.0	500.0	500.0	1.0	1.0	-50.68	18.9	-23.1	29.9	27.9	2.02	14.777	
600.0	600.0	600.0	600.0	1.2	1.2	-50.68	18.9	-23.1	29.9	27.4	2.47	12.091	
700.0	700.0	700.0	700.0	1.5	1.5	-50.68	18.9	-23.1	29.9	27.0	2.92	10.230	
800.0	800.0	800.0	800.0	1.7	1.7	-50.68	18.9	-23.1	29.9	26.5	3.37	8.866	
900.0	900.0	900.0	900.0	1.9	1.9	-50.68	18.9	-23.1	29.9	26.1	3.82	7.823	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-50.68	18.9	-23.1	29.9	25.6	4.27	7.000	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-50.68	18.9	-23.1	29.9	25.2	4.72	6.333	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-50.68	18.9	-23.1	29.9	24.7	5.17	5.782 CC, ES	
1,300.0	1,300.0	1,299.2	1,299.2	2.8	2.8	-50.41	19.9	-24.0	31.2	25.6	5.61	5.555	
1,400.0	1,400.0	1,398.3	1,398.2	3.0	3.0	-49.71	22.6	-26.7	35.1	29.0	6.06	5.789	
1,500.0	1,500.0	1,497.1	1,496.8	3.3	3.2	-48.84	27.2	-31.2	41.5	35.0	6.50	6.385	
1,600.0	1,600.0	1,595.5	1,594.8	3.5	3.5	-47.99	33.6	-37.4	50.5	43.6	6.95	7.268	
1,700.0	1,700.0	1,693.4	1,692.0	3.7	3.7	-47.27	41.8	-45.3	62.1	54.7	7.42	8.375	
1,800.0	1,800.0	1,790.6	1,788.3	3.9	4.0	-46.68	51.7	-54.8	76.3	68.4	7.90	9.654	
1,900.0	1,900.0	1,889.4	1,885.8	4.2	4.3	-46.24	62.6	-65.4	91.7	83.3	8.40	10.915	
2,000.0	2,000.0	1,988.2	1,983.5	4.4	4.5	-45.93	73.6	-76.0	107.1	98.2	8.91	12.018	
2,100.0	2,100.0	2,087.1	2,081.1	4.6	4.8	54.11	84.6	-86.7	122.0	112.9	9.17	13.313	
2,200.0	2,200.0	2,186.1	2,179.0	4.8	5.2	55.04	95.6	-97.3	136.0	126.4	9.59	14.178	
2,300.0	2,299.9	2,285.1	2,276.9	5.0	5.5	56.35	106.6	-107.9	149.0	139.0	10.02	14.867	
2,400.0	2,399.7	2,384.3	2,374.8	5.2	5.8	57.96	117.6	-118.6	161.2	150.7	10.46	15.406	
2,500.0	2,499.4	2,483.5	2,472.8	5.4	6.1	59.83	128.6	-129.2	172.6	161.7	10.91	15.817	
2,600.0	2,598.9	2,582.6	2,570.8	5.6	6.4	61.94	139.6	-139.9	183.4	172.0	11.38	16.119	
2,700.0	2,698.3	2,681.8	2,668.8	5.9	6.8	64.27	150.6	-150.5	193.6	181.8	11.86	16.329	
2,800.0	2,797.4	2,780.9	2,766.7	6.1	7.1	66.80	161.6	-161.2	203.5	191.2	12.36	16.461	
2,810.4	2,807.7	2,791.2	2,776.8	6.1	7.2	67.07	162.7	-162.3	204.5	192.1	12.42	16.471	
2,900.0	2,896.4	2,879.9	2,864.5	6.4	7.5	69.43	172.6	-171.8	213.4	200.5	12.89	16.554	
3,000.0	2,995.4	2,979.0	2,962.4	6.6	7.8	71.83	183.6	-182.5	223.7	210.3	13.44	16.649	
3,100.0	3,094.4	3,078.0	3,060.2	6.9	8.1	74.01	194.6	-193.1	234.4	220.4	14.00	16.745	
3,200.0	3,193.4	3,177.1	3,158.1	7.2	8.5	76.01	205.6	-203.7	245.4	230.8	14.57	16.841	
3,300.0	3,292.4	3,276.1	3,256.0	7.5	8.8	77.83	216.6	-214.4	256.6	241.5	15.15	16.934	
3,400.0	3,391.4	3,375.2	3,353.8	7.8	9.2	79.50	227.6	-225.0	268.1	252.4	15.75	17.025	
3,500.0	3,490.4	3,474.2	3,451.7	8.1	9.5	81.04	238.5	-235.6	279.8	263.4	16.35	17.113	
3,600.0	3,589.4	3,573.3	3,549.5	8.4	9.9	82.45	249.5	-246.3	291.7	274.7	16.96	17.199	
3,700.0	3,688.4	3,672.3	3,647.4	8.7	10.2	83.75	260.5	-256.9	303.7	286.1	17.57	17.281	
3,800.0	3,787.4	3,771.4	3,745.2	9.0	10.6	84.95	271.5	-267.6	315.9	297.7	18.20	17.360	
3,900.0	3,886.4	3,870.4	3,843.1	9.3	10.9	86.06	282.5	-278.2	328.2	309.4	18.82	17.436	
4,000.0	3,985.4	3,969.4	3,941.0	9.6	11.3	87.09	293.5	-288.8	340.6	321.2	19.45	17.509	
4,100.0	4,084.4	4,068.5	4,038.8	9.9	11.6	88.04	304.5	-299.5	353.1	333.0	20.09	17.579	
4,200.0	4,183.4	4,167.5	4,136.7	10.3	12.0	88.94	315.5	-310.1	365.7	345.0	20.73	17.646	
4,300.0	4,282.4	4,266.6	4,234.5	10.6	12.4	89.77	326.5	-320.8	378.4	357.1	21.37	17.711	
4,400.0	4,381.4	4,365.6	4,332.4	10.9	12.7	90.55	337.5	-331.4	391.2	369.2	22.01	17.774	
4,500.0	4,480.4	4,464.7	4,430.2	11.2	13.1	91.28	348.5	-342.0	404.0	381.4	22.66	17.834	
4,600.0	4,579.4	4,563.7	4,528.1	11.6	13.4	91.96	359.5	-352.7	416.9	393.6	23.30	17.891	
4,700.0	4,678.4	4,662.8	4,626.0	11.9	13.8	92.61	370.5	-363.3	429.9	405.9	23.95	17.947	
4,800.0	4,777.4	4,761.8	4,723.8	12.2	14.1	93.21	381.4	-373.9	442.9	418.3	24.60	18.000	
4,900.0	4,876.4	4,860.9	4,821.7	12.6	14.5	93.78	392.4	-384.6	455.9	430.6	25.26	18.051	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-332 - Wellbore #1 - Plan #1 (11-2-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (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	4,975.4	4,959.9	4,919.5	12.9	14.8	94.32	403.4	-395.2	469.0	443.1	25.91	18.101		
5,100.0	5,074.4	5,059.0	5,017.4	13.2	15.2	94.83	414.4	-405.9	482.1	455.5	26.56	18.149		
5,200.0	5,173.4	5,166.8	5,124.1	13.6	15.6	95.42	425.8	-416.9	494.8	467.5	27.22	18.176		
5,300.0	5,272.4	5,281.2	5,237.7	13.9	15.8	96.31	435.0	-425.8	504.7	476.9	27.85	18.125		
5,324.0	5,296.2	5,308.6	5,265.1	14.0	15.9	96.57	436.7	-427.4	506.7	478.7	27.99	18.101		
5,400.0	5,371.6	5,395.8	5,352.0	14.2	16.1	97.48	440.9	-431.5	511.7	483.3	28.42	18.006		
5,500.0	5,471.1	5,510.6	5,466.7	14.4	16.3	98.52	443.5	-434.0	515.4	486.5	28.89	17.841		
5,600.0	5,570.9	5,614.7	5,570.9	14.6	16.4	99.24	443.6	-434.1	516.5	487.2	29.30	17.628		
5,700.0	5,670.9	5,714.7	5,670.9	14.8	16.6	99.56	443.6	-434.1	516.9	487.2	29.68	17.418		
5,729.1	5,700.0	5,743.8	5,700.0	14.8	16.6	-0.01	443.6	-434.1	516.9	489.5	27.47	18.816		
5,800.0	5,770.9	5,814.7	5,770.9	15.0	16.7	-0.01	443.6	-434.1	516.9	489.2	27.74	18.634		
5,903.5	5,874.4	5,918.2	5,874.4	15.2	16.9	-0.01	443.6	-434.1	516.9	488.8	28.14	18.370		
5,950.0	5,920.8	5,964.7	5,920.8	15.2	17.0	-90.01	443.6	-432.7	516.9	486.4	30.54	16.926		
5,957.1	5,927.9	5,971.8	5,927.9	15.2	17.0	-90.01	443.6	-432.2	516.9	486.4	30.56	16.918		
6,000.0	5,970.6	6,014.7	5,970.6	15.3	17.0	-90.00	443.6	-427.9	516.9	486.3	30.63	16.874		
6,050.0	6,020.0	6,064.7	6,020.0	15.3	17.0	-90.00	443.6	-420.0	516.9	486.3	30.69	16.846		
6,100.0	6,068.7	6,114.7	6,068.7	15.3	17.0	-89.99	443.6	-408.8	516.9	486.2	30.70	16.836		
6,150.0	6,116.6	6,164.7	6,116.6	15.3	17.0	-89.99	443.6	-394.5	516.9	486.2	30.69	16.842		
6,200.0	6,163.5	6,214.7	6,163.4	15.3	17.0	-89.98	443.6	-377.0	516.9	486.3	30.66	16.859		
6,250.0	6,209.1	6,264.7	6,209.0	15.2	17.0	-89.98	443.6	-356.6	516.9	486.3	30.62	16.880		
6,300.0	6,253.3	6,314.6	6,253.2	15.2	16.9	-89.97	443.6	-333.2	516.9	486.3	30.59	16.898		
6,350.0	6,295.9	6,364.6	6,295.7	15.2	16.9	-89.96	443.6	-306.9	516.9	486.4	30.58	16.905		
6,400.0	6,336.6	6,414.6	6,336.4	15.2	16.9	-89.96	443.6	-278.0	516.9	486.3	30.61	16.889		
6,450.0	6,375.4	6,464.6	6,375.2	15.3	16.8	-89.95	443.6	-246.4	516.9	486.2	30.70	16.840		
6,500.0	6,412.1	6,514.6	6,411.7	15.3	16.8	-89.95	443.6	-212.4	516.9	486.1	30.87	16.746		
6,550.0	6,446.4	6,564.5	6,446.0	15.5	16.8	-89.95	443.6	-176.1	516.9	485.8	31.15	16.597		
6,600.0	6,478.3	6,614.5	6,477.9	15.7	16.8	-89.94	443.6	-137.6	516.9	485.4	31.55	16.386		
6,650.0	6,507.6	6,664.5	6,507.1	15.9	16.8	-89.94	443.6	-97.1	516.9	484.8	32.09	16.107		
6,700.0	6,534.2	6,714.4	6,533.7	16.3	16.9	-89.93	443.6	-54.8	516.9	484.1	32.80	15.761		
6,750.0	6,558.0	6,764.4	6,557.4	16.7	17.2	-89.93	443.6	-10.8	516.9	483.3	33.67	15.353		
6,800.0	6,578.8	6,814.3	6,578.2	17.2	17.6	-89.93	443.6	34.6	516.9	482.2	34.72	14.891		
6,850.0	6,596.6	6,864.3	6,596.0	17.8	18.1	-89.92	443.6	81.3	516.9	481.0	35.93	14.388		
6,900.0	6,611.4	6,914.2	6,610.7	18.5	18.8	-89.92	443.6	129.0	516.9	479.6	37.30	13.859		
6,950.0	6,622.9	6,964.2	6,622.2	19.3	19.5	-89.92	443.6	177.6	516.9	478.1	38.82	13.316		
7,000.0	6,631.3	7,014.1	6,630.6	20.1	20.4	-89.92	443.6	226.9	516.9	476.5	40.47	12.772		
7,050.0	6,636.4	7,064.1	6,635.7	21.0	21.3	-89.92	443.6	276.5	516.9	474.7	42.24	12.239		
7,100.0	6,638.3	7,114.0	6,637.5	21.9	22.2	-89.91	443.6	326.4	516.9	472.9	44.09	11.724		
7,109.9	6,638.3	7,123.9	6,637.5	22.1	22.4	-89.91	443.6	336.3	516.9	472.5	44.47	11.625		
7,200.0	6,637.5	7,214.0	6,636.8	23.9	24.2	-89.92	443.6	426.4	516.9	468.9	48.06	10.756		
