PETROLEUM DEVELOPMENT CORP DJ Basin

Well Name: **High Pointe LLC 10F-212**

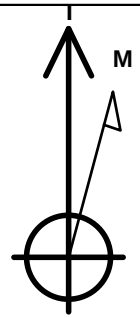
Surface Location: High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W
North American Datum 1983 , US State Plane 1983, Colorado Northern Zone
Ground Elevation: 4923.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1396127.03	3170735.73	40.419150	-104.886790	

Original Well Elev WELL @ 4936.0ft (Original Well Elev)

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 769'FNL & 425'FWL	1.0	0.0	0.0	Point
BHL 780'FNL & 500'FEL	7006.0	7.7	4215.6	Point



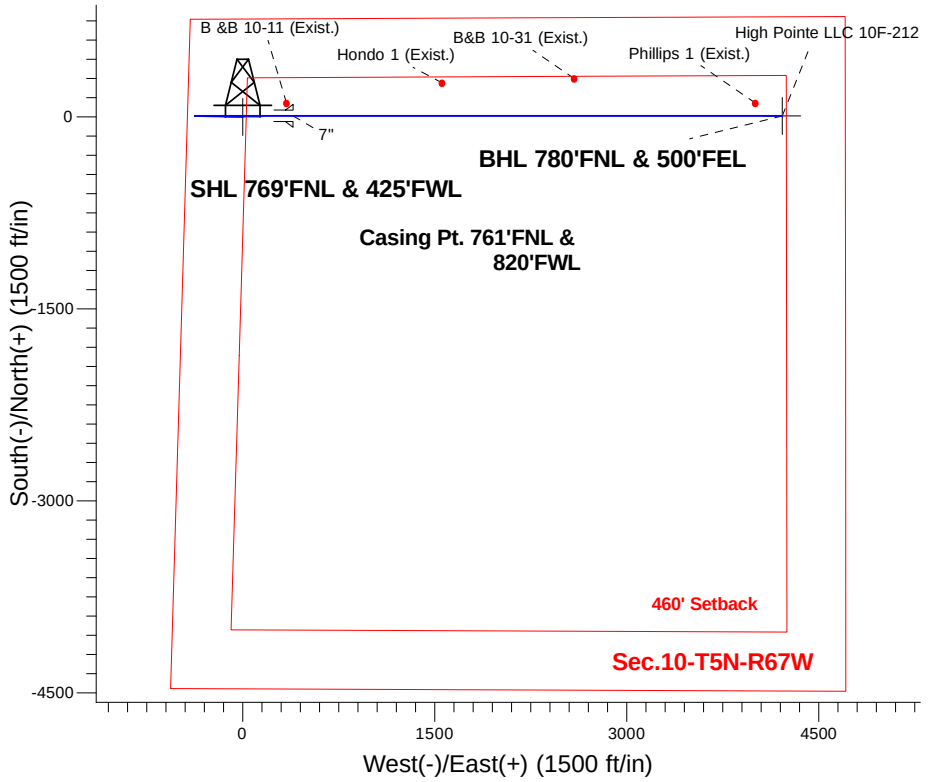
Azimuths to True North
Magnetic North: 9.09°

Magnetic Field
Strength: 53300.2snT
Dip Angle: 67.10°
Date: 12/31/2009
Model: IGRF200510

High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W
High Pointe LLC 10F-212
Plan #1 (1-18-16)
12:54, February 01 2016

ANNOTATIONS

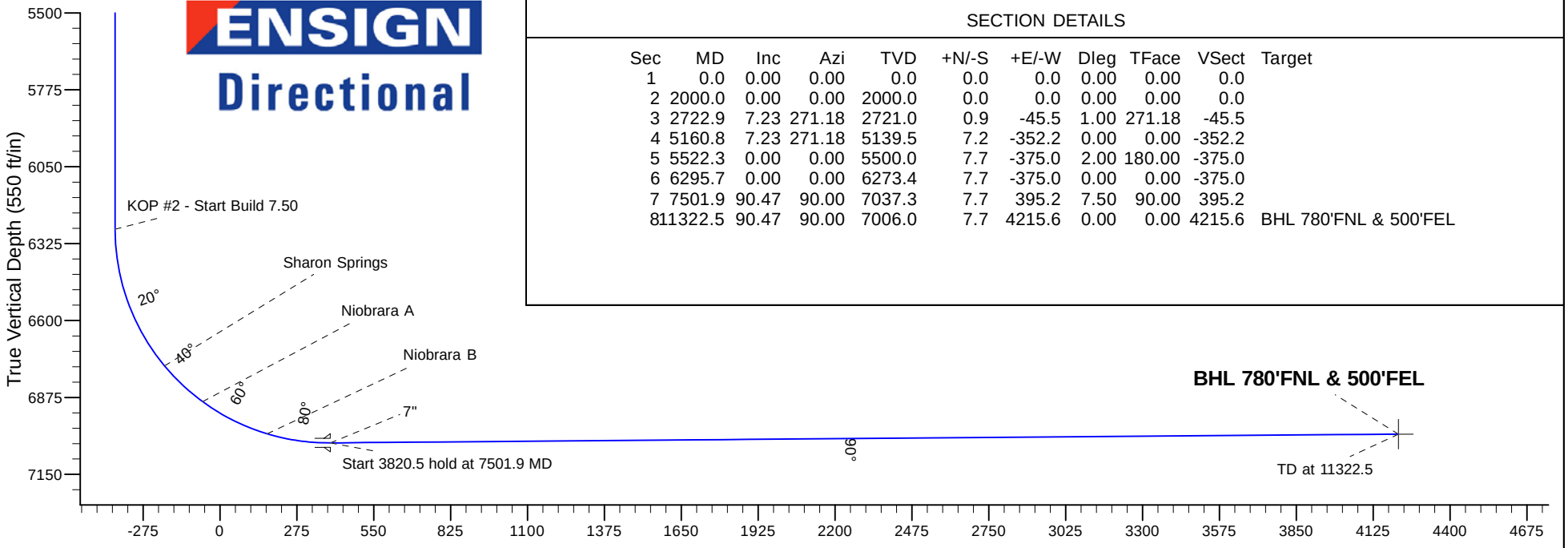
TVD	MD	Annotation
2000.0	2000.0	KOP - Start Build 1.00
5139.5	5160.8	Start Drop -2.00
6273.4	6295.7	KOP #2 - Start Build 7.50
7037.3	7501.9	Start 3820.5 hold at 7501.9 MD
7006.0	11322.5	TD at 11322.5



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	2722.9	7.23	271.18	2721.0	0.9	-45.5	1.00	271.18	-45.5	
4	5160.8	7.23	271.18	5139.5	7.2	-352.2	0.00	0.00	-352.2	
5	5522.3	0.00	0.00	5500.0	7.7	-375.0	2.00	180.00	-375.0	
6	6295.7	0.00	0.00	6273.4	7.7	-375.0	0.00	0.00	-375.0	
7	7501.9	90.47	90.00	7037.3	7.7	395.2	7.50	90.00	395.2	
8	11322.5	90.47	90.00	7006.0	7.7	4215.6	0.00	0.00	4215.6	BHL 780'FNL & 500'FEL



ENSIGN Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.10-T5N-R67W
High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W
High Pointe LLC 10F-212

Wellbore #1

Plan: Plan #1 (1-18-16)

Standard Planning Report

01 February, 2016

PDC ENERGY
Growing E&P Value

Database:	US_EDM	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Project:	SEC.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**North Reference:**	True
Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-18-16)		

Project	SEC.10-T5N-R67W, Weld County, Colorado		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W				
Site Position:		**Northing:**	1,396,156.18 usft	**Latitude:**	40.419230
From:	Lat/Long	**Easting:**	3,170,735.53 usft	**Longitude:**	-104.886790
Position Uncertainty:	0.0 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.40 °

Well	High Pointe LLC 10F-212					
Well Position	**+N/-S**	-29.1 ft	**Northing:**	1,396,127.03 usft	**Latitude:**	40.419150
	+E/-W	0.0 ft	**Easting:**	3,170,735.73 usft	**Longitude:**	-104.886790
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	0.0 ft	**Ground Level:**	4,923.0 ft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF200510	12/31/2009	9.09	67.10	53,300

Design	Plan #1 (1-18-16)			
Audit Notes:				
Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.0	0.0	0.0	89.90

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,722.9	7.23	271.18	2,721.0	0.9	-45.5	1.00	1.00	0.00	271.18	
5,160.8	7.23	271.18	5,139.5	7.2	-352.2	0.00	0.00	0.00	0.00	
5,522.3	0.00	0.00	5,500.0	7.7	-375.0	2.00	-2.00	0.00	180.00	
6,295.7	0.00	0.00	6,273.4	7.7	-375.0	0.00	0.00	0.00	0.00	
7,501.9	90.47	90.00	7,037.3	7.7	395.2	7.50	7.50	0.00	90.00	
11,322.5	90.47	90.00	7,006.0	7.7	4,215.6	0.00	0.00	0.00	0.00	BHL 780'FNL & 500'F

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Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-18-16)		

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 769'FNL & 425'FWL									
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
2,100.0	1.00	271.18	2,100.0	0.0	-0.9	-0.9	1.00	1.00	0.00
2,200.0	2.00	271.18	2,200.0	0.1	-3.5	-3.5	1.00	1.00	0.00
2,300.0	3.00	271.18	2,299.9	0.2	-7.9	-7.9	1.00	1.00	0.00
2,400.0	4.00	271.18	2,399.7	0.3	-14.0	-14.0	1.00	1.00	0.00
2,500.0	5.00	271.18	2,499.4	0.4	-21.8	-21.8	1.00	1.00	0.00
2,600.0	6.00	271.18	2,598.9	0.6	-31.4	-31.4	1.00	1.00	0.00
2,700.0	7.00	271.18	2,698.3	0.9	-42.7	-42.7	1.00	1.00	0.00
2,722.9	7.23	271.18	2,721.0	0.9	-45.5	-45.5	1.00	1.00	0.00
2,800.0	7.23	271.18	2,797.5	1.1	-55.2	-55.2	0.00	0.00	0.00
2,900.0	7.23	271.18	2,896.7	1.4	-67.8	-67.8	0.00	0.00	0.00
3,000.0	7.23	271.18	2,995.9	1.7	-80.4	-80.4	0.00	0.00	0.00
3,100.0	7.23	271.18	3,095.1	1.9	-93.0	-93.0	0.00	0.00	0.00
3,200.0	7.23	271.18	3,194.3	2.2	-105.6	-105.6	0.00	0.00	0.00
3,300.0	7.23	271.18	3,293.5	2.4	-118.1	-118.1	0.00	0.00	0.00
3,400.0	7.23	271.18	3,392.7	2.7	-130.7	-130.7	0.00	0.00	0.00
3,500.0	7.23	271.18	3,491.9	2.9	-143.3	-143.3	0.00	0.00	0.00
3,533.4	7.23	271.18	3,525.0	3.0	-147.5	-147.5	0.00	0.00	0.00
Parkman									
3,600.0	7.23	271.18	3,591.1	3.2	-155.9	-155.9	0.00	0.00	0.00
3,700.0	7.23	271.18	3,690.3	3.5	-168.5	-168.5	0.00	0.00	0.00
3,800.0	7.23	271.18	3,789.5	3.7	-181.0	-181.0	0.00	0.00	0.00
3,900.0	7.23	271.18	3,888.7	4.0	-193.6	-193.6	0.00	0.00	0.00
4,000.0	7.23	271.18	3,987.9	4.2	-206.2	-206.2	0.00	0.00	0.00
4,100.0	7.23	271.18	4,087.1	4.5	-218.8	-218.8	0.00	0.00	0.00
4,200.0	7.23	271.18	4,186.3	4.8	-231.4	-231.4	0.00	0.00	0.00
4,228.9	7.23	271.18	4,215.0	4.8	-235.0	-235.0	0.00	0.00	0.00
Sussex									
4,300.0	7.23	271.18	4,285.5	5.0	-243.9	-243.9	0.00	0.00	0.00
4,400.0	7.23	271.18	4,384.8	5.3	-256.5	-256.5	0.00	0.00	0.00

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Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-18-16)		