7,300.0	6,636.7	7,314.0	6,636.1	26.0	26.4	-89.93	443.6	526.4	516.9	464.6	52.33	9.879		
7,400.0	6,635.8	7,414.0	6,635.3	28.3	28.6	-89.94	443.6	626.4	516.9	460.1	56.83	9.097		
7,500.0	6,635.0	7,514.0	6,634.6	30.6	31.0	-89.95	443.6	726.4	516.9	455.4	61.51	8.404		
7,600.0	6,634.2	7,614.0	6,633.8	33.1	33.4	-89.96	443.6	826.4	516.9	450.6	66.34	7.792		
7,700.0	6,633.3	7,714.0	6,633.1	35.5	35.8	-89.97	443.6	926.4	516.9	445.7	71.29	7.251		
7,800.0	6,632.5	7,814.0	6,632.3	38.1	38.4	-89.98	443.6	1,026.4	516.9	440.6	76.33	6.773		
7,900.0	6,631.7	7,914.0	6,631.6	40.6	40.9	-89.99	443.6	1,126.4	516.9	435.5	81.44	6.347		
8,000.0	6,630.8	8,014.0	6,630.8	43.2	43.5	-90.00	443.6	1,226.4	516.9	430.3	86.62	5.968		
8,100.0	6,630.0	8,114.0	6,630.1	45.8	46.1	-90.01	443.6	1,326.4	516.9	425.1	91.85	5.628		
8,200.0	6,629.1	8,214.0	6,629.3	48.5	48.7	-90.02	443.6	1,426.4	516.9	419.8	97.13	5.322		
8,300.0	6,628.3	8,314.0	6,628.6	51.1	51.4	-90.03	443.6	1,526.4	516.9	414.5	102.44	5.046		
8,400.0	6,627.5	8,414.0	6,627.8	53.8	54.1	-90.04	443.6	1,626.4	516.9	409.2	107.78	4.796		

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



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	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		
8,500.0	6,626.6	8,514.0	6,627.1	56.5	56.7	-90.05	443.6	1,726.4	516.9	403.8	113.15	4.569		
8,600.0	6,625.8	8,614.0	6,626.3	59.2	59.4	-90.06	443.6	1,826.4	516.9	398.4	118.54	4.361		
8,700.0	6,625.0	8,714.0	6,625.6	61.9	62.1	-90.07	443.6	1,926.4	516.9	393.0	123.95	4.171		
8,800.0	6,624.1	8,814.0	6,624.8	64.6	64.9	-90.08	443.6	2,026.4	516.9	387.6	129.38	3.995		
8,900.0	6,623.3	8,914.0	6,624.1	67.3	67.6	-90.09	443.6	2,126.4	516.9	382.1	134.83	3.834		
9,000.0	6,622.4	9,014.0	6,623.3	70.1	70.3	-90.10	443.6	2,226.4	516.9	376.7	140.29	3.685		
9,100.0	6,621.6	9,114.0	6,622.6	72.8	73.0	-90.11	443.6	2,326.4	516.9	371.2	145.76	3.547		
9,200.0	6,620.8	9,214.0	6,621.8	75.5	75.8	-90.12	443.6	2,426.4	516.9	365.7	151.24	3.418		
9,300.0	6,619.9	9,314.0	6,621.1	78.3	78.5	-90.13	443.6	2,526.4	516.9	360.2	156.73	3.298		
9,400.0	6,619.1	9,414.0	6,620.3	81.0	81.3	-90.14	443.6	2,626.4	516.9	354.7	162.23	3.186		
9,500.0	6,618.3	9,514.0	6,619.6	83.8	84.0	-90.15	443.6	2,726.4	516.9	349.2	167.74	3.082		
9,600.0	6,617.4	9,614.0	6,618.8	86.6	86.8	-90.16	443.6	2,826.4	516.9	343.7	173.26	2.984		
9,700.0	6,616.6	9,714.0	6,618.1	89.3	89.5	-90.16	443.6	2,926.4	516.9	338.2	178.78	2.892		
9,800.0	6,615.7	9,814.0	6,617.3	92.1	92.3	-90.17	443.6	3,026.4	517.0	332.6	184.31	2.805		
9,900.0	6,614.9	9,914.0	6,616.6	94.9	95.1	-90.18	443.6	3,126.4	517.0	327.1	189.84	2.723		
10,000.0	6,614.1	10,014.0	6,615.8	97.6	97.8	-90.19	443.6	3,226.4	517.0	321.6	195.38	2.646		
10,100.0	6,613.2	10,114.0	6,615.1	100.4	100.6	-90.20	443.6	3,326.3	517.0	316.0	200.92	2.573		
10,200.0	6,612.4	10,214.0	6,614.3	103.2	103.4	-90.21	443.6	3,426.3	517.0	310.5	206.47	2.504		
10,300.0	6,611.6	10,314.0	6,613.6	105.9	106.1	-90.22	443.6	3,526.3	517.0	304.9	212.02	2.438		
10,400.0	6,610.7	10,414.0	6,612.8	108.7	108.9	-90.23	443.6	3,626.3	517.0	299.4	217.57	2.376		
10,500.0	6,609.9	10,514.0	6,612.1	111.5	111.7	-90.24	443.6	3,726.3	517.0	293.8	223.13	2.317		
10,600.0	6,609.0	10,614.0	6,611.3	114.3	114.5	-90.25	443.6	3,826.3	517.0	288.3	228.69	2.260		
10,700.0	6,608.2	10,714.0	6,610.6	117.1	117.3	-90.26	443.6	3,926.3	517.0	282.7	234.26	2.207		
10,800.0	6,607.4	10,814.0	6,609.8	119.9	120.0	-90.27	443.6	4,026.3	517.0	277.1	239.82	2.156		
10,900.0	6,606.5	10,914.0	6,609.1	122.6	122.8	-90.28	443.6	4,126.3	517.0	271.6	245.39	2.107		
11,000.0	6,605.7	11,014.0	6,608.3	125.4	125.6	-90.29	443.6	4,226.3	517.0	266.0	250.96	2.060		
11,100.0	6,604.8	11,114.0	6,607.6	128.2	128.4	-90.30	443.6	4,326.3	517.0	260.4	256.53	2.015		
11,200.0	6,604.0	11,214.0	6,606.8	131.0	131.2	-90.31	443.6	4,426.3	517.0	254.9	262.11	1.972		
11,300.0	6,603.2	11,314.0	6,606.1	133.8	134.0	-90.32	443.6	4,526.3	517.0	249.3	267.68	1.931		
11,400.0	6,602.3	11,414.0	6,605.3	136.6	136.7	-90.33	443.6	4,626.3	517.0	243.7	273.26	1.892		
11,500.0	6,601.5	11,514.0	6,604.6	139.4	139.5	-90.34	443.6	4,726.3	517.0	238.1	278.84	1.854		
11,600.0	6,600.7	11,614.0	6,603.8	142.2	142.3	-90.35	443.6	4,826.3	517.0	232.5	284.42	1.818		
11,700.0	6,599.8	11,714.0	6,603.1	144.9	145.1	-90.36	443.6	4,926.3	517.0	227.0	290.01	1.783		
11,800.0	6,599.0	11,814.0	6,602.3	147.7	147.9	-90.37	443.6	5,026.3	517.0	221.4	295.59	1.749		
11,900.0	6,598.1	11,914.0	6,601.6	150.5	150.7	-90.38	443.6	5,126.3	517.0	215.8	301.18	1.716		
12,000.0	6,597.3	12,014.0	6,600.8	153.3	153.5	-90.39	443.6	5,226.3	517.0	210.2	306.76	1.685		
12,100.0	6,596.5	12,114.0	6,600.1	156.1	156.3	-90.40	443.6	5,326.3	517.0	204.6	312.35	1.655		
12,200.0	6,595.6	12,214.0	6,599.3	158.9	159.1	-90.41	443.6	5,426.3	517.0	199.0	317.94	1.626		
12,300.0	6,594.8	12,314.0	6,598.6	161.7	161.9	-90.42	443.6	5,526.3	517.0	193.4	323.53	1.598		
12,400.0	6,594.0	12,414.0	6,597.8	164.5	164.7	-90.43	443.6	5,626.3	517.0	187.8	329.12	1.571		
12,500.0	6,593.1	12,514.0	6,597.1	167.3	167.5	-90.44	443.6	5,726.3	517.0	182.3	334.71	1.545		
12,600.0	6,592.3	12,614.0	6,596.3	170.1	170.3	-90.45	443.6	5,826.3	517.0	176.7	340.30	1.519		
12,700.0	6,591.4	12,714.0	6,595.5	172.9	173.1	-90.45	443.6	5,926.3	517.0	171.1	345.90	1.495 Level 3		
12,800.0	6,590.6	12,814.0	6,594.8	175.7	175.9	-90.46	443.6	6,026.3	517.0	165.5	351.49	1.471 Level 3		
12,900.0	6,589.8	12,914.0	6,594.0	178.5	178.7	-90.47	443.6	6,126.3	517.0	159.9	357.09	1.448 Level 3		
13,000.0	6,588.9	13,014.0	6,593.3	181.3	181.5	-90.48	443.6	6,226.3	517.0	154.3	362.68	1.425 Level 3		
13,100.0	6,588.1	13,114.0	6,592.5	184.1	184.2	-90.49	443.6	6,326.3	517.0	148.7	368.28	1.404 Level 3		
13,200.0	6,587.3	13,214.0	6,591.8	186.9	187.0	-90.50	443.6	6,426.3	517.0	143.1	373.88	1.383 Level 3		
13,300.0	6,586.4	13,314.0	6,591.0	189.7	189.8	-90.51	443.6	6,526.3	517.0	137.5	379.47	1.362 Level 3		
13,400.0	6,585.6	13,414.0	6,590.3	192.5	192.6	-90.52	443.6	6,626.3	517.0	131.9	385.07	1.343 Level 3		
13,500.0	6,584.7	13,514.0	6,589.5	195.3	195.4	-90.53	443.6	6,726.3	517.0	126.3	390.67	1.323 Level 3		

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



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26F-332 - Wellbore #1 - Plan #1 (11-2-15)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	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
13,600.0	6,583.9	13,614.0	6,588.8	198.1	198.2	-90.54	443.6	6,826.2	517.0	120.7	396.27	1.305	Level 3
13,665.6	6,583.4	13,679.7	6,588.3	199.9	200.1	-90.55	443.6	6,891.9	517.0	117.0	399.95	1.293	Level 3
13,708.1	6,583.0	13,720.0	6,588.0	201.1	201.2	-90.55	443.6	6,932.2	517.0	114.7	402.26	1.285	Level 3, SF

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-202 - Wellbore #1 - Plan #1 (11-2-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (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	129.00	-9.5	11.7	15.1	15.1	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	129.00	-9.5	11.7	15.1	14.8	0.22	66.996		
200.0	200.0	200.0	200.0	0.3	0.3	129.00	-9.5	11.7	15.1	14.4	0.67	22.332		
300.0	300.0	300.0	300.0	0.6	0.6	129.00	-9.5	11.7	15.1	13.9	1.12	13.399		
400.0	400.0	400.0	400.0	0.8	0.8	129.00	-9.5	11.7	15.1	13.5	1.57	9.571		
500.0	500.0	500.0	500.0	1.0	1.0	129.00	-9.5	11.7	15.1	13.0	2.02	7.444		
600.0	600.0	600.0	600.0	1.2	1.2	129.00	-9.5	11.7	15.1	12.6	2.47	6.091		
700.0	700.0	700.0	700.0	1.5	1.5	129.00	-9.5	11.7	15.1	12.1	2.92	5.154		
800.0	800.0	800.0	800.0	1.7	1.7	129.00	-9.5	11.7	15.1	11.7	3.37	4.466		