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	7.23	271.18	4,484.0	5.5	-269.1	-269.1	0.00	0.00	0.00
4,600.0	7.23	271.18	4,583.2	5.8	-281.7	-281.7	0.00	0.00	0.00
4,620.0	7.23	271.18	4,603.0	5.8	-284.2	-284.2	0.00	0.00	0.00
Shannon									
4,700.0	7.23	271.18	4,682.4	6.0	-294.3	-294.3	0.00	0.00	0.00
4,800.0	7.23	271.18	4,781.6	6.3	-306.8	-306.8	0.00	0.00	0.00
4,900.0	7.23	271.18	4,880.8	6.6	-319.4	-319.4	0.00	0.00	0.00
5,000.0	7.23	271.18	4,980.0	6.8	-332.0	-332.0	0.00	0.00	0.00
5,100.0	7.23	271.18	5,079.2	7.1	-344.6	-344.6	0.00	0.00	0.00
5,160.8	7.23	271.18	5,139.5	7.2	-352.2	-352.2	0.00	0.00	0.00
5,200.0	6.45	271.18	5,178.4	7.3	-356.9	-356.9	2.00	-2.00	0.00
5,300.0	4.45	271.18	5,278.0	7.5	-366.4	-366.4	2.00	-2.00	0.00
5,400.0	2.45	271.18	5,377.8	7.6	-372.4	-372.4	2.00	-2.00	0.00
5,500.0	0.45	271.18	5,477.7	7.7	-374.9	-374.9	2.00	-2.00	0.00
5,522.3	0.00	0.00	5,500.0	7.7	-375.0	-375.0	2.00	-2.00	0.00
5,600.0	0.00	0.00	5,577.7	7.7	-375.0	-375.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,677.7	7.7	-375.0	-375.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,777.7	7.7	-375.0	-375.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,877.7	7.7	-375.0	-375.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,977.7	7.7	-375.0	-375.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,077.7	7.7	-375.0	-375.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,177.7	7.7	-375.0	-375.0	0.00	0.00	0.00
6,295.7	0.00	0.00	6,273.4	7.7	-375.0	-375.0	0.00	0.00	0.00
6,300.0	0.32	90.00	6,277.7	7.7	-375.0	-375.0	7.50	7.50	0.00
6,400.0	7.82	90.00	6,377.4	7.7	-367.9	-367.9	7.50	7.50	0.00
6,500.0	15.32	90.00	6,475.3	7.7	-347.8	-347.8	7.50	7.50	0.00
6,600.0	22.82	90.00	6,569.8	7.7	-315.2	-315.2	7.50	7.50	0.00
6,700.0	30.32	90.00	6,659.1	7.7	-270.5	-270.5	7.50	7.50	0.00
6,800.0	37.82	90.00	6,741.9	7.7	-214.5	-214.5	7.50	7.50	0.00
6,825.8	39.76	90.00	6,762.0	7.7	-198.3	-198.3	7.50	7.50	0.00
Sharon Springs									
6,900.0	45.32	90.00	6,816.7	7.7	-148.2	-148.2	7.50	7.50	0.00
7,000.0	52.82	90.00	6,882.1	7.7	-72.7	-72.7	7.50	7.50	0.00
7,013.2	53.81	90.00	6,890.0	7.7	-62.1	-62.1	7.50	7.50	0.00
Niobrara A									
7,100.0	60.32	90.00	6,937.2	7.7	10.7	10.7	7.50	7.50	0.00
7,200.0	67.82	90.00	6,980.9	7.7	100.6	100.6	7.50	7.50	0.00
7,272.5	73.26	90.00	7,005.0	7.7	168.9	169.0	7.50	7.50	0.00
Niobrara B									
7,300.0	75.32	90.00	7,012.4	7.7	195.4	195.4	7.50	7.50	0.00
7,400.0	82.82	90.00	7,031.4	7.7	293.5	293.5	7.50	7.50	0.00
7,500.0	90.32	90.00	7,037.4	7.7	393.3	393.3	7.50	7.50	0.00
7,501.9	90.47	90.00	7,037.3	7.7	395.2	395.2	7.50	7.50	0.00
7,600.0	90.47	90.00	7,036.5	7.7	493.3	493.3	0.00	0.00	0.00
7,700.0	90.47	90.00	7,035.7	7.7	593.3	593.3	0.00	0.00	0.00
7,800.0	90.47	90.00	7,034.9	7.7	693.3	693.3	0.00	0.00	0.00
7,900.0	90.47	90.00	7,034.1	7.7	793.3	793.3	0.00	0.00	0.00
8,000.0	90.47	90.00	7,033.3	7.7	893.3	893.3	0.00	0.00	0.00
8,100.0	90.47	90.00	7,032.4	7.7	993.3	993.3	0.00	0.00	0.00
8,200.0	90.47	90.00	7,031.6	7.7	1,093.2	1,093.3	0.00	0.00	0.00
8,300.0	90.47	90.00	7,030.8	7.7	1,193.2	1,193.3	0.00	0.00	0.00

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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)
8,400.0	90.47	90.00	7,030.0	7.7	1,293.2	1,293.3	0.00	0.00	0.00
8,500.0	90.47	90.00	7,029.2	7.7	1,393.2	1,393.2	0.00	0.00	0.00
8,600.0	90.47	90.00	7,028.3	7.7	1,493.2	1,493.2	0.00	0.00	0.00
8,700.0	90.47	90.00	7,027.5	7.7	1,593.2	1,593.2	0.00	0.00	0.00
8,800.0	90.47	90.00	7,026.7	7.7	1,693.2	1,693.2	0.00	0.00	0.00
8,900.0	90.47	90.00	7,025.9	7.7	1,793.2	1,793.2	0.00	0.00	0.00
9,000.0	90.47	90.00	7,025.1	7.7	1,893.2	1,893.2	0.00	0.00	0.00
9,100.0	90.47	90.00	7,024.2	7.7	1,993.2	1,993.2	0.00	0.00	0.00
9,200.0	90.47	90.00	7,023.4	7.7	2,093.2	2,093.2	0.00	0.00	0.00
9,300.0	90.47	90.00	7,022.6	7.7	2,193.2	2,193.2	0.00	0.00	0.00
9,400.0	90.47	90.00	7,021.8	7.7	2,293.2	2,293.2	0.00	0.00	0.00
9,500.0	90.47	90.00	7,020.9	7.7	2,393.2	2,393.2	0.00	0.00	0.00
9,600.0	90.47	90.00	7,020.1	7.7	2,493.2	2,493.2	0.00	0.00	0.00
9,700.0	90.47	90.00	7,019.3	7.7	2,593.2	2,593.2	0.00	0.00	0.00
9,800.0	90.47	90.00	7,018.5	7.7	2,693.2	2,693.2	0.00	0.00	0.00
9,900.0	90.47	90.00	7,017.7	7.7	2,793.2	2,793.2	0.00	0.00	0.00
10,000.0	90.47	90.00	7,016.8	7.7	2,893.2	2,893.2	0.00	0.00	0.00
10,100.0	90.47	90.00	7,016.0	7.7	2,993.2	2,993.2	0.00	0.00	0.00
10,200.0	90.47	90.00	7,015.2	7.7	3,093.2	3,093.2	0.00	0.00	0.00
10,300.0	90.47	90.00	7,014.4	7.7	3,193.2	3,193.2	0.00	0.00	0.00
10,400.0	90.47	90.00	7,013.6	7.7	3,293.2	3,293.2	0.00	0.00	0.00
10,500.0	90.47	90.00	7,012.7	7.7	3,393.2	3,393.2	0.00	0.00	0.00
10,600.0	90.47	90.00	7,011.9	7.7	3,493.2	3,493.2	0.00	0.00	0.00
10,700.0	90.47	90.00	7,011.1	7.7	3,593.2	3,593.2	0.00	0.00	0.00
10,800.0	90.47	90.00	7,010.3	7.7	3,693.2	3,693.2	0.00	0.00	0.00
10,900.0	90.47	90.00	7,009.5	7.7	3,793.2	3,793.2	0.00	0.00	0.00
11,000.0	90.47	90.00	7,008.6	7.7	3,893.2	3,893.2	0.00	0.00	0.00
11,100.0	90.47	90.00	7,007.8	7.7	3,993.1	3,993.2	0.00	0.00	0.00
11,200.0	90.47	90.00	7,007.0	7.7	4,093.1	4,093.2	0.00	0.00	0.00
11,300.0	90.47	90.00	7,006.2	7.7	4,193.1	4,193.1	0.00	0.00	0.00
11,322.5	90.47	90.00	7,006.0	7.7	4,215.6	4,215.6	0.00	0.00	0.00
BHL 780'FNL & 500'FEL									

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 769'FNL & 425'FWl - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,396,127.04	3,170,735.73	40.419150	-104.886790
BHL 780'FNL & 500'FEL - plan hits target center - Point	0.00	0.00	7,006.0	7.7	4,215.6	1,396,163.83	3,174,951.03	40.419170	-104.871650

Database:	US_EDM	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Project:	SEC.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**North Reference:**	True
Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-18-16)		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,533.4	3,525.0	Parkman		0.00	
4,228.9	4,215.0	Sussex		0.00	
4,620.0	4,603.0	Shannon		0.00	
6,825.8	6,762.0	Sharon Springs		0.00	
7,013.2	6,890.0	Niobrara A		0.00	
7,272.5	7,005.0	Niobrara B		0.00	

ENSIGN Directional

PETROLEUM DEVELOPMENT CORP DJ Basin

SEC.10-T5N-R67W
High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W
High Pointe LLC 10F-212

Wellbore #1
Plan #1 (1-18-16)

Anticollision Report

01 February, 2016

PDC ENERGY
Growing E&P Value

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Reference Plan #1 (1-18-16)

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0 ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 2/1/2016

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,322.5	Plan #1 (1-18-16) (Wellbore #1)	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Existing Wells Pad Sec.10-T5N-R67W						
B &B 10-11 (Exist.) - Wellbore #1 - Wellbore #1	7,449.2	7,005.0	101.6	-60.2	0.628	Level 1, CC
B &B 10-11 (Exist.) - Wellbore #1 - Wellbore #1	7,450.0	7,005.0	101.6	-60.3	0.628	Level 1, ES, SF
B&B 10-31 (Exist.) - Wellbore #1 - Wellbore #1	9,696.3	7,020.3	291.2	72.0	1.328	Level 3, CC
B&B 10-31 (Exist.) - Wellbore #1 - Wellbore #1	9,700.0	7,020.3	291.2	71.9	1.328	Level 3, ES, SF
Hondo 1 (Exist.) - Wellbore #1 - Wellbore #1	8,663.2	7,000.8	258.3	67.4	1.353	Level 3, CC, ES, SF
Phillips 1 (Exist.) - Wellbore #1 - Wellbore #1	11,110.8	6,976.7	102.0	-155.5	0.396	Level 1, CC, ES, SF
High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W						
High Pointe LLC 10E-332 - Wellbore #1 - Plan #1 (1-18-1	1,000.0	1,000.0	14.6	10.3	3.412	CC, ES
High Pointe LLC 10E-332 - Wellbore #1 - Plan #1 (1-18-1	11,322.5	11,402.0	348.9	105.9	1.436	Level 3, SF
High Pointe LLC 10E-402 - Wellbore #1 - Plan #1 (1-18-1	800.0	800.0	29.1	25.8	8.642	CC, ES
High Pointe LLC 10E-402 - Wellbore #1 - Plan #1 (1-18-1	11,322.5	11,542.3	638.0	400.2	2.683	SF
High Pointe LLC 10F-202 - Wellbore #1 - Plan #1 (1-18-1	1,166.3	1,167.3	32.8	27.8	6.531	CC
High Pointe LLC 10F-202 - Wellbore #1 - Plan #1 (1-18-1	1,200.0	1,201.0	32.8	27.6	6.340	ES
High Pointe LLC 10F-202 - Wellbore #1 - Plan #1 (1-18-1	11,322.5	11,338.0	462.7	215.8	1.874	SF
High Pointe LLC 10F-312 - Wellbore #1 - Plan #1 (1-18-1	1,366.3	1,367.3	18.2	12.3	3.077	CC
High Pointe LLC 10F-312 - Wellbore #1 - Plan #1 (1-18-1	11,322.5	11,395.9	238.8	0.3	1.001	Level 2, ES, SF