900.0	900.0	900.0	900.0	1.9	1.9	129.00	-9.5	11.7	15.1	11.2	3.82	3.941		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	129.00	-9.5	11.7	15.1	10.8	4.27	3.526		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	129.00	-9.5	11.7	15.1	10.3	4.72	3.190		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	129.00	-9.5	11.7	15.1	9.9	5.17	2.913		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	129.00	-9.5	11.7	15.1	9.4	5.62	2.680		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	129.00	-9.5	11.7	15.1	9.0	6.07	2.481		
1,500.0	1,500.0	1,500.1	1,500.1	3.3	3.2	133.84	-10.2	10.6	14.7	8.2	6.50	2.260		
1,594.2	1,594.2	1,594.3	1,594.2	3.5	3.4	148.16	-12.1	7.5	14.2	7.3	6.88	2.066 CC		
1,600.0	1,600.0	1,600.1	1,600.0	3.5	3.4	149.35	-12.2	7.3	14.2	7.3	6.91	2.060		
1,700.0	1,700.0	1,699.8	1,699.5	3.7	3.6	173.76	-15.7	1.7	15.8	8.5	7.32	2.155		
1,800.0	1,800.0	1,799.1	1,798.3	3.9	3.8	-163.69	-20.5	-6.0	21.4	13.6	7.75	2.759		
1,900.0	1,900.0	1,897.8	1,896.4	4.2	4.1	-149.24	-26.6	-15.8	31.1	22.9	8.20	3.795		
2,000.0	2,000.0	1,996.0	1,993.6	4.4	4.3	-140.78	-34.0	-27.7	44.3	35.6	8.67	5.107		
2,100.0	2,100.0	2,094.9	2,091.3	4.6	4.6	-36.79	-42.0	-40.6	58.3	49.3	9.02	6.465		
2,200.0	2,200.0	2,194.1	2,189.3	4.8	4.8	-34.87	-50.0	-53.5	71.1	61.7	9.42	7.548		
2,300.0	2,299.9	2,293.4	2,287.5	5.0	5.1	-34.20	-58.0	-66.4	82.5	72.7	9.83	8.395		
2,400.0	2,399.7	2,392.9	2,385.8	5.2	5.4	-34.29	-66.1	-79.4	92.5	82.3	10.25	9.027		
2,500.0	2,499.4	2,492.5	2,484.3	5.4	5.7	-34.93	-74.1	-92.4	101.1	90.4	10.68	9.468		
2,600.0	2,598.9	2,592.3	2,582.8	5.6	6.1	-36.00	-82.2	-105.4	108.2	97.1	11.11	9.740		
2,700.0	2,698.3	2,692.1	2,681.4	5.9	6.4	-37.46	-90.2	-118.3	114.0	102.5	11.56	9.863		
2,800.0	2,797.4	2,791.9	2,780.1	6.1	6.7	-39.32	-98.3	-131.3	118.6	106.5	12.03	9.856		
2,810.4	2,807.7	2,802.2	2,790.3	6.1	6.8	-39.53	-99.2	-132.7	119.0	106.9	12.08	9.849		
2,900.0	2,896.4	2,891.7	2,878.7	6.4	7.1	-41.38	-106.4	-144.3	122.4	109.9	12.53	9.774		
3,000.0	2,995.4	2,991.5	2,977.4	6.6	7.4	-43.32	-114.5	-157.3	126.4	113.4	13.04	9.696		
3,100.0	3,094.4	3,091.4	3,076.0	6.9	7.7	-45.14	-122.5	-170.3	130.6	117.0	13.57	9.624		
3,200.0	3,193.4	3,191.2	3,174.7	7.2	8.1	-46.84	-130.6	-183.3	134.8	120.7	14.11	9.558		
3,300.0	3,292.4	3,291.0	3,273.3	7.5	8.4	-48.44	-138.7	-196.3	139.2	124.5	14.66	9.495		
3,400.0	3,391.4	3,390.9	3,372.0	7.8	8.8	-49.94	-146.8	-209.3	143.7	128.4	15.23	9.436		
3,500.0	3,490.4	3,490.7	3,470.6	8.1	9.1	-51.35	-154.8	-222.3	148.2	132.4	15.80	9.380		
3,600.0	3,589.4	3,590.5	3,569.3	8.4	9.5	-52.68	-162.9	-235.3	152.9	136.5	16.39	9.328		
3,700.0	3,688.4	3,690.4	3,667.9	8.7	9.8	-53.92	-171.0	-248.3	157.6	140.6	16.99	9.278		
3,800.0	3,787.4	3,790.2	3,766.6	9.0	10.2	-55.09	-179.1	-261.3	162.4	144.8	17.59	9.231		
3,900.0	3,886.4	3,890.0	3,865.2	9.3	10.5	-56.20	-187.1	-274.3	167.3	149.1	18.21	9.187		
4,000.0	3,985.4	3,989.8	3,963.9	9.6	10.9	-57.24	-195.2	-287.3	172.2	153.4	18.83	9.145		
4,100.0	4,084.4	4,089.7	4,062.5	9.9	11.3	-58.23	-203.3	-300.3	177.2	157.7	19.46	9.105		
4,200.0	4,183.4	4,189.5	4,161.2	10.3	11.6	-59.16	-211.4	-313.3	182.2	162.1	20.09	9.068		
4,300.0	4,282.4	4,289.3	4,259.8	10.6	12.0	-60.04	-219.4	-326.3	187.2	166.5	20.73	9.032		
4,400.0	4,381.4	4,389.2	4,358.5	10.9	12.3	-60.87	-227.5	-339.3	192.4	171.0	21.38	8.999		
4,500.0	4,480.4	4,489.0	4,457.1	11.2	12.7	-61.66	-235.6	-352.3	197.5	175.5	22.03	8.967		
4,600.0	4,579.4	4,588.8	4,555.8	11.6	13.1	-62.41	-243.6	-365.3	202.7	180.0	22.68	8.937		
4,700.0	4,678.4	4,688.7	4,654.4	11.9	13.4	-63.12	-251.7	-378.3	207.9	184.6	23.34	8.909		
4,800.0	4,777.4	4,788.5	4,753.1	12.2	13.8	-63.80	-259.8	-391.3	213.2	189.2	24.00	8.882		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	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		
4,900.0	4,876.4	4,888.3	4,851.7	12.6	14.2	-64.45	-267.9	-404.3	218.4	193.8	24.66	8.857		
5,000.0	4,975.4	4,993.6	4,956.0	12.9	14.4	-65.38	-275.5	-416.7	222.6	197.3	25.31	8.796		
5,100.0	5,074.4	5,099.3	5,061.2	13.2	14.7	-66.97	-281.2	-425.8	224.3	198.3	25.99	8.629		
5,200.0	5,173.4	5,204.7	5,166.3	13.6	14.9	-69.24	-284.8	-431.6	223.5	196.8	26.70	8.370		
5,300.0	5,272.4	5,309.4	5,271.0	13.9	15.1	-72.27	-286.4	-434.2	220.7	193.3	27.45	8.040		
5,324.0	5,296.2	5,334.4	5,296.0	14.0	15.1	-73.12	-286.5	-434.3	219.8	192.2	27.64	7.953		
5,400.0	5,371.6	5,410.0	5,371.6	14.2	15.2	-75.51	-286.5	-434.3	217.1	189.0	28.15	7.713		
5,500.0	5,471.1	5,509.5	5,471.1	14.4	15.4	-77.96	-286.5	-434.3	214.9	186.2	28.71	7.484		
5,600.0	5,570.9	5,609.3	5,570.9	14.6	15.5	-79.57	-286.5	-434.3	213.7	184.5	29.18	7.322		
5,700.0	5,670.9	5,709.3	5,670.9	14.8	15.7	-80.29	-286.5	-434.3	213.2	183.6	29.57	7.210		
5,729.1	5,700.0	5,738.4	5,700.0	14.8	15.7	-179.92	-286.5	-434.3	213.2	187.0	26.13	8.159		
5,800.0	5,770.9	5,809.3	5,770.9	15.0	15.8	-179.92	-286.5	-434.3	213.2	186.8	26.39	8.077		
5,855.2	5,826.0	5,864.5	5,826.0	15.1	15.9	180.00	-286.5	-434.0	213.2	186.6	26.60	8.015		
5,903.5	5,874.4	5,912.6	5,874.1	15.2	16.0	179.23	-286.5	-431.1	213.2	186.5	26.72	7.978		
5,950.0	5,920.8	5,958.6	5,919.8	15.2	16.0	88.11	-286.5	-425.6	213.3	182.9	30.44	7.006		
6,000.0	5,970.6	6,007.8	5,968.1	15.3	16.0	86.91	-286.5	-416.6	213.5	182.9	30.56	6.985		
6,050.0	6,020.0	6,056.8	6,015.5	15.3	16.0	85.73	-286.5	-404.6	213.8	183.1	30.63	6.978		
6,100.0	6,068.7	6,105.4	6,061.9	15.3	16.0	84.57	-286.5	-389.7	214.1	183.5	30.66	6.984		
6,150.0	6,116.6	6,153.8	6,106.9	15.3	16.0	83.45	-286.5	-372.0	214.6	183.9	30.66	7.000		
6,200.0	6,163.5	6,202.0	6,150.5	15.3	15.9	82.36	-286.5	-351.6	215.1	184.5	30.62	7.025		
6,250.0	6,209.1	6,250.0	6,192.6	15.2	15.9	81.30	-286.5	-328.5	215.7	185.1	30.56	7.056		
6,300.0	6,253.3	6,297.6	6,232.8	15.2	15.8	80.29	-286.5	-303.1	216.3	185.8	30.50	7.091		
6,350.0	6,295.9	6,345.0	6,271.3	15.2	15.8	79.33	-286.5	-275.3	216.9	186.5	30.45	7.124		
6,400.0	6,336.6	6,392.3	6,307.8	15.2	15.8	78.41	-286.5	-245.3	217.6	187.2	30.43	7.153		
6,450.0	6,375.4	6,439.4	6,342.2	15.3	15.8	77.55	-286.5	-213.2	218.3	187.9	30.45	7.171		
6,500.0	6,412.1	6,486.3	6,374.5	15.3	15.8	76.74	-286.5	-179.2	219.0	188.5	30.53	7.174		
6,550.0	6,446.4	6,533.0	6,404.6	15.5	15.9	76.00	-286.5	-143.4	219.7	189.0	30.71	7.156		
6,600.0	6,478.3	6,579.6	6,432.3	15.7	16.0	75.30	-286.5	-106.0	220.4	189.4	30.99	7.112		
6,650.0	6,507.6	6,626.1	6,457.6	15.9	16.2	74.68	-286.5	-67.0	221.0	189.7	31.40	7.041		
6,700.0	6,534.2	6,672.4	6,480.5	16.3	16.5	74.11	-286.5	-26.7	221.7	189.7	31.95	6.939		
6,750.0	6,558.0	6,718.6	6,500.8	16.7	16.9	73.61	-286.5	14.8	222.2	189.6	32.65	6.807		
6,800.0	6,578.8	6,764.8	6,518.5	17.2	17.3	73.17	-286.5	57.4	222.7	189.2	33.51	6.647		
6,850.0	6,596.6	6,810.8	6,533.6	17.8	17.9	72.79	-286.5	100.8	223.2	188.6	34.53	6.463		
6,900.0	6,611.4	6,856.8	6,546.1	18.5	18.5	72.48	-286.5	145.1	223.5	187.8	35.71	6.260		
6,950.0	6,622.9	6,902.7	6,555.8	19.3	19.2	72.24	-286.5	190.0	223.8	186.8	37.04	6.043		
7,000.0	6,631.3	6,950.0	6,563.0	20.1	20.0	72.06	-286.5	236.7	224.1	185.5	38.53	5.815		
7,001.2	6,631.5	6,950.0	6,563.0	20.1	20.0	72.06	-286.5	236.7	224.1	185.5	38.55	5.812		
7,050.0	6,636.4	6,994.4	6,567.1	21.0	20.8	71.96	-286.5	280.9	224.2	184.1	40.10	5.591		
7,100.0	6,638.3	7,040.2	6,568.7	21.9	21.7	71.91	-286.5	326.7	224.3	182.5	41.80	5.365		
7,109.9	6,638.3	7,050.8	6,568.6	22.1	21.9	71.91	-286.5	337.2	224.3	182.1	42.17	5.318		
7,131.9	6,638.1	7,071.2	6,568.4	22.5	22.3	71.90	-286.5	357.7	224.3	181.3	42.97	5.219		
7,200.0	6,637.5	7,139.3	6,567.8	23.9	23.6	71.88	-286.5	425.7	224.3	178.7	45.58	4.921		
7,300.0	6,636.7	7,239.3	6,566.8	26.0	25.8	71.84	-286.5	525.7	224.3	174.7	49.65	4.518		
7,400.0	6,635.8	7,339.3	6,565.8	28.3	28.0	71.80	-286.5	625.7	224.4	170.4	53.94	4.160		
7,500.0	6,635.0	7,439.3	6,564.8	30.6	30.4	71.76	-286.5	725.7	224.4	166.0	58.41	3.843		
7,600.0	6,634.2	7,539.3	6,563.8	33.1	32.8	71.73	-286.5	825.7	224.5	161.5	63.01	3.563		
7,700.0	6,633.3	7,639.3	6,562.8	35.5	35.3	71.69	-286.5	925.7	224.5	156.8	67.72	3.316		
7,800.0	6,632.5	7,739.3	6,561.8	38.1	37.8	71.65	-286.5	1,025.7	224.6	152.1	72.51	3.097		
7,900.0	6,631.7	7,839.3	6,560.8	40.6	40.4	71.61	-286.5	1,125.7	224.6	147.3	77.37	2.903		
8,000.0	6,630.8	7,939.3	6,559.8	43.2	43.0	71.57	-286.5	1,225.7	224.7	142.4	82.29	2.730		
8,100.0	6,630.0	8,039.3	6,558.8	45.8	45.6	71.54	-286.5	1,325.7	224.7	137.5	87.26	2.575		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design		Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-202 - Wellbore #1 - Plan #1 (11-2-15)											Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
8,200.0	6,629.1	8,139.3	6,557.8	48.5	48.2	71.50	-286.5	1,425.7	224.8	132.5	92.27	2.436			
8,300.0	6,628.3	8,239.3	6,556.8	51.1	50.9	71.46	-286.5	1,525.7	224.8	127.5	97.30	2.311			
8,400.0	6,627.5	8,339.3	6,555.8	53.8	53.6	71.42	-286.5	1,625.7	224.9	122.5	102.37	2.197			
8,500.0	6,626.6	8,439.3	6,554.8	56.5	56.3	71.38	-286.5	1,725.7	224.9	117.5	107.46	2.093			
8,600.0	6,625.8	8,539.3	6,553.8	59.2	59.0	71.35	-286.5	1,825.7	225.0	112.4	112.56	1.999			
8,700.0	6,625.0	8,639.3	6,552.8	61.9	61.7	71.31	-286.5	1,925.7	225.0	107.3	117.69	1.912			
8,800.0	6,624.1	8,739.3	6,551.8	64.6	64.4	71.27	-286.5	2,025.7	225.1	102.3	122.83	1.832			
8,900.0	6,623.3	8,839.3	6,550.8	67.3	67.1	71.23	-286.5	2,125.7	225.1	97.2	127.98	1.759			
9,000.0	6,622.4	8,939.3	6,549.9	70.1	69.8	71.19	-286.5	2,225.6	225.2	92.0	133.14	1.691			
9,100.0	6,621.6	9,039.3	6,548.9	72.8	72.6	71.16	-286.5	2,325.6	225.2	86.9	138.31	1.628			
9,200.0	6,620.8	9,139.3	6,547.9	75.5	75.3	71.12	-286.5	2,425.6	225.3	81.8	143.49	1.570			
9,300.0	6,619.9	9,239.3	6,546.9	78.3	78.1	71.08	-286.5	2,525.6	225.3	76.7	148.67	1.516			
9,400.0	6,619.1	9,339.3	6,545.9	81.0	80.8	71.04	-286.5	2,625.6	225.4	71.5	153.87	1.465 Level 3			
9,500.0	6,618.3	9,439.3	6,544.9	83.8	83.6	71.00	-286.5	2,725.6	225.4	66.4	159.06	1.417 Level 3			
9,600.0	6,617.4	9,539.3	6,543.9	86.6	86.3	70.97	-286.5	2,825.6	225.5	61.2	164.26	1.373 Level 3			
9,700.0	6,616.6	9,639.3	6,542.9	89.3	89.1	70.93	-286.5	2,925.6	225.5	56.1	169.47	1.331 Level 3			
9,800.0	6,615.7	9,739.3	6,541.9	92.1	91.9	70.89	-286.5	3,025.6	225.6	50.9	174.67	1.291 Level 3			
9,900.0	6,614.9	9,839.3	6,540.9	94.9	94.6	70.85	-286.5	3,125.6	225.6	45.7	179.89	1.254 Level 3			
10,000.0	6,614.1	9,939.3	6,539.9	97.6	97.4	70.82	-286.5	3,225.6	225.7	40.6	185.10	1.219 Level 2			
10,100.0	6,613.2	10,039.3	6,538.9	100.4	100.2	70.78	-286.5	3,325.6	225.7	35.4	190.31	1.186 Level 2			
10,200.0	6,612.4	10,139.3	6,537.9	103.2	102.9	70.74	-286.5	3,425.6	225.8	30.3	195.53	1.155 Level 2			
10,300.0	6,611.6	10,239.3	6,536.9	105.9	105.7	70.70	-286.5	3,525.6	225.8	25.1	200.75	1.125 Level 2			
10,400.0	6,610.7	10,339.3	6,535.9	108.7	108.5	70.66	-286.5	3,625.6	225.9	19.9	205.97	1.097 Level 2			
10,500.0	6,609.9	10,439.3	6,534.9	111.5	111.3	70.63	-286.5	3,725.6	225.9	14.8	211.18	1.070 Level 2			
10,600.0	6,609.0	10,539.3	6,533.9	114.3	114.1	70.59	-286.5	3,825.6	226.0	9.6	216.40	1.044 Level 2			
10,700.0	6,608.2	10,639.3	6,532.9	117.1	116.8	70.55	-286.5	3,925.6	226.0	4.4	221.62	1.020 Level 2			
10,800.0	6,607.4	10,739.3	6,531.9	119.9	119.6	70.51	-286.5	4,025.6	226.1	-0.8	226.84	0.997 Level 1			
10,900.0	6,606.5	10,839.3	6,531.0	122.6	122.4	70.48	-286.5	4,125.6	226.1	-5.9	232.06	0.974 Level 1			
11,000.0	6,605.7	10,939.3	6,530.0	125.4	125.2	70.44	-286.5	4,225.5	226.2	-11.1	237.28	0.953 Level 1			
11,100.0	6,604.8	11,039.3	6,529.0	128.2	128.0	70.40	-286.5	4,325.5	226.2	-16.3	242.50	0.933 Level 1			
11,200.0	6,604.0	11,139.3	6,528.0	131.0	130.8	70.36	-286.5	4,425.5	226.3	-21.4	247.72	0.914 Level 1			
11,300.0	6,603.2	11,239.3	6,527.0	133.8	133.6	70.33	-286.5	4,525.5	226.4	-26.6	252.94	0.895 Level 1			
11,400.0	6,602.3	11,339.3	6,526.0	136.6	136.4	70.29	-286.5	4,625.5	226.4	-31.8	258.16	0.877 Level 1			
11,500.0	6,601.5	11,439.3	6,525.0	139.4	139.1	70.25	-286.5	4,725.5	226.5	-36.9	263.37	0.860 Level 1			
11,600.0	6,600.7	11,539.3	6,524.0	142.2	141.9	70.21	-286.5	4,825.5	226.5	-42.1	268.59	0.843 Level 1			
11,700.0	6,599.8	11,639.3	6,523.0	144.9	144.7	70.18	-286.5	4,925.5	226.6	-47.2	273.80	0.827 Level 1			
11,800.0	6,599.0	11,739.3	6,522.0	147.7	147.5	70.14	-286.5	5,025.5	226.6	-52.4	279.02	0.812 Level 1			
11,900.0	6,598.1	11,839.3	6,521.0	150.5	150.3	70.10	-286.5	5,125.5	226.7	-57.6	284.23	0.797 Level 1			
12,000.0	6,597.3	11,939.3	6,520.0	153.3	153.1	70.06	-286.5	5,225.5	226.7	-62.7	289.44	0.783 Level 1			
12,100.0	6,596.5	12,039.3	6,519.0	156.1	155.9	70.03	-286.5	5,325.5	226.8	-67.9	294.65	0.770 Level 1			
12,200.0	6,595.6	12,139.3	6,518.0	158.9	158.7	69.99	-286.5	5,425.5	226.8	-73.0	299.86	0.756 Level 1			
12,300.0	6,594.8	12,239.3	6,517.0	161.7	161.5	69.95	-286.5	5,525.5	226.9	-78.2	305.07	0.744 Level 1			
12,400.0	6,594.0	12,339.3	6,516.0	164.5	164.3	69.91	-286.5	5,625.5	226.9	-83.3	310.27	0.731 Level 1			
12,500.0	6,593.1	12,439.3	6,515.0	167.3	167.1	69.88	-286.5	5,725.5	227.0	-88.5	315.48	0.720 Level 1			
12,600.0	6,592.3	12,539.3	6,514.0	170.1	169.9	69.84	-286.5	5,825.5	227.0	-93.6	320.68	0.708 Level 1			
12,700.0	6,591.4	12,639.3	6,513.0	172.9	172.7	69.80	-286.5	5,925.5	227.1	-98.8	325.88	0.697 Level 1			
12,800.0	6,590.6	12,739.3	6,512.1	175.7	175.5	69.77	-286.5	6,025.5	227.1	-103.9	331.08	0.686 Level 1			
12,900.0	6,589.8	12,839.3	6,511.1	178.5	178.3	69.73	-286.5	6,125.5	227.2	-109.1	336.28	0.676 Level 1			
13,000.0	6,588.9	12,939.3	6,510.1	181.3	181.1	69.69	-286.5	6,225.4	227.3	-114.2	341.47	0.666 Level 1			
13,100.0	6,588.1	13,039.3	6,509.1	184.1	183.9	69.65	-286.5	6,325.4	227.3	-119.4	346.66	0.656 Level 1			
13,200.0	6,587.3	13,139.3	6,508.1	186.9	186.7	69.62	-286.5	6,425.4	227.4	-124.5	351.86	0.646 Level 1			

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-202 - Wellbore #1 - Plan #1 (11-2-15)													<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.0 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Distance</b>								
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>	
13,300.0	6,586.4	13,239.3	6,507.1	189.7	189.5	69.58	-286.5	6,525.4	227.4	-129.6	357.05	0.637	Level 1	
13,400.0	6,585.6	13,339.3	6,506.1	192.5	192.3	69.54	-286.5	6,625.4	227.5	-134.8	362.23	0.628	Level 1	
13,500.0	6,584.7	13,439.3	6,505.1	195.3	195.1	69.51	-286.5	6,725.4	227.5	-139.9	367.42	0.619	Level 1	
13,600.0	6,583.9	13,539.3	6,504.1	198.1	197.9	69.47	-286.5	6,825.4	227.6	-145.0	372.60	0.611	Level 1	
13,708.1	6,583.0	13,647.3	6,503.0	201.1	200.9	69.43	-286.5	6,933.5	227.6	-150.6	378.21	0.602	Level 1, ES, SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-212 - Wellbore #1 - Plan #1 (11-2-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-50.35	9.5	-11.4	14.8	14.8	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	-50.35	9.5	-11.4	14.8	14.6	0.22	66.014		
200.0	200.0	200.0	200.0	0.3	0.3	-50.35	9.5	-11.4	14.8	14.2	0.67	22.005		
300.0	300.0	300.0	300.0	0.6	0.6	-50.35	9.5	-11.4	14.8	13.7	1.12	13.203		
400.0	400.0	400.0	400.0	0.8	0.8	-50.35	9.5	-11.4	14.8	13.3	1.57	9.431		
500.0	500.0	500.0	500.0	1.0	1.0	-50.35	9.5	-11.4	14.8	12.8	2.02	7.335		