Offset Design Existing Wells Pad Sec.10-T5N-R67W - B &B 10-11 (Exist.) - Wellbore #1 - Wellbore #1

Survey Program: 7840-UNKNOWN

Offset Site Error: 0.0 ft
Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	72.30	109.3	342.5	360.8				
100.0	100.0	69.0	69.0	0.1	1.4	72.30	109.3	342.5	359.5	358.0	1.49	240.858	
200.0	200.0	169.0	169.0	0.3	3.4	72.30	109.3	342.5	359.5	355.8	3.72	96.709	
300.0	300.0	269.0	269.0	0.6	5.4	72.30	109.3	342.5	359.5	353.6	5.94	60.500	
400.0	400.0	369.0	369.0	0.8	7.4	72.30	109.3	342.5	359.5	351.3	8.17	44.019	
500.0	500.0	469.0	469.0	1.0	9.4	72.30	109.3	342.5	359.5	349.1	10.39	34.595	
600.0	600.0	569.0	569.0	1.2	11.4	72.30	109.3	342.5	359.5	346.9	12.62	28.495	
700.0	700.0	669.0	669.0	1.5	13.4	72.30	109.3	342.5	359.5	344.7	14.84	24.223	
800.0	800.0	769.0	769.0	1.7	15.4	72.30	109.3	342.5	359.5	342.4	17.07	21.065	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells Pad Sec.10-T5N-R67W - B &B 10-11 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7840-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
900.0	900.0	869.0	869.0	1.9	17.4	72.30	109.3	342.5	359.5	340.2	19.29	18.636	
1,000.0	1,000.0	969.0	969.0	2.1	19.4	72.30	109.3	342.5	359.5	338.0	21.52	16.709	
1,100.0	1,100.0	1,069.0	1,069.0	2.4	21.4	72.30	109.3	342.5	359.5	335.8	23.74	15.143	
1,200.0	1,200.0	1,169.0	1,169.0	2.6	23.4	72.30	109.3	342.5	359.5	333.5	25.96	13.846	
1,300.0	1,300.0	1,269.0	1,269.0	2.8	25.4	72.30	109.3	342.5	359.5	331.3	28.19	12.753	
1,400.0	1,400.0	1,369.0	1,369.0	3.0	27.4	72.30	109.3	342.5	359.5	329.1	30.41	11.820	
1,500.0	1,500.0	1,469.0	1,469.0	3.3	29.4	72.30	109.3	342.5	359.5	326.9	32.64	11.014	
1,600.0	1,600.0	1,569.0	1,569.0	3.5	31.4	72.30	109.3	342.5	359.5	324.6	34.86	10.311	
1,700.0	1,700.0	1,669.0	1,669.0	3.7	33.4	72.30	109.3	342.5	359.5	322.4	37.09	9.693	
1,800.0	1,800.0	1,769.0	1,769.0	3.9	35.4	72.30	109.3	342.5	359.5	320.2	39.31	9.144	
1,900.0	1,900.0	1,869.0	1,869.0	4.2	37.4	72.30	109.3	342.5	359.5	318.0	41.54	8.655	
2,000.0	2,000.0	1,969.0	1,969.0	4.4	39.4	72.30	109.3	342.5	359.5	315.7	43.76	8.215	
2,100.0	2,100.0	2,069.0	2,069.0	4.6	41.4	161.17	109.3	342.5	360.3	314.4	45.97	7.839	
2,200.0	2,200.0	2,169.0	2,169.0	4.8	43.4	161.29	109.3	342.5	362.8	314.7	48.15	7.536	
2,300.0	2,299.9	2,268.9	2,268.9	5.0	45.4	161.50	109.3	342.5	366.9	316.6	50.31	7.294	
2,400.0	2,399.7	2,368.7	2,368.7	5.2	47.4	161.78	109.3	342.5	372.7	320.3	52.46	7.105	
2,500.0	2,499.4	2,468.4	2,468.4	5.4	49.4	162.12	109.3	342.5	380.2	325.6	54.59	6.965	
2,600.0	2,598.9	2,567.9	2,567.9	5.7	51.4	162.53	109.3	342.5	389.3	332.6	56.69	6.868	
2,700.0	2,698.3	2,667.3	2,667.3	5.9	53.3	162.98	109.3	342.5	400.1	341.4	58.77	6.808	
2,722.9	2,721.0	2,690.0	2,690.0	5.9	53.8	163.09	109.3	342.5	402.9	343.6	59.25	6.800	
2,800.0	2,797.5	2,766.5	2,766.5	6.1	55.3	163.49	109.3	342.5	412.2	351.2	60.93	6.765	
2,900.0	2,896.7	2,865.7	2,865.7	6.4	57.3	163.97	109.3	342.5	424.2	361.1	63.11	6.722	
3,000.0	2,995.9	2,964.9	2,964.9	6.7	59.3	164.42	109.3	342.5	436.4	371.1	65.30	6.683	
3,100.0	3,095.1	3,064.1	3,064.1	6.9	61.3	164.86	109.3	342.5	448.5	381.0	67.49	6.646	
3,200.0	3,194.3	3,163.3	3,163.3	7.2	63.3	165.26	109.3	342.5	460.7	391.0	69.67	6.612	
3,300.0	3,293.5	3,262.5	3,262.5	7.5	65.3	165.65	109.3	342.5	472.9	401.0	71.87	6.580	
3,400.0	3,392.7	3,361.7	3,361.7	7.8	67.2	166.02	109.3	342.5	485.1	411.0	74.06	6.550	
3,500.0	3,491.9	3,460.9	3,460.9	8.0	69.2	166.37	109.3	342.5	497.3	421.0	76.25	6.522	
3,600.0	3,591.1	3,560.1	3,560.1	8.3	71.2	166.70	109.3	342.5	509.5	431.1	78.44	6.496	
3,700.0	3,690.3	3,659.3	3,659.3	8.6	73.2	167.02	109.3	342.5	521.8	441.2	80.64	6.471	
3,800.0	3,789.5	3,758.5	3,758.5	8.9	75.2	167.32	109.3	342.5	534.1	451.2	82.83	6.447	
3,900.0	3,888.7	3,857.7	3,857.7	9.2	77.2	167.61	109.3	342.5	546.3	461.3	85.03	6.425	
4,000.0	3,987.9	3,956.9	3,956.9	9.5	79.1	167.89	109.3	342.5	558.7	471.4	87.23	6.405	
4,100.0	4,087.1	4,056.1	4,056.1	9.8	81.1	168.16	109.3	342.5	571.0	481.5	89.42	6.385	
4,200.0	4,186.3	4,155.3	4,155.3	10.1	83.1	168.41	109.3	342.5	583.3	491.7	91.62	6.366	
4,300.0	4,285.5	4,254.5	4,254.5	10.4	85.1	168.65	109.3	342.5	595.6	501.8	93.82	6.349	
4,400.0	4,384.8	4,353.8	4,353.8	10.7	87.1	168.89	109.3	342.5	608.0	512.0	96.02	6.332	
4,500.0	4,484.0	4,453.0	4,453.0	11.0	89.1	169.11	109.3	342.5	620.3	522.1	98.22	6.316	
4,600.0	4,583.2	4,552.2	4,552.2	11.3	91.0	169.32	109.3	342.5	632.7	532.3	100.42	6.301	
4,700.0	4,682.4	4,651.4	4,651.4	11.6	93.0	169.53	109.3	342.5	645.1	542.4	102.62	6.286	
4,800.0	4,781.6	4,750.6	4,750.6	12.0	95.0	169.73	109.3	342.5	657.4	552.6	104.82	6.272	
4,900.0	4,880.8	4,849.8	4,849.8	12.3	97.0	169.92	109.3	342.5	669.8	562.8	107.02	6.259	
5,000.0	4,980.0	4,949.0	4,949.0	12.6	99.0	170.11	109.3	342.5	682.2	573.0	109.22	6.246	
5,100.0	5,079.2	5,048.2	5,048.2	12.9	101.0	170.29	109.3	342.5	694.6	583.2	111.42	6.234	
5,160.8	5,139.5	5,108.5	5,108.5	13.1	102.2	170.39	109.3	342.5	702.2	589.4	112.76	6.227	
5,200.0	5,178.4	5,147.4	5,147.4	13.2	102.9	170.47	109.3	342.5	706.8	593.0	113.79	6.211	
5,300.0	5,278.0	5,247.0	5,247.0	13.4	104.9	170.63	109.3	342.5	716.1	599.8	116.31	6.157	
5,400.0	5,377.8	5,346.8	5,346.8	13.6	106.9	170.72	109.3	342.5	722.1	603.4	118.71	6.083	
5,500.0	5,477.7	5,446.7	5,446.7	13.8	108.9	170.76	109.3	342.5	724.6	603.6	120.96	5.990	
5,522.3	5,500.0	5,469.0	5,469.0	13.8	109.4	81.94	109.3	342.5	724.6	601.5	123.17	5.883	
5,600.0	5,577.7	5,546.7	5,546.7	14.0	110.9	81.94	109.3	342.5	724.6	599.8	124.86	5.804	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells Pad Sec.10-T5N-R67W - B &B 10-11 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7840-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,700.0	5,677.7	5,646.7	5,646.7	14.1	112.9	81.94	109.3	342.5	724.6	597.6	127.05	5.704	
5,800.0	5,777.7	5,746.7	5,746.7	14.3	114.9	81.94	109.3	342.5	724.6	595.4	129.24	5.607	
5,900.0	5,877.7	5,846.7	5,846.7	14.5	116.9	81.94	109.3	342.5	724.6	593.2	131.43	5.514	
6,000.0	5,977.7	5,946.7	5,946.7	14.7	118.9	81.94	109.3	342.5	724.6	591.0	133.62	5.423	
6,100.0	6,077.7	6,046.7	6,046.7	14.9	120.9	81.94	109.3	342.5	724.6	588.8	135.81	5.336	
6,200.0	6,177.7	6,146.7	6,146.7	15.1	122.9	81.94	109.3	342.5	724.6	586.6	138.00	5.251	
6,295.7	6,273.4	6,242.4	6,242.4	15.3	124.8	81.94	109.3	342.5	724.6	584.5	140.10	5.172	
6,300.0	6,277.7	6,246.7	6,246.7	15.3	124.9	-8.06	109.3	342.5	724.6	586.0	138.62	5.227	
6,350.0	6,327.7	6,296.7	6,296.7	15.4	125.9	-8.10	109.3	342.5	722.7	583.4	139.32	5.188	
6,400.0	6,377.4	6,346.4	6,346.4	15.4	126.9	-8.22	109.3	342.5	717.6	578.2	139.41	5.147	
6,450.0	6,426.7	6,395.7	6,395.7	15.5	127.9	-8.40	109.3	342.5	709.3	570.4	138.89	5.107	
6,500.0	6,475.3	6,444.3	6,444.3	15.5	128.9	-8.68	109.3	342.5	697.8	560.0	137.76	5.065	
6,550.0	6,523.1	6,492.1	6,492.1	15.5	129.8	-9.04	109.3	342.5	683.1	547.1	136.01	5.023	
6,600.0	6,569.8	6,538.8	6,538.8	15.5	130.8	-9.52	109.3	342.5	665.5	531.8	133.66	4.979	
6,650.0	6,615.2	6,584.2	6,584.2	15.5	131.7	-10.12	109.3	342.5	644.8	514.1	130.72	4.933	
6,700.0	6,659.1	6,628.1	6,628.1	15.5	132.6	-10.87	109.3	342.5	621.3	494.1	127.24	4.883	
6,750.0	6,701.4	6,670.4	6,670.4	15.5	133.4	-11.82	109.3	342.5	595.1	471.8	123.27	4.827	
6,800.0	6,741.9	6,710.9	6,710.9	15.6	134.2	-13.00	109.3	342.5	566.2	447.3	118.91	4.761	
6,850.0	6,780.4	6,749.4	6,749.4	15.7	135.0	-14.50	109.3	342.5	534.8	420.5	114.31	4.678	
6,900.0	6,816.7	6,785.7	6,785.7	15.8	135.7	-16.41	109.3	342.5	501.1	391.4	109.72	4.567	
6,950.0	6,850.6	6,819.6	6,819.6	15.9	136.4	-18.86	109.3	342.5	465.2	359.7	105.54	4.408	
7,000.0	6,882.1	6,851.1	6,851.1	16.2	137.0	-22.05	109.3	342.5	427.4	325.0	102.46	4.172	
7,050.0	6,911.0	6,880.0	6,880.0	16.5	137.6	-26.23	109.3	342.5	387.9	286.4	101.48	3.822	
7,100.0	6,937.2	6,906.2	6,906.2	16.9	138.1	-31.74	109.3	342.5	347.0	243.0	103.98	3.337	
7,150.0	6,960.5	6,929.5	6,929.5	17.4	138.6	-38.95	109.3	342.5	305.0	193.8	111.21	2.742	
7,200.0	6,980.9	6,949.9	6,949.9	17.9	139.0	-48.06	109.3	342.5	262.4	139.2	123.18	2.130	
7,250.0	6,998.2	6,967.2	6,967.2	18.5	139.3	-58.76	109.3	342.5	219.9	82.4	137.49	1.599	
7,300.0	7,012.4	6,981.4	6,981.4	19.3	139.6	-69.86	109.3	342.5	178.8	28.9	149.86	1.193	Level 2
7,350.0	7,023.5	6,992.5	6,992.5	20.0	139.9	-79.61	109.3	342.5	141.4	-16.0	157.39	0.898	Level 1
7,400.0	7,031.4	7,000.4	7,000.4	20.9	140.0	-86.56	109.3	342.5	112.8	-47.8	160.61	0.702	Level 1
7,449.2	7,036.0	7,005.0	7,005.0	21.8	140.1	-90.00	109.3	342.5	101.6	-60.2	161.85	0.628	Level 1, CC
7,450.0	7,036.0	7,005.0	7,005.0	21.8	140.1	-90.03	109.3	342.5	101.6	-60.3	161.87	0.628	Level 1, ES, SF
7,501.9	7,037.3	7,006.3	7,006.3	22.7	140.1	-89.76	109.3	342.5	114.5	-48.4	162.87	0.703	Level 1
7,600.0	7,036.5	7,005.5	7,005.5	24.7	140.1	-89.30	109.3	342.5	181.8	17.0	164.80	1.103	Level 2
7,700.0	7,035.7	7,004.7	7,004.7	26.8	140.1	-88.84	109.3	342.5	270.6	103.7	166.90	1.621	
7,800.0	7,034.9	7,003.9	7,003.9	29.1	140.1	-88.38	109.3	342.5	365.2	196.1	169.10	2.160	
7,900.0	7,034.1	7,003.1	7,003.1	31.4	140.1	-87.92	109.3	342.5	462.1	290.7	171.38	2.696	
8,000.0	7,033.3	7,002.3	7,002.3	33.8	140.0	-87.45	109.3	342.5	560.1	386.3	173.72	3.224	
8,100.0	7,032.4	7,001.4	7,001.4	36.3	140.0	-86.99	109.3	342.5	658.7	482.5	176.11	3.740	
8,200.0	7,031.6	7,000.6	7,000.6	38.8	140.0	-86.53	109.3	342.5	757.6	579.1	178.52	4.244	
8,300.0	7,030.8	6,999.8	6,999.8	41.4	140.0	-86.07	109.3	342.5	856.8	675.8	180.96	4.735	
8,400.0	7,030.0	6,999.0	6,999.0	44.0	140.0	-85.61	109.3	342.5	956.2	772.8	183.42	5.213	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells Pad Sec.10-T5N-R67W - B&B 10-31 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7795-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,800.0	7,026.7	7,027.7	7,027.7	54.5	140.6	-91.45	298.9	2,589.5	942.4	747.4	194.99	4.833	
8,900.0	7,025.9	7,026.9	7,026.9	57.2	140.5	-91.28	298.9	2,589.5	847.8	650.2	197.67	4.289	
9,000.0	7,025.1	7,026.1	7,026.1	59.9	140.5	-91.12	298.9	2,589.5	754.7	554.4	200.35	3.767	
9,100.0	7,024.2	7,025.2	7,025.2	62.6	140.5	-90.96	298.9	2,589.5	663.6	460.5	203.04	3.268	
9,200.0	7,023.4	7,024.4	7,024.4	65.3	140.5	-90.80	298.9	2,589.5	575.4	369.7	205.74	2.797	
9,300.0	7,022.6	7,023.6	7,023.6	68.0	140.5	-90.64	298.9	2,589.5	491.8	283.3	208.45	2.359	
9,400.0	7,021.8	7,022.8	7,022.8	70.7	140.5	-90.48	298.9	2,589.5	415.4	204.3	211.16	1.967	
9,500.0	7,020.9	7,021.9	7,021.9	73.4	140.4	-90.32	298.9	2,589.5	351.2	137.3	213.88	1.642	
9,600.0	7,020.1	7,021.1	7,021.1	76.2	140.4	-90.16	298.9	2,589.5	306.7	90.1	216.60	1.416	Level 3
9,696.3	7,019.3	7,020.3	7,020.3	78.8	140.4	-90.00	298.9	2,589.5	291.2	72.0	219.22	1.328	Level 3, CC
9,700.0	7,019.3	7,020.3	7,020.3	78.9	140.4	-89.99	298.9	2,589.5	291.2	71.9	219.33	1.328	Level 3, ES, SF
9,800.0	7,018.5	7,019.5	7,019.5	81.7	140.4	-89.83	298.9	2,589.5	309.1	87.1	222.05	1.392	Level 3
9,900.0	7,017.7	7,018.7	7,018.7	84.4	140.4	-89.67	298.9	2,589.5	355.4	130.6	224.78	1.581	
10,000.0	7,016.8	7,017.8	7,017.8	87.2	140.4	-89.51	298.9	2,589.5	420.8	193.2	227.51	1.849	
10,100.0	7,016.0	7,017.0	7,017.0	89.9	140.3	-89.35	298.9	2,589.5	497.8	267.5	230.25	2.162	
10,200.0	7,015.2	7,016.2	7,016.2	92.7	140.3	-89.19	298.9	2,589.5	581.8	348.8	232.98	2.497	
10,300.0	7,014.4	7,015.4	7,015.4	95.4	140.3	-89.03	298.9	2,589.5	670.3	434.5	235.71	2.844	
10,400.0	7,013.6	7,014.6	7,014.6	98.2	140.3	-88.86	298.9	2,589.5	761.6	523.1	238.45	3.194	
10,500.0	7,012.7	7,013.7	7,013.7	101.0	140.3	-88.70	298.9	2,589.5	854.8	613.6	241.18	3.544	
10,600.0	7,011.9	7,012.9	7,012.9	103.7	140.3	-88.54	298.9	2,589.5	949.4	705.5	243.92	3.892	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells Pad Sec.10-T5N-R67W - Hondo 1 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7334-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,700.0	7,035.7	7,008.7	7,008.7	26.8	140.2	-91.75	266.0	1,556.5	997.2	830.3	166.93	5.974	
7,800.0	7,034.9	7,007.9	7,007.9	29.1	140.2	-91.57	266.0	1,556.5	901.0	731.9	169.18	5.326	
7,900.0	7,034.1	7,007.1	7,007.1	31.4	140.1	-91.39	266.0	1,556.5	805.7	634.2	171.52	4.698	
8,000.0	7,033.3	7,006.3	7,006.3	33.8	140.1	-91.21	266.0	1,556.5	711.8	537.8	173.92	4.092	
8,100.0	7,032.4	7,005.4	7,005.4	36.3	140.1	-91.02	266.0	1,556.5	619.6	443.3	176.39	3.513	
8,200.0	7,031.6	7,004.6	7,004.6	38.8	140.1	-90.84	266.0	1,556.5	530.4	351.5	178.89	2.965	
8,300.0	7,030.8	7,003.8	7,003.8	41.4	140.1	-90.66	266.0	1,556.5	445.7	264.3	181.44	2.457	
8,400.0	7,030.0	7,003.0	7,003.0	44.0	140.1	-90.48	266.0	1,556.5	368.8	184.8	184.01	2.004	
8,500.0	7,029.2	7,002.2	7,002.2	46.6	140.0	-90.30	266.0	1,556.5	305.6	119.0	186.60	1.638	
8,600.0	7,028.3	7,001.3	7,001.3	49.2	140.0	-90.12	266.0	1,556.5	265.9	76.7	189.22	1.405	Level 3
8,663.2	7,027.8	7,000.8	7,000.8	50.9	140.0	-90.00	266.0	1,556.5	258.3	67.4	190.88	1.353	Level 3, CC, ES, SF
8,700.0	7,027.5	7,000.5	7,000.5	51.8	140.0	-89.93	266.0	1,556.5	260.9	69.1	191.85	1.360	Level 3
8,800.0	7,026.7	6,999.7	6,999.7	54.5	140.0	-89.75	266.0	1,556.5	292.3	97.8	194.50	1.503	
8,900.0	7,025.9	6,998.9	6,998.9	57.2	140.0	-89.57	266.0	1,556.5	350.4	153.2	197.16	1.777	
9,000.0	7,025.1	6,998.1	6,998.1	59.9	140.0	-89.39	266.0	1,556.5	424.4	224.6	199.82	2.124	
9,100.0	7,024.2	6,997.2	6,997.2	62.6	139.9	-89.21	266.0	1,556.5	507.4	304.9	202.50	2.506	
9,200.0	7,023.4	6,996.4	6,996.4	65.3	139.9	-89.02	266.0	1,556.5	595.7	390.5	205.18	2.903	
9,300.0	7,022.6	6,995.6	6,995.6	68.0	139.9	-88.84	266.0	1,556.5	687.1	479.3	207.87	3.306	
9,400.0	7,021.8	6,994.8	6,994.8	70.7	139.9	-88.66	266.0	1,556.5	780.7	570.1	210.56	3.708	
9,500.0	7,020.9	6,993.9	6,993.9	73.4	139.9	-88.48	266.0	1,556.5	875.7	662.4	213.26	4.106	
9,600.0	7,020.1	6,993.1	6,993.1	76.2	139.9	-88.30	266.0	1,556.5	971.7	755.7	215.96	4.499	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design Existing Wells Pad Sec.10-T5N-R67W - Phillips 1 (Exist.) - Wellbore #1 - Wellbore #1