600.0	600.0	600.0	600.0	1.2	1.2	-50.35	9.5	-11.4	14.8	12.4	2.47	6.001		
700.0	700.0	700.0	700.0	1.5	1.5	-50.35	9.5	-11.4	14.8	11.9	2.92	5.078		
800.0	800.0	800.0	800.0	1.7	1.7	-50.35	9.5	-11.4	14.8	11.5	3.37	4.401		
900.0	900.0	900.0	900.0	1.9	1.9	-50.35	9.5	-11.4	14.8	11.0	3.82	3.883		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-50.35	9.5	-11.4	14.8	10.6	4.27	3.474		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-50.35	9.5	-11.4	14.8	10.1	4.72	3.144		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-50.35	9.5	-11.4	14.8	9.7	5.17	2.870		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-50.35	9.5	-11.4	14.8	9.2	5.62	2.641		
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-50.35	9.5	-11.4	14.8	8.8	6.07	2.445		
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-50.35	9.5	-11.4	14.8	8.3	6.52	2.276		
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-50.35	9.5	-11.4	14.8	7.9	6.97	2.129 CC		
1,700.0	1,700.0	1,699.7	1,699.7	3.7	3.7	-51.45	9.8	-12.2	15.7	8.3	7.41	2.114		
1,800.0	1,800.0	1,799.4	1,799.4	3.9	3.9	-54.14	10.6	-14.7	18.1	10.3	7.84	2.314		
1,900.0	1,900.0	1,899.0	1,898.9	4.2	4.1	-57.28	12.1	-18.8	22.3	14.1	8.28	2.701		
2,000.0	2,000.0	1,998.4	1,998.1	4.4	4.3	-60.10	14.1	-24.5	28.3	19.6	8.72	3.247		
2,100.0	2,100.0	2,097.6	2,097.0	4.6	4.6	38.05	16.7	-31.8	35.3	26.2	9.13	3.870		
2,200.0	2,200.0	2,196.7	2,195.6	4.8	4.8	38.16	19.8	-40.7	42.7	33.2	9.53	4.477		
2,300.0	2,299.9	2,295.6	2,293.9	5.0	5.0	39.13	23.5	-51.2	50.4	40.4	9.95	5.066		
2,400.0	2,399.7	2,394.3	2,391.8	5.2	5.3	40.59	27.8	-63.3	58.5	48.1	10.36	5.641		
2,500.0	2,499.4	2,493.2	2,489.6	5.4	5.6	42.37	32.6	-76.9	66.9	56.1	10.79	6.197		
2,600.0	2,598.9	2,592.9	2,588.1	5.6	5.8	44.59	37.6	-91.0	74.5	63.3	11.23	6.633		
2,700.0	2,698.3	2,692.6	2,686.7	5.9	6.1	47.29	42.5	-105.1	81.1	69.4	11.69	6.932		
2,800.0	2,797.4	2,792.3	2,785.3	6.1	6.4	50.46	47.5	-119.3	86.6	74.5	12.18	7.115		
2,810.4	2,807.7	2,802.7	2,795.5	6.1	6.5	50.82	48.1	-120.7	87.2	75.0	12.23	7.128		
2,900.0	2,896.4	2,892.0	2,883.9	6.4	6.7	53.79	52.5	-133.4	91.9	79.2	12.70	7.235		
3,000.0	2,995.4	2,991.8	2,982.5	6.6	7.1	56.76	57.5	-147.5	97.3	84.1	13.23	7.355		
3,100.0	3,094.4	3,091.5	3,081.1	6.9	7.4	59.41	62.5	-161.7	103.0	89.3	13.79	7.474		
3,200.0	3,193.4	3,191.2	3,179.7	7.2	7.7	61.78	67.5	-175.8	108.9	94.6	14.36	7.589		
3,300.0	3,292.4	3,291.0	3,278.3	7.5	8.0	63.91	72.5	-190.0	115.0	100.1	14.94	7.699		
3,400.0	3,391.4	3,390.7	3,376.9	7.8	8.3	65.81	77.5	-204.1	121.2	105.7	15.53	7.804		
3,500.0	3,490.4	3,490.4	3,475.5	8.1	8.7	67.53	82.5	-218.2	127.6	111.4	16.14	7.904		
3,600.0	3,589.4	3,590.1	3,574.1	8.4	9.0	69.09	87.4	-232.4	134.0	117.3	16.75	7.999		
3,700.0	3,688.4	3,689.9	3,672.7	8.7	9.3	70.50	92.4	-246.5	140.5	123.2	17.38	8.088		
3,800.0	3,787.4	3,789.6	3,771.3	9.0	9.7	71.79	97.4	-260.6	147.2	129.1	18.01	8.172		
3,900.0	3,886.4	3,889.3	3,869.9	9.3	10.0	72.96	102.4	-274.8	153.8	135.2	18.64	8.252		
4,000.0	3,985.4	3,989.1	3,968.5	9.6	10.4	74.04	107.4	-288.9	160.6	141.3	19.28	8.326		
4,100.0	4,084.4	4,088.8	4,067.1	9.9	10.7	75.03	112.4	-303.0	167.3	147.4	19.93	8.397		
4,200.0	4,183.4	4,188.5	4,165.7	10.3	11.0	75.95	117.4	-317.2	174.2	153.6	20.58	8.463		
4,300.0	4,282.4	4,288.3	4,264.3	10.6	11.4	76.79	122.4	-331.3	181.1	159.8	21.23	8.526		
4,400.0	4,381.4	4,388.0	4,362.9	10.9	11.7	77.57	127.4	-345.4	188.0	166.1	21.89	8.586		
4,500.0	4,480.4	4,487.7	4,461.4	11.2	12.1	78.30	132.4	-359.6	194.9	172.3	22.55	8.642		
4,600.0	4,579.4	4,587.4	4,560.0	11.6	12.4	78.97	137.3	-373.7	201.9	178.7	23.22	8.695		
4,700.0	4,678.4	4,687.2	4,658.6	11.9	12.8	79.61	142.3	-387.9	208.9	185.0	23.88	8.745		
4,800.0	4,777.4	4,786.9	4,757.2	12.2	13.1	80.20	147.3	-402.0	215.9	191.3	24.55	8.793		
4,900.0	4,876.4	4,891.0	4,860.4	12.6	13.4	81.07	152.0	-415.4	222.1	196.9	25.20	8.811		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-212 - Wellbore #1 - Plan #1 (11-2-15)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (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	4,975.4	4,995.6	4,964.5	12.9	13.7	82.67	155.5	-425.3	226.1	200.3	25.83	8.755		
5,100.0	5,074.4	5,100.0	5,068.6	13.2	13.9	84.99	157.8	-431.6	228.3	201.9	26.46	8.630		
5,200.0	5,173.4	5,203.7	5,172.3	13.6	14.0	88.04	158.7	-434.3	229.0	201.9	27.08	8.456		
5,258.7	5,231.6	5,263.0	5,231.6	13.8	14.1	90.11	158.8	-434.4	228.9	201.5	27.44	8.343		
5,300.0	5,272.4	5,303.9	5,272.4	13.9	14.2	91.55	158.8	-434.4	229.0	201.3	27.68	8.272		
5,324.0	5,296.2	5,327.6	5,296.2	14.0	14.3	92.38	158.8	-434.4	229.1	201.3	27.83	8.233		
5,400.0	5,371.6	5,403.0	5,371.6	14.2	14.4	94.80	158.8	-434.4	229.7	201.5	28.24	8.136		
5,500.0	5,471.1	5,502.5	5,471.1	14.4	14.6	97.21	158.8	-434.4	230.7	202.1	28.68	8.044		
5,600.0	5,570.9	5,602.3	5,570.9	14.6	14.7	98.76	158.8	-434.4	231.6	202.5	29.09	7.962		
5,700.0	5,670.9	5,702.3	5,670.9	14.8	14.9	99.45	158.8	-434.4	232.0	202.6	29.46	7.878		
5,729.1	5,700.0	5,731.4	5,700.0	14.8	15.0	-0.10	158.8	-434.4	232.1	206.6	25.45	9.118		
5,800.0	5,770.9	5,802.3	5,770.9	15.0	15.1	-0.10	158.8	-434.4	232.1	206.3	25.74	9.016		
5,858.6	5,829.5	5,860.9	5,829.5	15.1	15.2	0.00	158.8	-434.0	232.1	206.1	25.97	8.935		
5,903.5	5,874.4	5,905.6	5,874.1	15.2	15.3	0.69	158.8	-431.2	232.1	205.9	26.14	8.880		
5,950.0	5,920.8	5,951.6	5,919.8	15.2	15.3	-88.26	158.8	-425.6	232.2	201.9	30.26	7.673		
6,000.0	5,970.6	6,000.8	5,968.1	15.3	15.3	-87.15	158.8	-416.6	232.4	202.0	30.32	7.662		
6,050.0	6,020.0	6,050.0	6,015.7	15.3	15.3	-86.05	158.8	-404.5	232.6	202.3	30.35	7.665		
6,100.0	6,068.7	6,098.4	6,061.8	15.3	15.3	-84.98	158.8	-389.6	233.0	202.6	30.34	7.678		
6,150.0	6,116.6	6,146.8	6,106.8	15.3	15.3	-83.93	158.8	-371.8	233.4	203.1	30.31	7.701		
6,200.0	6,163.5	6,194.9	6,150.3	15.3	15.3	-82.91	158.8	-351.4	233.9	203.6	30.25	7.731		
6,250.0	6,209.1	6,242.8	6,192.3	15.2	15.2	-81.93	158.8	-328.3	234.4	204.2	30.19	7.765		
6,300.0	6,253.3	6,290.5	6,232.6	15.2	15.2	-80.99	158.8	-302.8	235.0	204.9	30.13	7.799		
6,350.0	6,295.9	6,337.9	6,271.0	15.2	15.2	-80.09	158.8	-275.0	235.6	205.5	30.10	7.828		
6,400.0	6,336.6	6,385.2	6,307.5	15.2	15.3	-79.24	158.8	-245.0	236.2	206.1	30.10	7.849		
6,450.0	6,375.4	6,432.2	6,341.9	15.3	15.3	-78.43	158.8	-212.9	236.9	206.7	30.16	7.855		
6,500.0	6,412.1	6,479.1	6,374.1	15.3	15.5	-77.67	158.8	-178.9	237.6	207.3	30.30	7.841		
6,550.0	6,446.4	6,525.8	6,404.1	15.5	15.6	-76.97	158.8	-143.1	238.2	207.7	30.53	7.802		
6,600.0	6,478.3	6,572.4	6,431.8	15.7	15.9	-76.33	158.8	-105.7	238.9	208.0	30.88	7.734		
6,650.0	6,507.6	6,618.8	6,457.1	15.9	16.2	-75.73	158.8	-66.7	239.5	208.1	31.37	7.635		
6,700.0	6,534.2	6,665.1	6,479.9	16.3	16.6	-75.20	158.8	-26.5	240.0	208.1	31.99	7.503		
6,750.0	6,558.0	6,711.3	6,500.2	16.7	17.0	-74.73	158.8	15.0	240.6	207.8	32.77	7.341		
6,800.0	6,578.8	6,757.4	6,517.9	17.2	17.5	-74.31	158.8	57.6	241.1	207.3	33.71	7.151		
6,850.0	6,596.6	6,803.4	6,532.9	17.8	18.1	-73.96	158.8	101.0	241.5	206.7	34.80	6.939		
6,900.0	6,611.4	6,850.0	6,545.5	18.5	18.8	-73.66	158.8	145.9	241.8	205.8	36.06	6.707		
6,950.0	6,622.9	6,895.2	6,555.1	19.3	19.5	-73.44	158.8	190.1	242.1	204.7	37.44	6.467		
7,000.0	6,631.3	6,941.0	6,562.1	20.1	20.3	-73.27	158.8	235.4	242.3	203.4	38.95	6.221		
7,050.0	6,636.4	6,986.8	6,566.4	21.0	21.1	-73.17	158.8	280.9	242.5	201.9	40.58	5.975		
7,100.0	6,638.3	7,032.6	6,567.9	21.9	22.0	-73.13	158.8	326.7	242.5	200.2	42.29	5.734		
7,109.9	6,638.3	7,042.3	6,567.9	22.1	22.2	-73.12	158.8	336.5	242.5	199.9	42.65	5.685		
7,131.8	6,638.1	7,063.5	6,567.7	22.5	22.6	-73.12	158.8	357.6	242.5	199.0	43.48	5.578		