Offset Site Error: 0.0 ft

Survey Program: 7272-UNKNOWN

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	7,015.2	6,984.2	6,984.2	92.7	139.7	-94.19	109.6	4,004.0	916.5	684.8	231.74	3.955	
10,300.0	7,014.4	6,983.4	6,983.4	95.4	139.7	-93.73	109.6	4,004.0	817.2	582.6	234.60	3.483	
10,400.0	7,013.6	6,982.6	6,982.6	98.2	139.7	-93.27	109.6	4,004.0	718.1	480.6	237.46	3.024	
10,500.0	7,012.7	6,981.7	6,981.7	101.0	139.6	-92.81	109.6	4,004.0	619.3	379.0	240.31	2.577	
10,600.0	7,011.9	6,980.9	6,980.9	103.7	139.6	-92.35	109.6	4,004.0	520.9	277.8	243.14	2.142	
10,700.0	7,011.1	6,980.1	6,980.1	106.5	139.6	-91.89	109.6	4,004.0	423.3	177.3	245.96	1.721	
10,800.0	7,010.3	6,979.3	6,979.3	109.3	139.6	-91.43	109.6	4,004.0	327.1	78.4	248.78	1.315	Level 3
10,900.0	7,009.5	6,978.5	6,978.5	112.0	139.6	-90.97	109.6	4,004.0	234.2	-17.4	251.57	0.931	Level 1
11,000.0	7,008.6	6,977.6	6,977.6	114.8	139.6	-90.51	109.6	4,004.0	150.6	-103.8	254.36	0.592	Level 1
11,100.0	7,007.8	6,976.8	6,976.8	117.6	139.5	-90.05	109.6	4,004.0	102.5	-154.6	257.13	0.399	Level 1
11,110.8	7,007.7	6,976.7	6,976.7	117.9	139.5	-90.00	109.6	4,004.0	102.0	-155.5	257.43	0.396	Level 1, CC, ES, SF
11,200.0	7,007.0	6,976.0	6,976.0	120.4	139.5	-89.59	109.6	4,004.0	135.4	-124.4	259.89	0.521	Level 1
11,300.0	7,006.2	6,975.2	6,975.2	123.2	139.5	-89.13	109.6	4,004.0	214.9	-47.7	262.63	0.818	Level 1
11,322.5	7,006.0	6,975.0	6,975.0	123.8	139.5	-89.02	109.6	4,004.0	234.9	-28.3	263.24	0.892	Level 1

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-332 - Wellbore #1 - Plan # — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	14.6	0.0	14.6	14.6	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	0.00	14.6	0.0	14.6	14.3	0.22	64.834	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	14.6	0.0	14.6	13.9	0.67	21.611	
300.0	300.0	300.0	300.0	0.6	0.6	0.00	14.6	0.0	14.6	13.4	1.12	12.967	
400.0	400.0	400.0	400.0	0.8	0.8	0.00	14.6	0.0	14.6	13.0	1.57	9.262	
500.0	500.0	500.0	500.0	1.0	1.0	0.00	14.6	0.0	14.6	12.5	2.02	7.204	
600.0	600.0	600.0	600.0	1.2	1.2	0.00	14.6	0.0	14.6	12.1	2.47	5.894	
700.0	700.0	700.0	700.0	1.5	1.5	0.00	14.6	0.0	14.6	11.7	2.92	4.987	
800.0	800.0	800.0	800.0	1.7	1.7	0.00	14.6	0.0	14.6	11.2	3.37	4.322	
900.0	900.0	900.0	900.0	1.9	1.9	0.00	14.6	0.0	14.6	10.8	3.82	3.814	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	0.00	14.6	0.0	14.6	10.3	4.27	3.412	CC, ES
1,100.0	1,100.0	1,099.7	1,099.7	2.4	2.4	-3.60	15.4	-1.0	15.5	10.8	4.71	3.282	
1,200.0	1,200.0	1,199.3	1,199.2	2.6	2.6	-12.12	18.0	-3.9	18.5	13.3	5.16	3.582	
1,300.0	1,300.0	1,298.6	1,298.3	2.8	2.8	-21.26	22.4	-8.7	24.0	18.4	5.60	4.292	
1,400.0	1,400.0	1,397.5	1,396.8	3.0	3.0	-28.51	28.4	-15.4	32.4	26.4	6.06	5.353	
1,500.0	1,500.0	1,495.9	1,494.5	3.3	3.3	-33.64	36.0	-24.0	43.6	37.1	6.53	6.679	
1,600.0	1,600.0	1,594.4	1,592.1	3.5	3.5	-37.11	45.1	-34.1	57.1	50.1	7.02	8.140	
1,700.0	1,700.0	1,693.4	1,690.1	3.7	3.8	-39.30	54.4	-44.6	71.0	63.5	7.52	9.444	
1,800.0	1,800.0	1,792.4	1,788.1	3.9	4.1	-40.77	63.8	-55.0	85.0	77.0	8.04	10.580	
1,900.0	1,900.0	1,891.4	1,886.1	4.2	4.4	-41.82	73.1	-65.4	99.1	90.5	8.56	11.573	
2,000.0	2,000.0	1,990.4	1,984.1	4.4	4.7	-42.62	82.4	-75.8	113.1	104.0	9.09	12.446	
2,100.0	2,100.0	2,089.5	2,082.2	4.6	5.0	45.78	91.7	-86.3	126.6	117.4	9.20	13.758	
2,200.0	2,200.0	2,188.7	2,180.4	4.8	5.3	45.94	101.1	-96.7	138.8	129.2	9.63	14.411	
2,300.0	2,299.9	2,288.1	2,278.8	5.0	5.7	46.55	110.5	-107.2	149.9	139.8	10.08	14.880	
2,400.0	2,399.7	2,387.6	2,377.3	5.2	6.0	47.54	119.8	-117.7	159.8	149.3	10.52	15.188	
2,500.0	2,499.4	2,487.1	2,475.8	5.4	6.3	48.85	129.2	-128.1	168.6	157.7	10.98	15.358	
2,600.0	2,598.9	2,586.7	2,574.4	5.7	6.6	50.47	138.6	-138.6	176.4	165.0	11.45	15.409	
2,700.0	2,698.3	2,686.2	2,672.9	5.9	7.0	52.37	148.0	-149.1	183.3	171.4	11.94	15.356	
2,722.9	2,721.0	2,709.0	2,695.5	5.9	7.0	52.85	150.1	-151.5	184.8	172.7	12.05	15.331	
2,800.0	2,797.5	2,785.8	2,771.5	6.1	7.3	54.48	157.4	-159.6	189.7	177.2	12.44	15.241	
2,900.0	2,896.7	2,885.4	2,870.1	6.4	7.6	56.47	166.7	-170.1	196.2	183.3	12.96	15.135	
3,000.0	2,995.9	2,984.9	2,968.6	6.7	8.0	58.33	176.1	-180.6	203.0	189.5	13.50	15.040	
3,100.0	3,095.1	3,084.5	3,067.2	6.9	8.3	60.07	185.5	-191.0	210.0	196.0	14.04	14.955	
3,200.0	3,194.3	3,184.0	3,165.7	7.2	8.6	61.69	194.9	-201.5	217.2	202.6	14.60	14.878	
3,300.0	3,293.5	3,283.6	3,264.3	7.5	9.0	63.21	204.2	-212.0	224.5	209.3	15.16	14.808	
3,400.0	3,392.7	3,383.2	3,362.9	7.8	9.3	64.64	213.6	-222.5	232.0	216.2	15.73	14.745	
3,500.0	3,491.9	3,482.7	3,461.4	8.0	9.6	65.97	223.0	-233.0	239.6	223.3	16.31	14.688	
3,600.0	3,591.1	3,582.3	3,560.0	8.3	10.0	67.22	232.4	-243.5	247.3	230.4	16.90	14.635	
3,700.0	3,690.3	3,681.8	3,658.5	8.6	10.3	68.40	241.8	-253.9	255.2	237.7	17.49	14.588	
3,800.0	3,789.5	3,781.4	3,757.1	8.9	10.6	69.50	251.1	-264.4	263.1	245.0	18.09	14.545	
3,900.0	3,888.7	3,880.9	3,855.7	9.2	11.0	70.54	260.5	-274.9	271.1	252.5	18.69	14.505	
4,000.0	3,987.9	3,980.5	3,954.2	9.5	11.3	71.52	269.9	-285.4	279.3	260.0	19.30	14.469	
4,100.0	4,087.1	4,080.1	4,052.8	9.8	11.7	72.45	279.3	-295.9	287.5	267.6	19.91	14.437	
4,200.0	4,186.3	4,179.6	4,151.3	10.1	12.0	73.32	288.7	-306.4	295.7	275.2	20.53	14.407	
4,300.0	4,285.5	4,279.2	4,249.9	10.4	12.3	74.15	298.0	-316.8	304.1	282.9	21.15	14.380	
4,400.0	4,384.8	4,378.7	4,348.5	10.7	12.7	74.93	307.4	-327.3	312.5	290.7	21.77	14.355	
4,500.0	4,484.0	4,478.3	4,447.0	11.0	13.0	75.67	316.8	-337.8	320.9	298.5	22.39	14.332	
4,600.0	4,583.2	4,577.9	4,545.6	11.3	13.4	76.37	326.2	-348.3	329.4	306.4	23.02	14.312	
4,700.0	4,682.4	4,682.6	4,649.3	11.6	13.7	77.13	335.7	-358.9	337.6	313.9	23.64	14.279	
4,800.0	4,781.6	4,792.6	4,758.8	12.0	14.0	78.25	343.3	-367.4	343.1	318.9	24.24	14.159	
4,900.0	4,880.8	4,902.6	4,868.5	12.3	14.2	79.77	348.1	-372.7	345.9	321.0	24.83	13.929	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-332 - Wellbore #1 - Plan #

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,980.0	5,012.1	4,978.0	12.6	14.3	81.72	350.0	-374.9	345.9	320.5	25.43	13.603	
5,100.0	5,079.2	5,113.3	5,079.2	12.9	14.5	83.81	350.1	-375.0	344.3	318.3	26.02	13.233	
5,160.8	5,139.5	5,173.7	5,139.5	13.1	14.6	85.06	350.1	-375.0	343.6	317.2	26.39	13.020	
5,200.0	5,178.4	5,212.6	5,178.4	13.2	14.7	85.83	350.1	-375.0	343.2	316.6	26.61	12.900	
5,300.0	5,278.0	5,312.1	5,278.0	13.4	14.8	87.39	350.1	-375.0	342.7	315.6	27.09	12.650	
5,400.0	5,377.8	5,411.9	5,377.8	13.6	15.0	88.39	350.1	-375.0	342.4	314.9	27.52	12.444	
5,500.0	5,477.7	5,511.9	5,477.7	13.8	15.2	88.81	350.1	-375.0	342.4	314.5	27.90	12.272	
5,522.3	5,500.0	5,534.1	5,500.0	13.8	15.2	0.00	350.1	-375.0	342.4	316.7	25.67	13.338	
5,600.0	5,577.7	5,611.9	5,577.7	14.0	15.4	0.00	350.1	-375.0	342.4	316.4	25.97	13.183	
5,700.0	5,677.7	5,711.9	5,677.7	14.1	15.5	0.00	350.1	-375.0	342.4	316.0	26.37	12.982	
5,800.0	5,777.7	5,811.9	5,777.7	14.3	15.7	0.00	350.1	-375.0	342.4	315.6	26.77	12.787	
5,900.0	5,877.7	5,911.9	5,877.7	14.5	15.9	0.00	350.1	-375.0	342.4	315.2	27.18	12.597	
6,000.0	5,977.7	6,011.9	5,977.7	14.7	16.1	0.00	350.1	-375.0	342.4	314.8	27.58	12.412	
6,100.0	6,077.7	6,111.9	6,077.7	14.9	16.2	0.00	350.1	-375.0	342.4	314.4	27.99	12.231	
6,200.0	6,177.7	6,211.9	6,177.7	15.1	16.4	0.00	350.1	-375.0	342.4	314.0	28.40	12.056	
6,295.7	6,273.4	6,307.6	6,273.4	15.3	16.6	0.00	350.1	-375.0	342.4	313.6	28.79	11.892	
6,295.7	6,273.4	6,307.6	6,273.4	15.3	16.6	0.00	350.1	-375.0	342.4	313.6	28.79	11.892	
6,300.0	6,277.7	6,311.9	6,277.7	15.3	16.6	-90.00	350.1	-375.0	342.4	311.4	30.94	11.066	
6,307.8	6,285.6	6,319.7	6,285.6	15.3	16.6	-90.02	350.1	-375.0	342.4	311.4	30.97	11.056	
6,350.0	6,327.7	6,361.8	6,327.7	15.4	16.7	-90.32	350.1	-375.0	342.4	311.3	31.10	11.011	
6,400.0	6,377.4	6,411.9	6,377.7	15.4	16.8	-91.04	350.1	-374.1	342.4	311.2	31.20	10.975	
6,450.0	6,426.7	6,462.2	6,427.9	15.5	16.8	-91.78	350.1	-370.1	342.5	311.3	31.26	10.957	
6,500.0	6,475.3	6,512.9	6,478.0	15.5	16.9	-92.51	350.1	-362.6	342.7	311.4	31.29	10.951	
6,550.0	6,523.1	6,563.9	6,527.8	15.5	16.9	-93.23	350.1	-351.8	342.9	311.6	31.30	10.957	
6,600.0	6,569.8	6,615.1	6,577.1	15.5	16.9	-93.93	350.1	-337.6	343.2	311.9	31.28	10.970	
6,650.0	6,615.2	6,666.7	6,625.5	15.5	16.9	-94.62	350.1	-320.1	343.5	312.2	31.26	10.989	
6,700.0	6,659.1	6,718.5	6,673.0	15.5	16.9	-95.30	350.1	-299.1	343.9	312.6	31.24	11.007	
6,750.0	6,701.4	6,770.7	6,719.1	15.5	16.9	-95.94	350.1	-274.9	344.2	313.0	31.23	11.021	
6,800.0	6,741.9	6,823.1	6,763.8	15.6	16.8	-96.57	350.1	-247.4	344.6	313.4	31.26	11.024	
6,850.0	6,780.4	6,875.9	6,806.6	15.7	16.8	-97.16	350.1	-216.7	345.1	313.7	31.35	11.009	
6,900.0	6,816.7	6,928.9	6,847.5	15.8	16.8	-97.72	350.1	-183.0	345.5	314.0	31.50	10.968	
6,950.0	6,850.6	6,982.1	6,886.1	15.9	16.8	-98.25	350.1	-146.4	346.0	314.2	31.76	10.895	
7,000.0	6,882.1	7,035.6	6,922.2	16.2	16.9	-98.74	350.1	-106.9	346.4	314.3	32.13	10.782	
7,050.0	6,911.0	7,089.3	6,955.7	16.5	17.0	-99.19	350.1	-64.8	346.8	314.2	32.64	10.626	
7,100.0	6,937.2	7,143.3	6,986.1	16.9	17.2	-99.60	350.1	-20.3	347.3	313.9	33.31	10.425	
7,150.0	6,960.5	7,197.4	7,013.5	17.4	17.5	-99.97	350.1	26.4	347.6	313.5	34.15	10.180	
7,200.0	6,980.9	7,251.7	7,037.6	17.9	18.0	-100.29	350.1	75.0	348.0	312.8	35.16	9.896	
7,250.0	6,998.2	7,306.2	7,058.2	18.5	18.6	-100.56	350.1	125.5	348.3	311.9	36.36	9.578	
7,300.0	7,012.4	7,360.8	7,075.1	19.3	19.3	-100.79	350.1	177.3	348.5	310.8	37.73	9.238	
7,350.0	7,023.5	7,415.5	7,088.4	20.0	20.2	-100.96	350.1	230.4	348.7	309.5	39.26	8.883	
7,400.0	7,031.4	7,470.3	7,097.8	20.9	21.0	-101.09	350.1	284.3	348.9	308.0	40.93	8.524	
7,450.0	7,036.0	7,525.1	7,103.4	21.8	22.0	-101.16	350.1	338.9	349.0	306.3	42.72	8.168	
7,501.9	7,037.3	7,582.1	7,105.0	22.7	23.1	-101.18	350.1	395.8	349.0	304.3	44.69	7.809	
7,600.0	7,036.5	7,680.1	7,104.2	24.7	25.0	-101.18	350.1	493.8	349.0	300.5	48.53	7.192	
7,700.0	7,035.7	7,780.1	7,103.3	26.8	27.1	-101.17	350.1	593.8	349.0	296.3	52.71	6.622	
7,800.0	7,034.9	7,880.1	7,102.5	29.1	29.4	-101.17	350.1	693.8	349.0	291.9	57.11	6.111	
7,900.0	7,034.1	7,980.1	7,101.7	31.4	31.7	-101.17	350.1	793.8	349.0	287.3	61.70	5.657	
8,000.0	7,033.3	8,080.1	7,100.8	33.8	34.1	-101.16	350.1	893.8	349.0	282.6	66.42	5.254	
8,100.0	7,032.4	8,180.1	7,100.0	36.3	36.5	-101.16	350.1	993.8	349.0	277.7	71.26	4.898	
8,200.0	7,031.6	8,280.1	7,099.2	38.8	39.0	-101.16	350.1	1,093.8	349.0	272.8	76.19	4.581	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-332 - Wellbore #1 - Plan #