7,200.0	6,637.5	7,131.7	6,567.1	23.9	24.0	-73.11	158.8	425.8	242.5	196.4	46.12	5.259		
7,300.0	6,636.7	7,231.7	6,566.2	26.0	26.1	-73.09	158.8	525.8	242.5	192.3	50.23	4.829		
7,400.0	6,635.8	7,331.7	6,565.2	28.3	28.4	-73.08	158.8	625.8	242.6	188.0	54.56	4.446		
7,500.0	6,635.0	7,431.7	6,564.3	30.6	30.8	-73.06	158.8	725.8	242.6	183.5	59.07	4.107		
7,600.0	6,634.2	7,531.7	6,563.4	33.1	33.2	-73.05	158.8	825.8	242.6	178.9	63.71	3.808		
7,700.0	6,633.3	7,631.7	6,562.5	35.5	35.7	-73.03	158.8	925.8	242.6	174.2	68.46	3.544		
7,800.0	6,632.5	7,731.7	6,561.6	38.1	38.2	-73.02	158.8	1,025.8	242.7	169.3	73.31	3.310		
7,900.0	6,631.7	7,831.7	6,560.7	40.6	40.8	-73.00	158.8	1,125.8	242.7	164.5	78.22	3.102		
8,000.0	6,630.8	7,931.7	6,559.8	43.2	43.3	-72.98	158.8	1,225.8	242.7	159.5	83.19	2.917		
8,100.0	6,630.0	8,031.7	6,558.9	45.8	46.0	-72.97	158.8	1,325.8	242.7	154.5	88.21	2.752		
8,200.0	6,629.1	8,131.7	6,558.0	48.5	48.6	-72.95	158.8	1,425.8	242.7	149.5	93.27	2.602		

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



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	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		
8,300.0	6,628.3	8,231.7	6,557.1	51.1	51.3	-72.94	158.8	1,525.8	242.8	144.4	98.36	2.468		
8,400.0	6,627.5	8,331.7	6,556.2	53.8	53.9	-72.92	158.8	1,625.7	242.8	139.3	103.49	2.346		
8,500.0	6,626.6	8,431.7	6,555.3	56.5	56.6	-72.91	158.8	1,725.7	242.8	134.2	108.63	2.235		
8,600.0	6,625.8	8,531.7	6,554.4	59.2	59.3	-72.89	158.8	1,825.7	242.8	129.0	113.80	2.134		
8,700.0	6,625.0	8,631.7	6,553.4	61.9	62.0	-72.87	158.8	1,925.7	242.8	123.8	118.99	2.041		
8,800.0	6,624.1	8,731.7	6,552.5	64.6	64.8	-72.86	158.8	2,025.7	242.9	118.7	124.19	1.956		
8,900.0	6,623.3	8,831.7	6,551.6	67.3	67.5	-72.84	158.8	2,125.7	242.9	113.5	129.41	1.877		
9,000.0	6,622.4	8,931.7	6,550.7	70.1	70.2	-72.83	158.8	2,225.7	242.9	108.3	134.63	1.804		
9,100.0	6,621.6	9,031.7	6,549.8	72.8	72.9	-72.81	158.8	2,325.7	242.9	103.0	139.87	1.737		
9,200.0	6,620.8	9,131.7	6,548.9	75.5	75.7	-72.80	158.8	2,425.7	242.9	97.8	145.12	1.674		
9,300.0	6,619.9	9,231.7	6,548.0	78.3	78.4	-72.78	158.8	2,525.7	243.0	92.6	150.38	1.616		
9,400.0	6,619.1	9,331.7	6,547.1	81.0	81.2	-72.76	158.7	2,625.7	243.0	87.3	155.64	1.561		
9,500.0	6,618.3	9,431.7	6,546.2	83.8	83.9	-72.75	158.7	2,725.7	243.0	82.1	160.92	1.510		
9,600.0	6,617.4	9,531.7	6,545.3	86.6	86.7	-72.73	158.7	2,825.7	243.0	76.8	166.19	1.462 Level 3		
9,700.0	6,616.6	9,631.7	6,544.4	89.3	89.5	-72.72	158.7	2,925.7	243.0	71.6	171.47	1.417 Level 3		
9,800.0	6,615.7	9,731.7	6,543.5	92.1	92.2	-72.70	158.7	3,025.7	243.1	66.3	176.76	1.375 Level 3		
9,900.0	6,614.9	9,831.7	6,542.6	94.9	95.0	-72.69	158.7	3,125.7	243.1	61.0	182.05	1.335 Level 3		
10,000.0	6,614.1	9,931.7	6,541.7	97.6	97.8	-72.67	158.7	3,225.7	243.1	55.8	187.35	1.298 Level 3		
10,100.0	6,613.2	10,031.7	6,540.7	100.4	100.5	-72.65	158.7	3,325.7	243.1	50.5	192.65	1.262 Level 3		
10,200.0	6,612.4	10,131.7	6,539.8	103.2	103.3	-72.64	158.7	3,425.7	243.1	45.2	197.95	1.228 Level 2		
10,300.0	6,611.6	10,231.7	6,538.9	105.9	106.1	-72.62	158.7	3,525.7	243.2	39.9	203.25	1.196 Level 2		
10,400.0	6,610.7	10,331.7	6,538.0	108.7	108.9	-72.61	158.7	3,625.7	243.2	34.6	208.56	1.166 Level 2		
10,500.0	6,609.9	10,431.7	6,537.1	111.5	111.6	-72.59	158.7	3,725.7	243.2	29.3	213.87	1.137 Level 2		
10,600.0	6,609.0	10,531.7	6,536.2	114.3	114.4	-72.58	158.7	3,825.7	243.2	24.1	219.18	1.110 Level 2		
10,700.0	6,608.2	10,631.7	6,535.3	117.1	117.2	-72.56	158.7	3,925.7	243.2	18.8	224.49	1.084 Level 2		
10,800.0	6,607.4	10,731.7	6,534.4	119.9	120.0	-72.54	158.7	4,025.6	243.3	13.5	229.80	1.059 Level 2		
10,900.0	6,606.5	10,831.7	6,533.5	122.6	122.8	-72.53	158.7	4,125.6	243.3	8.2	235.12	1.035 Level 2		
11,000.0	6,605.7	10,931.7	6,532.6	125.4	125.6	-72.51	158.7	4,225.6	243.3	2.9	240.44	1.012 Level 2		
11,100.0	6,604.8	11,031.7	6,531.7	128.2	128.3	-72.50	158.7	4,325.6	243.3	-2.4	245.75	0.990 Level 1		
11,200.0	6,604.0	11,131.7	6,530.8	131.0	131.1	-72.48	158.7	4,425.6	243.4	-7.7	251.07	0.969 Level 1		
11,300.0	6,603.2	11,231.7	6,529.9	133.8	133.9	-72.47	158.7	4,525.6	243.4	-13.0	256.39	0.949 Level 1		
11,400.0	6,602.3	11,331.7	6,528.9	136.6	136.7	-72.45	158.7	4,625.6	243.4	-18.3	261.71	0.930 Level 1		
11,500.0	6,601.5	11,431.7	6,528.0	139.4	139.5	-72.43	158.7	4,725.6	243.4	-23.6	267.04	0.912 Level 1		
11,600.0	6,600.7	11,531.7	6,527.1	142.2	142.3	-72.42	158.7	4,825.6	243.4	-28.9	272.36	0.894 Level 1		
11,700.0	6,599.8	11,631.7	6,526.2	144.9	145.1	-72.40	158.7	4,925.6	243.5	-34.2	277.68	0.877 Level 1		
11,800.0	6,599.0	11,731.7	6,525.3	147.7	147.9	-72.39	158.7	5,025.6	243.5	-39.5	283.00	0.860 Level 1		
11,900.0	6,598.1	11,831.7	6,524.4	150.5	150.7	-72.37	158.7	5,125.6	243.5	-44.8	288.33	0.845 Level 1		
12,000.0	6,597.3	11,931.7	6,523.5	153.3	153.5	-72.36	158.7	5,225.6	243.5	-50.1	293.65	0.829 Level 1		
12,100.0	6,596.5	12,031.7	6,522.6	156.1	156.3	-72.34	158.7	5,325.6	243.5	-55.4	298.97	0.815 Level 1		
12,200.0	6,595.6	12,131.7	6,521.7	158.9	159.1	-72.32	158.7	5,425.6	243.6	-60.7	304.30	0.800 Level 1		
12,300.0	6,594.8	12,231.7	6,520.8	161.7	161.9	-72.31	158.7	5,525.6	243.6	-66.0	309.62	0.787 Level 1		
12,400.0	6,594.0	12,331.7	6,519.9	164.5	164.7	-72.29	158.7	5,625.6	243.6	-71.3	314.95	0.773 Level 1		
12,500.0	6,593.1	12,431.7	6,519.0	167.3	167.4	-72.28	158.7	5,725.6	243.6	-76.6	320.27	0.761 Level 1		
12,600.0	6,592.3	12,531.7	6,518.1	170.1	170.2	-72.26	158.7	5,825.6	243.6	-81.9	325.60	0.748 Level 1		
12,700.0	6,591.4	12,631.7	6,517.1	172.9	173.0	-72.25	158.7	5,925.6	243.7	-87.2	330.92	0.736 Level 1		
12,800.0	6,590.6	12,731.7	6,516.2	175.7	175.8	-72.23	158.7	6,025.6	243.7	-92.6	336.24	0.725 Level 1		
12,900.0	6,589.8	12,831.7	6,515.3	178.5	178.6	-72.22	158.7	6,125.6	243.7	-97.9	341.57	0.714 Level 1		
13,000.0	6,588.9	12,931.7	6,514.4	181.3	181.4	-72.20	158.7	6,225.6	243.7	-103.2	346.89	0.703 Level 1		
13,100.0	6,588.1	13,031.7	6,513.5	184.1	184.2	-72.18	158.7	6,325.6	243.8	-108.5	352.22	0.692 Level 1		
13,200.0	6,587.3	13,131.7	6,512.6	186.9	187.0	-72.17	158.7	6,425.5	243.8	-113.8	357.54	0.682 Level 1		
13,300.0	6,586.4	13,231.7	6,511.7	189.7	189.8	-72.15	158.7	6,525.5	243.8	-119.1	362.86	0.672 Level 1		

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



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Bihain 5N64W26GK Pad Sec.26-T5N-R64W - Bihain 26G-212 - Wellbore #1 - Plan #1 (11-2-15)													<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b> 0-MWD													<b>Offset Well Error:</b>	0.0 ft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Distance</b>								
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>	<b>Warning</b>	
13,400.0	6,585.6	13,331.7	6,510.8	192.5	192.6	-72.14	158.7	6,625.5	243.8	-124.4	368.18	0.662	Level 1	
13,500.0	6,584.7	13,431.7	6,509.9	195.3	195.4	-72.12	158.7	6,725.5	243.8	-129.7	373.51	0.653	Level 1	
13,600.0	6,583.9	13,531.7	6,509.0	198.1	198.2	-72.11	158.7	6,825.5	243.9	-135.0	378.83	0.644	Level 1	
13,649.8	6,583.5	13,581.5	6,508.5	199.5	199.6	-72.10	158.7	6,875.3	243.9	-137.6	381.48	0.639	Level 1	
13,708.1	6,583.0	13,639.5	6,508.0	201.1	201.3	-72.09	158.7	6,933.4	243.9	-140.7	384.57	0.634	Level 1, ES, SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-2 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6867-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		
7,400.0	6,635.8	6,615.8	6,615.8	28.3	132.3	-90.93	384.4	1,510.8	995.8	835.2	160.60	6.200		
7,500.0	6,635.0	6,615.0	6,615.0	30.6	132.3	-90.82	384.4	1,510.8	908.1	745.2	162.93	5.574		