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,300.0	7,030.8	8,380.1	7,098.3	41.4	41.6	-101.16	350.1	1,193.8	349.0	267.8	81.19	4.298	
8,400.0	7,030.0	8,480.1	7,097.5	44.0	44.1	-101.15	350.1	1,293.8	349.0	262.7	86.26	4.046	
8,500.0	7,029.2	8,580.1	7,096.6	46.6	46.7	-101.15	350.1	1,393.8	349.0	257.6	91.38	3.819	
8,600.0	7,028.3	8,680.1	7,095.8	49.2	49.4	-101.15	350.1	1,493.8	349.0	252.5	96.54	3.615	
8,700.0	7,027.5	8,780.1	7,095.0	51.8	52.0	-101.14	350.1	1,593.8	349.0	247.3	101.73	3.430	
8,800.0	7,026.7	8,880.1	7,094.1	54.5	54.7	-101.14	350.1	1,693.8	349.0	242.0	106.96	3.263	
8,900.0	7,025.9	8,980.1	7,093.3	57.2	57.3	-101.14	350.1	1,793.8	349.0	236.8	112.22	3.110	
9,000.0	7,025.1	9,080.1	7,092.5	59.9	60.0	-101.14	350.1	1,893.8	349.0	231.5	117.50	2.970	
9,100.0	7,024.2	9,180.1	7,091.6	62.6	62.7	-101.13	350.1	1,993.8	349.0	226.2	122.80	2.842	
9,200.0	7,023.4	9,280.1	7,090.8	65.3	65.4	-101.13	350.1	2,093.8	349.0	220.9	128.12	2.724	
9,300.0	7,022.6	9,380.1	7,089.9	68.0	68.1	-101.13	350.1	2,193.8	349.0	215.5	133.45	2.615	
9,400.0	7,021.8	9,480.1	7,089.1	70.7	70.8	-101.12	350.1	2,293.8	349.0	210.2	138.80	2.514	
9,500.0	7,020.9	9,580.1	7,088.3	73.4	73.6	-101.12	350.1	2,393.8	349.0	204.8	144.16	2.421	
9,600.0	7,020.1	9,680.1	7,087.4	76.2	76.3	-101.12	350.1	2,493.8	349.0	199.4	149.53	2.334	
9,700.0	7,019.3	9,780.1	7,086.6	78.9	79.0	-101.12	350.1	2,593.8	349.0	194.1	154.91	2.253	
9,800.0	7,018.5	9,880.1	7,085.7	81.7	81.8	-101.11	350.1	2,693.8	349.0	188.7	160.30	2.177	
9,900.0	7,017.7	9,980.1	7,084.9	84.4	84.5	-101.11	350.1	2,793.8	349.0	183.3	165.69	2.106	
10,000.0	7,016.8	10,080.1	7,084.1	87.2	87.2	-101.11	350.1	2,893.7	349.0	177.9	171.10	2.040	
10,100.0	7,016.0	10,180.1	7,083.2	89.9	90.0	-101.10	350.1	2,993.7	349.0	172.5	176.51	1.977	
10,200.0	7,015.2	10,280.1	7,082.4	92.7	92.8	-101.10	350.1	3,093.7	349.0	167.0	181.93	1.918	
10,300.0	7,014.4	10,380.1	7,081.6	95.4	95.5	-101.10	350.1	3,193.7	349.0	161.6	187.35	1.863	
10,400.0	7,013.6	10,480.1	7,080.7	98.2	98.3	-101.10	350.1	3,293.7	349.0	156.2	192.78	1.810	
10,500.0	7,012.7	10,580.1	7,079.9	101.0	101.0	-101.09	350.1	3,393.7	349.0	150.7	198.21	1.761	
10,600.0	7,011.9	10,680.1	7,079.0	103.7	103.8	-101.09	350.1	3,493.7	349.0	145.3	203.65	1.714	
10,700.0	7,011.1	10,780.1	7,078.2	106.5	106.6	-101.09	350.1	3,593.7	349.0	139.9	209.09	1.669	
10,800.0	7,010.3	10,880.1	7,077.4	109.3	109.3	-101.08	350.1	3,693.7	349.0	134.4	214.54	1.627	
10,900.0	7,009.5	10,980.1	7,076.5	112.0	112.1	-101.08	350.1	3,793.7	349.0	129.0	219.98	1.586	
11,000.0	7,008.6	11,080.1	7,075.7	114.8	114.9	-101.08	350.1	3,893.7	349.0	123.5	225.44	1.548	
11,100.0	7,007.8	11,180.1	7,074.9	117.6	117.6	-101.08	350.1	3,993.7	349.0	118.1	230.89	1.511	
11,200.0	7,007.0	11,280.1	7,074.0	120.4	120.4	-101.07	350.1	4,093.7	348.9	112.6	236.35	1.476	Level 3
11,300.0	7,006.2	11,380.1	7,073.2	123.2	123.2	-101.07	350.1	4,193.7	348.9	107.1	241.81	1.443	Level 3
11,319.9	7,006.0	11,400.0	7,073.0	123.7	123.8	-101.07	350.1	4,213.6	348.9	106.0	242.90	1.437	Level 3
11,322.5	7,006.0	11,402.0	7,073.0	123.8	123.8	-101.07	350.1	4,215.6	348.9	105.9	243.02	1.436	Level 3, SF