7,600.0	6,634.2	6,614.2	6,614.2	33.1	132.3	-90.72	384.4	1,510.8	823.3	658.0	165.34	4.979		
7,700.0	6,633.3	6,613.3	6,613.3	35.5	132.3	-90.61	384.4	1,510.8	742.3	574.5	167.80	4.423		
7,800.0	6,632.5	6,612.5	6,612.5	38.1	132.2	-90.51	384.4	1,510.8	666.4	496.1	170.31	3.913		
7,900.0	6,631.7	6,611.7	6,611.7	40.6	132.2	-90.40	384.4	1,510.8	597.7	424.8	172.86	3.458		
8,000.0	6,630.8	6,610.8	6,610.8	43.2	132.2	-90.30	384.4	1,510.8	538.8	363.4	175.43	3.071		
8,100.0	6,630.0	6,610.0	6,610.0	45.8	132.2	-90.19	384.4	1,510.8	493.4	315.4	178.04	2.772		
8,200.0	6,629.1	6,609.1	6,609.1	48.5	132.2	-90.09	384.4	1,510.8	465.4	284.8	180.66	2.576		
8,284.4	6,628.4	6,608.4	6,608.4	50.7	132.2	-90.00	384.4	1,510.8	457.7	274.8	182.89	2.503 CC		
8,300.0	6,628.3	6,608.3	6,608.3	51.1	132.2	-89.98	384.4	1,510.8	458.0	274.7	183.30	2.498 ES, SF		
8,400.0	6,627.5	6,607.5	6,607.5	53.8	132.1	-89.88	384.4	1,510.8	472.1	286.1	185.95	2.539		
8,500.0	6,626.6	6,606.6	6,606.6	56.5	132.1	-89.77	384.4	1,510.8	505.9	317.3	188.62	2.682		
8,600.0	6,625.8	6,605.8	6,605.8	59.2	132.1	-89.67	384.4	1,510.8	556.0	364.7	191.30	2.906		
8,700.0	6,625.0	6,605.0	6,605.0	61.9	132.1	-89.56	384.4	1,510.8	618.2	424.3	193.99	3.187		
8,800.0	6,624.1	6,604.1	6,604.1	64.6	132.1	-89.46	384.4	1,510.8	689.5	492.8	196.69	3.505		
8,900.0	6,623.3	6,603.3	6,603.3	67.3	132.1	-89.35	384.4	1,510.8	767.1	567.7	199.39	3.847		
9,000.0	6,622.4	6,602.4	6,602.4	70.1	132.0	-89.25	384.4	1,510.8	849.5	647.4	202.10	4.203		
9,100.0	6,621.6	6,601.6	6,601.6	72.8	132.0	-89.14	384.4	1,510.8	935.3	730.4	204.81	4.566		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-3 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 6865-UNKNOWN												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	26.61	405.5	203.1	453.9				
100.0	100.0	82.0	82.0	0.1	1.6	26.61	405.5	203.1	453.5	451.8	1.75	258.766	
200.0	200.0	182.0	182.0	0.3	3.6	26.61	405.5	203.1	453.5	449.5	3.98	114.023	
300.0	300.0	282.0	282.0	0.6	5.6	26.61	405.5	203.1	453.5	447.3	6.20	73.122	
400.0	400.0	382.0	382.0	0.8	7.6	26.61	405.5	203.1	453.5	445.1	8.43	53.817	
500.0	500.0	482.0	482.0	1.0	9.6	26.61	405.5	203.1	453.5	442.9	10.65	42.576	
600.0	600.0	582.0	582.0	1.2	11.6	26.61	405.5	203.1	453.5	440.6	12.88	35.220	
700.0	700.0	682.0	682.0	1.5	13.6	26.61	405.5	203.1	453.5	438.4	15.10	30.031	
800.0	800.0	782.0	782.0	1.7	15.6	26.61	405.5	203.1	453.5	436.2	17.33	26.175	
900.0	900.0	882.0	882.0	1.9	17.6	26.61	405.5	203.1	453.5	434.0	19.55	23.197	
1,000.0	1,000.0	982.0	982.0	2.1	19.6	26.61	405.5	203.1	453.5	431.7	21.78	20.827	
1,100.0	1,100.0	1,082.0	1,082.0	2.4	21.6	26.61	405.5	203.1	453.5	429.5	24.00	18.896	
1,200.0	1,200.0	1,182.0	1,182.0	2.6	23.6	26.61	405.5	203.1	453.5	427.3	26.22	17.293	
1,300.0	1,300.0	1,282.0	1,282.0	2.8	25.6	26.61	405.5	203.1	453.5	425.1	28.45	15.941	
1,400.0	1,400.0	1,382.0	1,382.0	3.0	27.6	26.61	405.5	203.1	453.5	422.8	30.67	14.785	
1,500.0	1,500.0	1,482.0	1,482.0	3.3	29.6	26.61	405.5	203.1	453.5	420.6	32.90	13.785	
1,600.0	1,600.0	1,582.0	1,582.0	3.5	31.6	26.61	405.5	203.1	453.5	418.4	35.12	12.912	
1,700.0	1,700.0	1,682.0	1,682.0	3.7	33.6	26.61	405.5	203.1	453.5	416.2	37.35	12.143	
1,800.0	1,800.0	1,782.0	1,782.0	3.9	35.6	26.61	405.5	203.1	453.5	413.9	39.57	11.460	
1,900.0	1,900.0	1,882.0	1,882.0	4.2	37.6	26.61	405.5	203.1	453.5	411.7	41.80	10.850	
2,000.0	2,000.0	1,982.0	1,982.0	4.4	39.6	26.61	405.5	203.1	453.5	409.5	44.02	10.302 CC	
2,100.0	2,100.0	2,082.0	2,082.0	4.6	41.6	126.28	405.5	203.1	454.0	407.8	46.23	9.821	
2,200.0	2,200.0	2,182.0	2,182.0	4.8	43.6	126.53	405.5	203.1	455.6	407.2	48.42	9.410	
2,300.0	2,299.9	2,281.9	2,281.9	5.0	45.6	126.95	405.5	203.1	458.2	407.6	50.60	9.056	
2,400.0	2,399.7	2,381.7	2,381.7	5.2	47.6	127.53	405.5	203.1	461.9	409.1	52.78	8.752	
2,500.0	2,499.4	2,481.4	2,481.4	5.4	49.6	128.25	405.5	203.1	466.7	411.8	54.95	8.494	
2,600.0	2,598.9	2,580.9	2,580.9	5.6	51.6	129.11	405.5	203.1	472.7	415.6	57.11	8.278	
2,700.0	2,698.3	2,680.3	2,680.3	5.9	53.6	130.10	405.5	203.1	480.0	420.7	59.26	8.100	
2,800.0	2,797.4	2,779.4	2,779.4	6.1	55.6	131.20	405.5	203.1	488.5	427.1	61.40	7.957	
2,810.4	2,807.7	2,789.7	2,789.7	6.1	55.8	131.32	405.5	203.1	489.5	427.9	61.62	7.944	
2,900.0	2,896.4	2,878.4	2,878.4	6.4	57.6	132.41	405.5	203.1	498.0	434.4	63.58	7.831	
3,000.0	2,995.4	2,977.4	2,977.4	6.6	59.5	133.58	405.5	203.1	507.6	441.8	65.78	7.717	
3,100.0	3,094.4	3,076.4	3,076.4	6.9	61.5	134.70	405.5	203.1	517.5	449.5	67.98	7.612	
3,200.0	3,193.4	3,175.4	3,175.4	7.2	63.5	135.79	405.5	203.1	527.5	457.4	70.18	7.517	
3,300.0	3,292.4	3,274.4	3,274.4	7.5	65.5	136.83	405.5	203.1	537.8	465.4	72.38	7.430	
3,400.0	3,391.4	3,373.4	3,373.4	7.8	67.5	137.83	405.5	203.1	548.2	473.6	74.59	7.350	
3,500.0	3,490.4	3,472.4	3,472.4	8.1	69.4	138.80	405.5	203.1	558.8	482.0	76.79	7.276	
3,600.0	3,589.4	3,571.4	3,571.4	8.4	71.4	139.73	405.5	203.1	569.5	490.5	79.00	7.209	
3,700.0	3,688.4	3,670.4	3,670.4	8.7	73.4	140.62	405.5	203.1	580.4	499.2	81.20	7.147	
3,800.0	3,787.4	3,769.4	3,769.4	9.0	75.4	141.49	405.5	203.1	591.4	508.0	83.41	7.090	
3,900.0	3,886.4	3,868.4	3,868.4	9.3	77.4	142.32	405.5	203.1	602.5	516.9	85.61	7.038	
4,000.0	3,985.4	3,967.4	3,967.4	9.6	79.3	143.12	405.5	203.1	613.8	526.0	87.82	6.989	
4,100.0	4,084.4	4,066.4	4,066.4	9.9	81.3	143.89	405.5	203.1	625.1	535.1	90.02	6.944	
4,200.0	4,183.4	4,165.4	4,165.4	10.3	83.3	144.64	405.5	203.1	636.6	544.4	92.22	6.903	
4,300.0	4,282.4	4,264.4	4,264.4	10.6	85.3	145.36	405.5	203.1	648.2	553.8	94.43	6.865	
4,400.0	4,381.4	4,363.4	4,363.4	10.9	87.3	146.05	405.5	203.1	659.9	563.3	96.63	6.829	
4,500.0	4,480.4	4,462.4	4,462.4	11.2	89.2	146.72	405.5	203.1	671.7	572.8	98.83	6.796	
4,600.0	4,579.4	4,561.4	4,561.4	11.6	91.2	147.37	405.5	203.1	683.5	582.5	101.04	6.765	
4,700.0	4,678.4	4,660.4	4,660.4	11.9	93.2	147.99	405.5	203.1	695.5	592.2	103.24	6.737	
4,800.0	4,777.4	4,759.4	4,759.4	12.2	95.2	148.59	405.5	203.1	707.5	602.1	105.44	6.710	
4,900.0	4,876.4	4,858.4	4,858.4	12.6	97.2	149.18	405.5	203.1	719.6	612.0	107.64	6.685	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Bihain 26-3 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft	
Survey Program: 6865-UNKNOWN													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,000.0	4,975.4	4,957.4	4,957.4	12.9	99.1	149.74	405.5	203.1	731.8	621.9	109.84	6.662		
5,100.0	5,074.4	5,056.4	5,056.4	13.2	101.1	150.29	405.5	203.1	744.0	632.0	112.04	6.640		
5,200.0	5,173.4	5,155.4	5,155.4	13.6	103.1	150.82	405.5	203.1	756.3	642.1	114.24	6.620		
5,300.0	5,272.4	5,254.4	5,254.4	13.9	105.1	151.33	405.5	203.1	768.7	652.2	116.44	6.601		
5,324.0	5,296.2	5,278.2	5,278.2	14.0	105.6	151.45	405.5	203.1	771.7	654.7	116.97	6.597		
5,400.0	5,371.6	5,353.6	5,353.6	14.2	107.1	151.87	405.5	203.1	780.2	661.3	118.92	6.561		
5,500.0	5,471.1	5,453.1	5,453.1	14.4	109.1	152.28	405.5	203.1	788.8	667.5	121.39	6.499		
5,600.0	5,570.9	5,552.9	5,552.9	14.6	111.1	152.54	405.5	203.1	794.4	670.6	123.75	6.419		
5,700.0	5,670.9	5,652.9	5,652.9	14.8	113.1	152.66	405.5	203.1	796.8	670.8	126.00	6.324		
5,729.1	5,700.0	5,682.0	5,682.0	14.8	113.6	53.08	405.5	203.1	797.0	668.9	128.06	6.223		
5,800.0	5,770.9	5,752.9	5,752.9	15.0	115.1	53.08	405.5	203.1	797.0	667.4	129.60	6.150		
5,903.5	5,874.4	5,856.4	5,856.4	15.2	117.1	53.08	405.5	203.1	797.0	665.1	131.86	6.044		
5,950.0	5,920.8	5,902.8	5,902.8	15.2	118.1	-37.04	405.5	203.1	795.8	664.6	131.28	6.062		
6,000.0	5,970.6	5,952.6	5,952.6	15.3	119.1	-37.41	405.5	203.1	792.1	660.3	131.82	6.009		
6,050.0	6,020.0	6,002.0	6,002.0	15.3	120.0	-38.05	405.5	203.1	785.8	653.8	132.01	5.953		
6,100.0	6,068.7	6,050.7	6,050.7	15.3	121.0	-38.97	405.5	203.1	777.0	645.1	131.90	5.891		
6,150.0	6,116.6	6,098.6	6,098.6	15.3	122.0	-40.19	405.5	203.1	765.8	634.3	131.55	5.822		
6,200.0	6,163.5	6,145.5	6,145.5	15.3	122.9	-41.71	405.5	203.1	752.3	621.3	131.04	5.741		
6,250.0	6,209.1	6,191.1	6,191.1	15.2	123.8	-43.57	405.5	203.1	736.7	606.2	130.49	5.645		
6,300.0	6,253.3	6,235.3	6,235.3	15.2	124.7	-45.78	405.5	203.1	719.1	589.0	130.06	5.529		
6,350.0	6,295.9	6,277.9	6,277.9	15.2	125.6	-48.36	405.5	203.1	699.8	569.9	129.89	5.387		
6,400.0	6,336.6	6,318.6	6,318.6	15.2	126.4	-51.32	405.5	203.1	678.9	548.8	130.16	5.216		
6,450.0	6,375.4	6,357.4	6,357.4	15.3	127.1	-54.65	405.5	203.1	657.0	526.0	131.00	5.015		
6,500.0	6,412.1	6,394.1	6,394.1	15.3	127.9	-58.33	405.5	203.1	634.2	501.7	132.47	4.787		
6,550.0	6,446.4	6,428.4	6,428.4	15.5	128.6	-62.28	405.5	203.1	610.9	476.4	134.56	4.540		
6,600.0	6,478.3	6,460.3	6,460.3	15.7	129.2	-66.43	405.5	203.1	587.8	450.7	137.10	4.287		
6,650.0	6,507.6	6,489.6	6,489.6	15.9	129.8	-70.65	405.5	203.1	565.3	425.4	139.89	4.041		
6,700.0	6,534.2	6,516.2	6,516.2	16.3	130.3	-74.80	405.5	203.1	544.0	401.3	142.64	3.813		
6,750.0	6,558.0	6,540.0	6,540.0	16.7	130.8	-78.71	405.5	203.1	524.5	379.4	145.13	3.614		
6,800.0	6,578.8	6,560.8	6,560.8	17.2	131.2	-82.23	405.5	203.1	507.7	360.4	147.23	3.448		
6,850.0	6,596.6	6,578.6	6,578.6	17.8	131.6	-85.25	405.5	203.1	494.1	345.2	148.92	3.318		
6,900.0	6,611.4	6,593.4	6,593.4	18.5	131.9	-87.66	405.5	203.1	484.5	334.3	150.25	3.225		
6,950.0	6,622.9	6,604.9	6,604.9	19.3	132.1	-89.39	405.5	203.1	479.5	328.1	151.36	3.168		
6,976.1	6,627.7	6,609.7	6,609.7	19.7	132.2	-90.00	405.5	203.1	478.8	326.9	151.90	3.152 ES		
7,000.0	6,631.3	6,613.3	6,613.3	20.1	132.3	-90.38	405.5	203.1	479.4	327.0	152.37	3.146 SF		
7,050.0	6,636.4	6,618.4	6,618.4	21.0	132.4	-90.61	405.5	203.1	484.4	331.0	153.35	3.159		
7,100.0	6,638.3	6,620.3	6,620.3	21.9	132.4	-90.07	405.5	203.1	494.4	340.1	154.33	3.204		
7,109.9	6,638.3	6,620.3	6,620.3	22.1	132.4	-89.87	405.5	203.1	497.0	342.5	154.51	3.216		
7,200.0	6,637.5	6,619.5	6,619.5	23.9	132.4	-89.78	405.5	203.1	528.3	372.0	156.30	3.380		
7,300.0	6,636.7	6,618.7	6,618.7	26.0	132.4	-89.68	405.5	203.1	577.7	419.3	158.41	3.647		
7,400.0	6,635.8	6,617.8	6,617.8	28.3	132.4	-89.58	405.5	203.1	639.1	478.4	160.65	3.978		
7,500.0	6,635.0	6,617.0	6,617.0	30.6	132.3	-89.48	405.5	203.1	709.3	546.3	162.98	4.352		
7,600.0	6,634.2	6,616.2	6,616.2	33.1	132.3	-89.38	405.5	203.1	786.0	620.6	165.38	4.752		
7,700.0	6,633.3	6,615.3	6,615.3	35.5	132.3	-89.27	405.5	203.1	867.4	699.6	167.84	5.168		
7,800.0	6,632.5	6,614.5	6,614.5	38.1	132.3	-89.17	405.5	203.1	952.4	782.0	170.34	5.591		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Monfort Kuner B 26-7 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 7312-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		
8,800.0	6,624.1	6,600.1	6,600.1	64.6	132.0	-90.80	411.8	2,838.5	946.0	749.4	196.60	4.812		
8,900.0	6,623.3	6,599.3	6,599.3	67.3	132.0	-90.70	411.8	2,838.5	861.7	662.3	199.31	4.323		
9,000.0	6,622.4	6,598.4	6,598.4	70.1	132.0	-90.61	411.8	2,838.5	781.0	579.0	202.03	3.866		
9,100.0	6,621.6	6,597.6	6,597.6	72.8	132.0	-90.51	411.8	2,838.5	705.4	500.7	204.75	3.445		
9,200.0	6,620.8	6,596.8	6,596.8	75.5	131.9	-90.41	411.8	2,838.5	636.6	429.1	207.48	3.068		
9,300.0	6,619.9	6,595.9	6,595.9	78.3	131.9	-90.31	411.8	2,838.5	576.9	366.7	210.21	2.744		
9,400.0	6,619.1	6,595.1	6,595.1	81.0	131.9	-90.21	411.8	2,838.5	529.5	316.5	212.95	2.487		
9,500.0	6,618.3	6,594.3	6,594.3	83.8	131.9	-90.11	411.8	2,838.5	497.9	282.2	215.69	2.309		
9,600.0	6,617.4	6,593.4	6,593.4	86.6	131.9	-90.01	411.8	2,838.5	485.3	266.9	218.43	2.222		
9,612.1	6,617.3	6,593.3	6,593.3	86.9	131.9	-90.00	411.8	2,838.5	485.1	266.4	218.76	2.218	CC, ES, SF	
9,700.0	6,616.6	6,592.6	6,592.6	89.3	131.9	-89.91	411.8	2,838.5	493.0	271.9	221.17	2.229		
9,800.0	6,615.7	6,591.7	6,591.7	92.1	131.8	-89.81	411.8	2,838.5	520.3	296.3	223.92	2.323		
9,900.0	6,614.9	6,590.9	6,590.9	94.9	131.8	-89.72	411.8	2,838.5	564.1	337.5	226.67	2.489		
10,000.0	6,614.1	6,590.1	6,590.1	97.6	131.8	-89.62	411.8	2,838.5	621.1	391.7	229.42	2.707		
10,100.0	6,613.2	6,589.2	6,589.2	100.4	131.8	-89.52	411.8	2,838.5	688.0	455.9	232.17	2.963		
10,200.0	6,612.4	6,588.4	6,588.4	103.2	131.8	-89.42	411.8	2,838.5	762.2	527.3	234.93	3.244		
10,300.0	6,611.6	6,587.6	6,587.6	105.9	131.8	-89.32	411.8	2,838.5	841.7	604.1	237.68	3.541		
10,400.0	6,610.7	6,586.7	6,586.7	108.7	131.7	-89.22	411.8	2,838.5	925.2	684.8	240.44	3.848		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Monfort Kuner B 26-8 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6840-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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,100.0	6,613.2	6,586.2	6,586.2	100.4	131.7	-90.81	404.0	4,130.0	934.7	702.6	232.10	4.027		
10,200.0	6,612.4	6,585.4	6,585.4	103.2	131.7	-90.71	404.0	4,130.0	850.2	615.4	234.86	3.620		
10,300.0	6,611.6	6,584.6	6,584.6	105.9	131.7	-90.61	404.0	4,130.0	769.5	531.9	237.62	3.239		
10,400.0	6,610.7	6,583.7	6,583.7	108.7	131.7	-90.51	404.0	4,130.0	693.9	453.5	240.39	2.887		
10,500.0	6,609.9	6,582.9	6,582.9	111.5	131.7	-90.41	404.0	4,130.0	625.1	381.9	243.15	2.571		
10,600.0	6,609.0	6,582.0	6,582.0	114.3	131.6	-90.31	404.0	4,130.0	565.7	319.8	245.92	2.300		
10,700.0	6,608.2	6,581.2	6,581.2	117.1	131.6	-90.20	404.0	4,130.0	518.9	270.3	248.69	2.087		
10,800.0	6,607.4	6,580.4	6,580.4	119.9	131.6	-90.10	404.0	4,130.0	488.4	237.0	251.46	1.942		
10,900.0	6,606.5	6,579.5	6,579.5	122.6	131.6	-90.00	404.0	4,130.0	477.3	223.1	254.22	1.878		
10,903.6	6,606.5	6,579.5	6,579.5	122.7	131.6	-90.00	404.0	4,130.0	477.3	223.0	254.33	1.877	CC, ES, SF	
11,000.0	6,605.7	6,578.7	6,578.7	125.4	131.6	-89.90	404.0	4,130.0	487.0	230.0	256.99	1.895		
11,100.0	6,604.8	6,577.8	6,577.8	128.2	131.6	-89.80	404.0	4,130.0	516.1	256.4	259.76	1.987		
11,200.0	6,604.0	6,577.0	6,577.0	131.0	131.5	-89.70	404.0	4,130.0	561.8	299.3	262.53	2.140		
11,300.0	6,603.2	6,576.2	6,576.2	133.8	131.5	-89.60	404.0	4,130.0	620.4	355.1	265.30	2.339		
11,400.0	6,602.3	6,575.3	6,575.3	136.6	131.5	-89.50	404.0	4,130.0	688.6	420.5	268.07	2.569		
11,500.0	6,601.5	6,574.5	6,574.5	139.4	131.5	-89.40	404.0	4,130.0	763.8	493.0	270.84	2.820		
11,600.0	6,600.7	6,573.7	6,573.7	142.2	131.5	-89.30	404.0	4,130.0	844.2	570.6	273.61	3.086		
11,700.0	6,599.8	6,572.8	6,572.8	144.9	131.5	-89.20	404.0	4,130.0	928.4	652.0	276.38	3.359		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4617.0ft (RKB - 13')

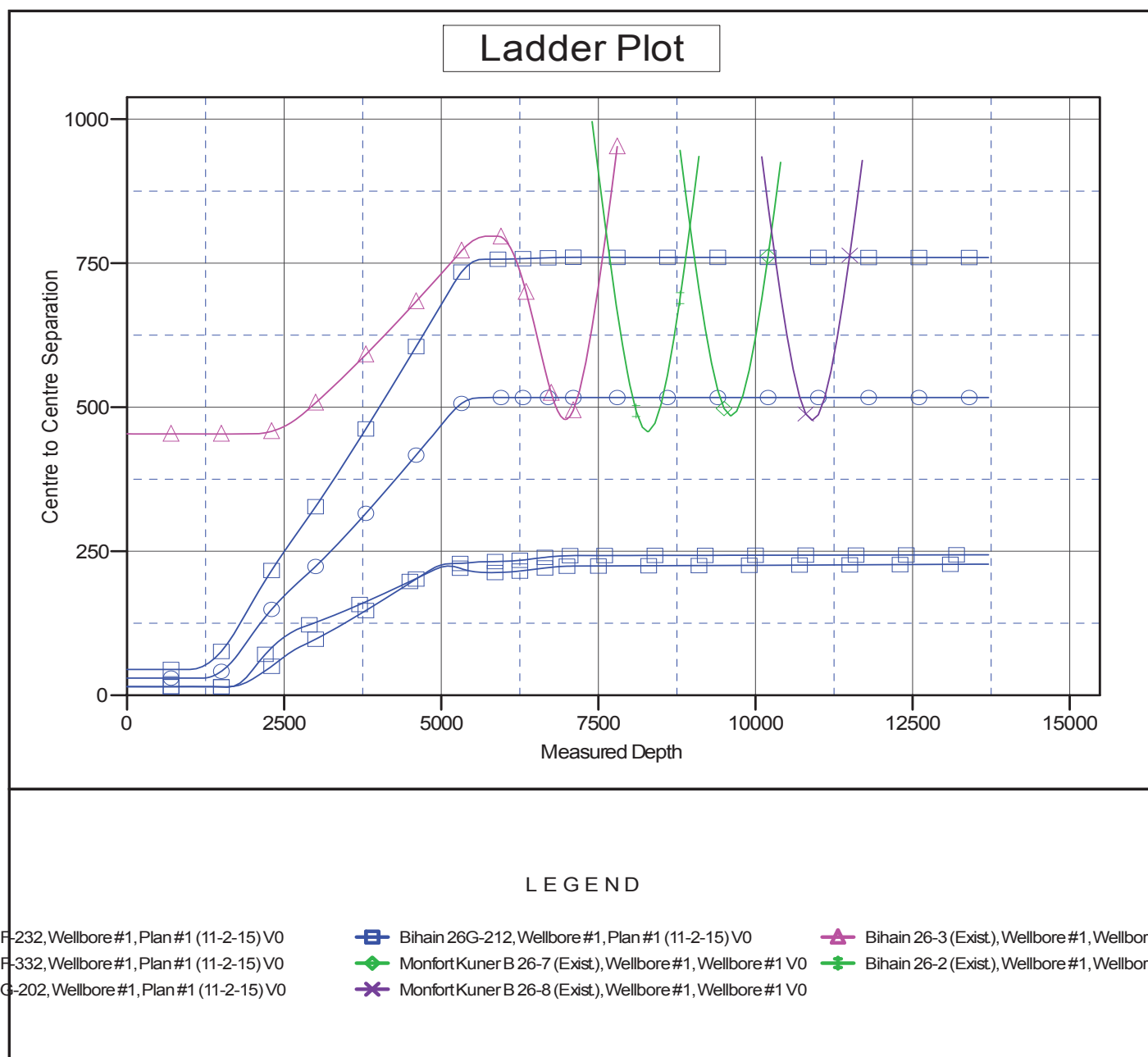
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Bihain 26G-312

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.63°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP DJ Basin	<b>Local Co-ordinate Reference:</b>	Well Bihain 26G-312
<b>Project:</b>	SEC.26-T5N-R64W	<b>TVD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Reference Site:</b>	Bihain 5N64W26GK Pad Sec.26-T5N-R64W	<b>MD Reference:</b>	WELL @ 4617.0ft (RKB - 13')
<b>Site Error:</b>	0.0 ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Bihain 26G-312	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	US_EDM
<b>Reference Design:</b>	Plan #1 (11-2-15)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4617.0ft (RKB - 13')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: Bihain 26G-312

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.63°