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-402 - Wellbore #1 - Plan # — **Offset Site Error:** 0.0 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	0.00	29.1	0.0	29.1				
100.0	100.0	100.0	100.0	0.1	0.1	0.00	29.1	0.0	29.1	28.9	0.22	129.632	
200.0	200.0	200.0	200.0	0.3	0.3	0.00	29.1	0.0	29.1	28.5	0.67	43.211	
300.0	300.0	300.0	300.0	0.6	0.6	0.00	29.1	0.0	29.1	28.0	1.12	25.926	
400.0	400.0	400.0	400.0	0.8	0.8	0.00	29.1	0.0	29.1	27.6	1.57	18.519	
500.0	500.0	500.0	500.0	1.0	1.0	0.00	29.1	0.0	29.1	27.1	2.02	14.404	
600.0	600.0	600.0	600.0	1.2	1.2	0.00	29.1	0.0	29.1	26.7	2.47	11.785	
700.0	700.0	700.0	700.0	1.5	1.5	0.00	29.1	0.0	29.1	26.2	2.92	9.972	
800.0	800.0	800.0	800.0	1.7	1.7	0.00	29.1	0.0	29.1	25.8	3.37	8.642	CC, ES
900.0	900.0	899.3	899.3	1.9	1.9	-1.31	30.2	-0.7	30.2	26.4	3.82	7.923	
1,000.0	1,000.0	998.5	998.5	2.1	2.1	-4.72	33.5	-2.8	33.6	29.4	4.26	7.895	
1,100.0	1,100.0	1,097.5	1,097.2	2.4	2.4	-9.06	38.9	-6.2	39.5	34.8	4.71	8.388	
1,200.0	1,200.0	1,196.0	1,195.3	2.6	2.6	-13.32	46.5	-11.0	48.0	42.8	5.17	9.283	
1,300.0	1,300.0	1,294.0	1,292.7	2.8	2.8	-16.96	56.1	-17.1	59.1	53.4	5.64	10.476	
1,400.0	1,400.0	1,391.4	1,389.0	3.0	3.1	-19.89	67.7	-24.5	72.8	66.7	6.13	11.877	
1,500.0	1,500.0	1,488.0	1,484.3	3.3	3.4	-22.17	81.3	-33.1	89.2	82.5	6.65	13.412	
1,600.0	1,600.0	1,584.8	1,579.3	3.5	3.7	-23.93	96.8	-42.9	107.9	100.7	7.20	14.990	
1,700.0	1,700.0	1,682.9	1,675.6	3.7	4.1	-25.22	112.8	-53.1	127.1	119.3	7.77	16.355	
1,800.0	1,800.0	1,781.0	1,771.9	3.9	4.4	-26.17	128.8	-63.3	146.3	137.9	8.35	17.512	
1,900.0	1,900.0	1,879.1	1,868.1	4.2	4.8	-26.90	144.9	-73.5	165.5	156.6	8.95	18.501	
2,000.0	2,000.0	1,977.3	1,964.4	4.4	5.2	-27.47	160.9	-83.7	184.8	175.3	9.55	19.354	
2,100.0	2,100.0	2,075.5	2,060.7	4.6	5.6	60.93	176.9	-93.8	203.7	194.4	9.28	21.946	
2,200.0	2,200.0	2,173.8	2,157.2	4.8	5.9	60.97	193.0	-104.0	221.7	212.0	9.73	22.795	
2,300.0	2,299.9	2,272.3	2,253.8	5.0	6.3	61.35	209.1	-114.3	238.9	228.8	10.18	23.469	
2,400.0	2,399.7	2,370.9	2,350.5	5.2	6.7	62.02	225.2	-124.5	255.4	244.7	10.64	23.991	
2,500.0	2,499.4	2,469.5	2,447.3	5.4	7.1	62.92	241.3	-134.7	271.0	259.9	11.12	24.379	
2,600.0	2,598.9	2,568.2	2,544.1	5.7	7.5	64.03	257.4	-144.9	286.1	274.5	11.61	24.646	
2,700.0	2,698.3	2,666.9	2,641.0	5.9	7.9	65.33	273.5	-155.2	300.5	288.4	12.11	24.808	
2,722.9	2,721.0	2,689.5	2,663.1	5.9	8.0	65.65	277.2	-157.5	303.7	291.5	12.23	24.831	
2,800.0	2,797.5	2,765.6	2,737.8	6.1	8.4	66.80	289.7	-165.4	314.6	301.9	12.64	24.895	
2,900.0	2,896.7	2,864.2	2,834.6	6.4	8.8	68.18	305.8	-175.7	328.8	315.7	13.17	24.965	
3,000.0	2,995.9	2,962.9	2,931.4	6.7	9.2	69.44	321.9	-185.9	343.3	329.6	13.72	25.022	
3,100.0	3,095.1	3,061.6	3,028.2	6.9	9.6	70.60	338.0	-196.1	357.9	343.6	14.28	25.067	
3,200.0	3,194.3	3,160.3	3,125.0	7.2	10.0	71.67	354.1	-206.4	372.6	357.8	14.84	25.103	
3,300.0	3,293.5	3,259.0	3,221.8	7.5	10.4	72.66	370.3	-216.6	387.5	372.0	15.42	25.131	
3,400.0	3,392.7	3,357.6	3,318.7	7.8	10.8	73.58	386.4	-226.8	402.4	386.4	16.00	25.151	
3,500.0	3,491.9	3,456.3	3,415.5	8.0	11.2	74.43	402.5	-237.1	417.5	400.9	16.59	25.166	
3,600.0	3,591.1	3,555.0	3,512.3	8.3	11.6	75.22	418.6	-247.3	432.6	415.4	17.18	25.176	
3,700.0	3,690.3	3,653.7	3,609.1	8.6	12.1	75.96	434.7	-257.5	447.8	430.0	17.78	25.182	
3,800.0	3,789.5	3,752.3	3,705.9	8.9	12.5	76.65	450.9	-267.8	463.1	444.7	18.39	25.185	
3,900.0	3,888.7	3,851.0	3,802.7	9.2	12.9	77.30	467.0	-278.0	478.4	459.4	19.00	25.185	
4,000.0	3,987.9	3,949.7	3,899.5	9.5	13.3	77.90	483.1	-288.2	493.8	474.2	19.61	25.183	
4,100.0	4,087.1	4,048.4	3,996.3	9.8	13.7	78.47	499.2	-298.5	509.3	489.0	20.23	25.179	
4,200.0	4,186.3	4,147.0	4,093.2	10.1	14.1	79.01	515.3	-308.7	524.8	503.9	20.85	25.173	
4,300.0	4,285.5	4,245.7	4,190.0	10.4	14.6	79.51	531.5	-318.9	540.3	518.8	21.47	25.167	
4,400.0	4,384.8	4,344.4	4,286.8	10.7	15.0	79.99	547.6	-329.2	555.9	533.8	22.09	25.159	
4,500.0	4,484.0	4,443.1	4,383.6	11.0	15.4	80.44	563.7	-339.4	571.5	548.7	22.72	25.151	
4,600.0	4,583.2	4,549.8	4,488.4	11.3	15.8	80.92	580.9	-350.3	586.9	563.5	23.36	25.122	
4,700.0	4,682.4	4,671.6	4,608.7	11.6	16.2	81.59	597.1	-360.6	599.3	575.3	24.00	24.974	
4,800.0	4,781.6	4,794.2	4,730.4	12.0	16.5	82.46	609.0	-368.2	608.0	583.4	24.61	24.700	
4,900.0	4,880.8	4,916.9	4,852.8	12.3	16.7	83.53	616.5	-373.0	613.0	587.7	25.23	24.297	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-402 - Wellbore #1 - Plan #

Survey Program: 0-MWD

Offset Site Error: 0.0 ft

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,980.0	5,039.5	4,975.3	12.6	16.9	84.80	619.6	-374.9	614.4	588.5	25.84	23.778	
5,100.0	5,079.2	5,143.4	5,079.2	12.9	17.1	86.01	619.7	-375.0	613.4	587.0	26.42	23.216	
5,160.8	5,139.5	5,203.7	5,139.5	13.1	17.1	86.72	619.7	-375.0	612.9	586.1	26.78	22.888	
5,200.0	5,178.4	5,242.6	5,178.4	13.2	17.2	87.15	619.7	-375.0	612.7	585.7	26.99	22.700	
5,300.0	5,278.0	5,342.2	5,278.0	13.4	17.3	88.02	619.7	-375.0	612.3	584.8	27.46	22.297	
5,400.0	5,377.8	5,442.0	5,377.8	13.6	17.5	88.58	619.7	-375.0	612.1	584.2	27.88	21.953	
5,500.0	5,477.7	5,542.0	5,477.7	13.8	17.6	88.82	619.7	-375.0	612.0	583.8	28.26	21.659	
5,522.3	5,500.0	5,564.2	5,500.0	13.8	17.7	0.00	619.7	-375.0	612.0	583.7	28.37	21.573	
5,600.0	5,577.7	5,642.0	5,577.7	14.0	17.8	0.00	619.7	-375.0	612.0	583.4	28.65	21.365	
5,700.0	5,677.7	5,742.0	5,677.7	14.1	17.9	0.00	619.7	-375.0	612.0	583.0	29.02	21.093	
5,800.0	5,777.7	5,842.0	5,777.7	14.3	18.1	0.00	619.7	-375.0	612.0	582.6	29.39	20.826	
5,900.0	5,877.7	5,942.0	5,877.7	14.5	18.2	0.00	619.7	-375.0	612.0	582.3	29.76	20.564	
6,000.0	5,977.7	6,042.0	5,977.7	14.7	18.4	0.00	619.7	-375.0	612.0	581.9	30.14	20.308	
6,100.0	6,077.7	6,142.0	6,077.7	14.9	18.5	0.00	619.7	-375.0	612.0	581.5	30.51	20.057	
6,200.0	6,177.7	6,242.0	6,177.7	15.1	18.7	0.00	619.7	-375.0	612.0	581.1	30.89	19.811	
6,295.7	6,273.4	6,337.6	6,273.4	15.3	18.9	0.00	619.7	-375.0	612.0	580.8	31.26	19.580	
6,300.0	6,277.7	6,342.0	6,277.7	15.3	18.9	-90.00	619.7	-375.0	612.0	580.8	31.26	19.577	
6,307.8	6,285.5	6,349.7	6,285.5	15.3	18.9	-90.01	619.7	-375.0	612.0	580.7	31.29	19.561	
6,350.0	6,327.7	6,391.9	6,327.7	15.4	18.9	-90.18	619.7	-375.0	612.0	580.6	31.42	19.482	
6,400.0	6,377.4	6,441.6	6,377.4	15.4	19.0	-90.66	619.7	-375.0	612.1	580.6	31.53	19.414	
6,450.0	6,426.7	6,490.9	6,426.7	15.5	19.1	-91.43	619.7	-375.0	612.2	580.6	31.60	19.375	
6,500.0	6,475.3	6,540.4	6,476.2	15.5	19.2	-92.44	619.7	-374.6	612.6	581.0	31.63	19.368	
6,550.0	6,523.1	6,591.2	6,526.9	15.5	19.2	-93.49	619.7	-371.3	613.2	581.6	31.62	19.392	
6,600.0	6,569.8	6,642.8	6,578.0	15.5	19.3	-94.54	619.7	-364.4	614.1	582.5	31.59	19.438	
6,650.0	6,615.2	6,695.3	6,629.5	15.5	19.3	-95.58	619.7	-354.0	615.1	583.6	31.54	19.500	
6,700.0	6,659.1	6,748.7	6,680.9	15.5	19.3	-96.60	619.7	-339.7	616.3	584.8	31.49	19.574	
6,750.0	6,701.4	6,803.1	6,732.1	15.5	19.3	-97.59	619.7	-321.6	617.7	586.3	31.43	19.651	
6,800.0	6,741.9	6,858.4	6,782.8	15.6	19.3	-98.56	619.7	-299.4	619.2	587.9	31.40	19.722	
6,850.0	6,780.4	6,914.6	6,832.5	15.7	19.3	-99.50	619.7	-273.2	620.9	589.5	31.40	19.775	
6,900.0	6,816.7	6,971.8	6,881.0	15.8	19.2	-100.39	619.7	-242.8	622.6	591.2	31.45	19.796	
6,950.0	6,850.6	7,030.0	6,927.8	15.9	19.2	-101.25	619.7	-208.3	624.4	592.8	31.58	19.770	
7,000.0	6,882.1	7,089.2	6,972.6	16.2	19.1	-102.05	619.7	-169.6	626.2	594.4	31.82	19.683	
7,050.0	6,911.0	7,149.2	7,014.9	16.5	19.1	-102.80	619.7	-127.0	628.0	595.8	32.17	19.519	
7,100.0	6,937.2	7,210.2	7,054.2	16.9	19.0	-103.49	619.7	-80.4	629.8	597.1	32.70	19.260	
7,150.0	6,960.5	7,272.0	7,090.2	17.4	19.0	-104.11	619.7	-30.1	631.4	598.0	33.40	18.906	
7,200.0	6,980.9	7,334.6	7,122.3	17.9	19.0	-104.66	619.7	23.6	632.9	598.6	34.29	18.459	
7,250.0	6,998.2	7,397.9	7,150.3	18.5	18.9	-105.13	619.7	80.3	634.2	598.8	35.38	17.926	
7,300.0	7,012.4	7,461.9	7,173.6	19.3	19.3	-105.52	619.7	139.8	635.3	598.6	36.70	17.312	
7,350.0	7,023.5	7,526.3	7,192.0	20.0	20.2	-105.83	619.7	201.5	636.2	598.0	38.21	16.652	
7,400.0	7,031.4	7,591.1	7,205.2	20.9	21.2	-106.05	619.7	264.9	636.9	597.0	39.91	15.959	
7,450.0	7,036.0	7,656.1	7,213.0	21.8	22.3	-106.18	619.7	329.5	637.3	595.5	41.77	15.256	
7,501.9	7,037.3	7,723.3	7,215.3	22.7	23.6	-106.22	619.7	396.6	637.4	593.6	43.85	14.537	
7,600.0	7,036.5	7,821.3	7,214.6	24.7	25.5	-106.22	619.7	494.6	637.4	589.8	47.58	13.395	
7,700.0	7,035.7	7,921.3	7,213.8	26.8	27.6	-106.22	619.7	594.6	637.4	585.8	51.67	12.337	
7,800.0	7,034.9	8,021.3	7,213.0	29.1	29.8	-106.23	619.7	694.6	637.4	581.5	55.97	11.389	
7,900.0	7,034.1	8,121.3	7,212.3	31.4	32.1	-106.23	619.7	794.6	637.5	577.0	60.45	10.545	
8,000.0	7,033.3	8,221.3	7,211.5	33.8	34.5	-106.24	619.7	894.6	637.5	572.4	65.07	9.796	
8,100.0	7,032.4	8,321.3	7,210.7	36.3	37.0	-106.24	619.7	994.6	637.5	567.7	69.80	9.133	
8,200.0	7,031.6	8,421.3	7,210.0	38.8	39.4	-106.25	619.7	1,094.6	637.5	562.9	74.62	8.543	
8,300.0	7,030.8	8,521.3	7,209.2	41.4	42.0	-106.25	619.7	1,194.6	637.5	558.0	79.52	8.017	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10E-402 - Wellbore #1 - Plan #

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,400.0	7,030.0	8,621.3	7,208.4	44.0	44.5	-106.26	619.7	1,294.6	637.5	553.1	84.48	7.547	
8,500.0	7,029.2	8,721.3	7,207.7	46.6	47.1	-106.26	619.7	1,394.6	637.5	548.1	89.48	7.125	
8,600.0	7,028.3	8,821.3	7,206.9	49.2	49.7	-106.27	619.7	1,494.6	637.6	543.0	94.53	6.744	
8,700.0	7,027.5	8,921.3	7,206.1	51.8	52.3	-106.27	619.7	1,594.6	637.6	538.0	99.62	6.400	
8,800.0	7,026.7	9,021.3	7,205.4	54.5	55.0	-106.27	619.7	1,694.6	637.6	532.9	104.73	6.088	
8,900.0	7,025.9	9,121.3	7,204.6	57.2	57.6	-106.28	619.7	1,794.6	637.6	527.7	109.88	5.803	
9,000.0	7,025.1	9,221.3	7,203.8	59.9	60.3	-106.28	619.7	1,894.6	637.6	522.6	115.04	5.542	
9,100.0	7,024.2	9,321.3	7,203.1	62.6	63.0	-106.29	619.7	1,994.6	637.6	517.4	120.23	5.303	
9,200.0	7,023.4	9,421.3	7,202.3	65.3	65.7	-106.29	619.7	2,094.6	637.6	512.2	125.43	5.084	
9,300.0	7,022.6	9,521.3	7,201.5	68.0	68.4	-106.30	619.7	2,194.6	637.7	507.0	130.65	4.881	
9,400.0	7,021.8	9,621.3	7,200.8	70.7	71.1	-106.30	619.7	2,294.6	637.7	501.8	135.88	4.693	
9,500.0	7,020.9	9,721.3	7,200.0	73.4	73.8	-106.31	619.7	2,394.6	637.7	496.6	141.13	4.519	
9,600.0	7,020.1	9,821.3	7,199.2	76.2	76.5	-106.31	619.7	2,494.6	637.7	491.3	146.38	4.356	
9,700.0	7,019.3	9,921.3	7,198.4	78.9	79.3	-106.31	619.7	2,594.6	637.7	486.1	151.65	4.205	
9,800.0	7,018.5	10,021.3	7,197.7	81.7	82.0	-106.32	619.7	2,694.6	637.7	480.8	156.92	4.064	
9,900.0	7,017.7	10,121.3	7,196.9	84.4	84.7	-106.32	619.7	2,794.6	637.8	475.6	162.20	3.932	
10,000.0	7,016.8	10,221.3	7,196.1	87.2	87.5	-106.33	619.7	2,894.6	637.8	470.3	167.49	3.808	
10,100.0	7,016.0	10,321.3	7,195.4	89.9	90.2	-106.33	619.7	2,994.6	637.8	465.0	172.78	3.691	
10,200.0	7,015.2	10,421.3	7,194.6	92.7	93.0	-106.34	619.7	3,094.6	637.8	459.7	178.08	3.582	
10,300.0	7,014.4	10,521.3	7,193.8	95.4	95.7	-106.34	619.7	3,194.6	637.8	454.4	183.38	3.478	
10,400.0	7,013.6	10,621.3	7,193.1	98.2	98.5	-106.35	619.7	3,294.6	637.8	449.1	188.69	3.380	
10,500.0	7,012.7	10,721.3	7,192.3	101.0	101.3	-106.35	619.7	3,394.6	637.8	443.8	194.01	3.288	
10,600.0	7,011.9	10,821.3	7,191.5	103.7	104.0	-106.36	619.7	3,494.6	637.9	438.5	199.32	3.200	
10,700.0	7,011.1	10,921.3	7,190.8	106.5	106.8	-106.36	619.7	3,594.5	637.9	433.2	204.64	3.117	
10,800.0	7,010.3	11,021.3	7,190.0	109.3	109.5	-106.36	619.7	3,694.5	637.9	427.9	209.97	3.038	
10,900.0	7,009.5	11,121.3	7,189.2	112.0	112.3	-106.37	619.7	3,794.5	637.9	422.6	215.30	2.963	
11,000.0	7,008.6	11,221.3	7,188.5	114.8	115.1	-106.37	619.7	3,894.5	637.9	417.3	220.63	2.891	
11,100.0	7,007.8	11,321.3	7,187.7	117.6	117.8	-106.38	619.7	3,994.5	637.9	412.0	225.96	2.823	
11,200.0	7,007.0	11,421.3	7,186.9	120.4	120.6	-106.38	619.7	4,094.5	637.9	406.7	231.29	2.758	
11,300.0	7,006.2	11,521.3	7,186.2	123.2	123.4	-106.39	619.7	4,194.5	638.0	401.3	236.63	2.696	
11,308.1	7,006.1	11,529.4	7,186.1	123.4	123.6	-106.39	619.7	4,202.6	638.0	400.9	237.06	2.691	
11,322.5	7,006.0	11,542.3	7,186.0	123.8	124.0	-106.39	619.7	4,215.5	638.0	400.2	237.79	2.683	SF

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-202 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-32.8	0.0	32.8	32.8	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-32.8	0.0	32.8	32.6	0.23	144.426	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-32.8	0.0	32.8	32.1	0.68	48.463	
300.0	300.0	301.0	301.0	0.6	0.6	-180.00	-32.8	0.0	32.8	31.7	1.13	29.117	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-32.8	0.0	32.8	31.2	1.58	20.810	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-32.8	0.0	32.8	30.8	2.03	16.190	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-32.8	0.0	32.8	30.3	2.47	13.249	
700.0	700.0	701.0	701.0	1.5	1.5	-180.00	-32.8	0.0	32.8	29.9	2.92	11.213	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-32.8	0.0	32.8	29.4	3.37	9.719	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-32.8	0.0	32.8	29.0	3.82	8.576	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-32.8	0.0	32.8	28.5	4.27	7.674	
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-180.00	-32.8	0.0	32.8	28.1	4.72	6.943	
1,166.3	1,166.3	1,167.3	1,167.3	2.5	2.5	-180.00	-32.8	0.0	32.8	27.8	5.02	6.531	CC
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-180.00	-32.8	0.0	32.8	27.6	5.17	6.340	ES
1,300.0	1,300.0	1,300.3	1,300.3	2.8	2.8	-178.52	-33.8	-0.9	33.8	28.2	5.59	6.040	
1,400.0	1,400.0	1,399.5	1,399.5	3.0	3.0	-174.61	-36.7	-3.5	36.9	30.9	6.00	6.149	
1,500.0	1,500.0	1,498.5	1,498.2	3.3	3.2	-169.44	-41.5	-7.7	42.3	35.9	6.41	6.601	
1,600.0	1,600.0	1,597.0	1,596.3	3.5	3.4	-164.15	-48.2	-13.7	50.3	43.5	6.83	7.364	
1,700.0	1,700.0	1,695.0	1,693.6	3.7	3.6	-159.45	-56.7	-21.3	61.0	53.8	7.28	8.390	
1,800.0	1,800.0	1,793.5	1,791.2	3.9	3.8	-155.66	-66.8	-30.2	74.0	66.2	7.74	9.560	
1,900.0	1,900.0	1,892.6	1,889.3	4.2	4.1	-152.96	-77.1	-39.3	87.3	79.1	8.22	10.622	
2,000.0	2,000.0	1,991.6	1,987.4	4.4	4.4	-150.98	-87.3	-48.5	100.8	92.1	8.72	11.565	
2,100.0	2,100.0	2,090.7	2,085.5	4.6	4.6	-60.91	-97.6	-57.6	114.0	105.0	8.97	12.701	
2,200.0	2,200.0	2,189.9	2,183.8	4.8	4.9	-60.60	-107.9	-66.7	126.3	116.9	9.39	13.451	
2,300.0	2,299.9	2,289.3	2,282.2	5.0	5.2	-60.97	-118.2	-75.9	137.8	128.0	9.81	14.038	
2,400.0	2,399.7	2,388.7	2,380.6	5.2	5.5	-61.87	-128.5	-85.0	148.4	138.2	10.25	14.483	
2,500.0	2,499.4	2,488.1	2,479.1	5.4	5.8	-63.20	-138.8	-94.2	158.4	147.7	10.70	14.804	
2,600.0	2,598.9	2,587.5	2,577.6	5.7	6.2	-64.91	-149.1	-103.3	167.6	156.5	11.16	15.021	
2,700.0	2,698.3	2,686.9	2,676.0	5.9	6.5	-66.95	-159.4	-112.5	176.4	164.7	11.64	15.148	
2,722.9	2,721.0	2,709.7	2,698.5	5.9	6.5	-67.46	-161.8	-114.6	178.3	166.5	11.76	15.167	
2,800.0	2,797.5	2,786.3	2,774.4	6.1	6.8	-69.20	-169.7	-121.6	184.9	172.7	12.15	15.221	
2,900.0	2,896.7	2,885.7	2,872.9	6.4	7.1	-71.29	-180.0	-130.8	193.6	181.0	12.66	15.290	
3,000.0	2,995.9	2,985.1	2,971.3	6.7	7.4	-73.19	-190.3	-139.9	202.6	189.4	13.19	15.356	
3,100.0	3,095.1	3,084.5	3,069.7	6.9	7.8	-74.93	-200.6	-149.1	211.8	198.1	13.74	15.419	
3,200.0	3,194.3	3,183.8	3,168.1	7.2	8.1	-76.53	-210.9	-158.2	221.2	206.9	14.29	15.480	
3,300.0	3,293.5	3,283.2	3,266.5	7.5	8.4	-77.99	-221.2	-167.4	230.7	215.8	14.85	15.536	
3,400.0	3,392.7	3,382.6	3,364.9	7.8	8.8	-79.34	-231.5	-176.5	240.4	224.9	15.42	15.590	
3,500.0	3,491.9	3,482.0	3,463.4	8.0	9.1	-80.58	-241.8	-185.7	250.1	234.1	15.99	15.640	
3,600.0	3,591.1	3,581.4	3,561.8	8.3	9.4	-81.73	-252.1	-194.8	260.0	243.5	16.58	15.688	
3,700.0	3,690.3	3,680.7	3,660.2	8.6	9.8	-82.79	-262.4	-203.9	270.0	252.9	17.16	15.732	
3,800.0	3,789.5	3,780.1	3,758.6	8.9	10.1	-83.78	-272.7	-213.1	280.1	262.3	17.76	15.775	
3,900.0	3,888.7	3,879.5	3,857.0	9.2	10.4	-84.70	-283.0	-222.2	290.3	271.9	18.35	15.814	
4,000.0	3,987.9	3,978.9	3,955.5	9.5	10.8	-85.56	-293.3	-231.4	300.5	281.5	18.95	15.852	
4,100.0	4,087.1	4,078.3	4,053.9	9.8	11.1	-86.36	-303.6	-240.5	310.8	291.2	19.56	15.888	
4,200.0	4,186.3	4,177.6	4,152.3	10.1	11.5	-87.11	-313.9	-249.7	321.1	300.9	20.17	15.922	
4,300.0	4,285.5	4,277.0	4,250.7	10.4	11.8	-87.81	-324.2	-258.8	331.5	310.7	20.78	15.954	
4,400.0	4,384.8	4,376.4	4,349.1	10.7	12.1	-88.47	-334.5	-268.0	341.9	320.5	21.39	15.984	
4,500.0	4,484.0	4,475.8	4,447.6	11.0	12.5	-89.09	-344.8	-277.1	352.4	330.4	22.01	16.014	
4,600.0	4,583.2	4,575.1	4,546.0	11.3	12.8	-89.68	-355.1	-286.3	362.9	340.3	22.62	16.041	
4,700.0	4,682.4	4,674.5	4,644.4	11.6	13.2	-90.23	-365.4	-295.4	373.5	350.2	23.24	16.068	
4,800.0	4,781.6	4,773.9	4,742.8	12.0	13.5	-90.75	-375.7	-304.6	384.1	360.2	23.87	16.093	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-202 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.0	4,880.8	4,873.3	4,841.2	12.3	13.9	-91.25	-386.0	-313.7	394.7	370.2	24.49	16.117	
5,000.0	4,980.0	4,972.7	4,939.7	12.6	14.2	-91.72	-396.3	-322.9	405.3	380.2	25.11	16.141	
5,100.0	5,079.2	5,072.0	5,038.1	12.9	14.5	-92.16	-406.6	-332.0	416.0	390.3	25.74	16.163	
5,160.8	5,139.5	5,132.5	5,097.9	13.1	14.7	-92.42	-412.9	-337.6	422.5	396.4	26.12	16.176	
5,200.0	5,178.4	5,171.4	5,136.5	13.2	14.9	-92.63	-416.9	-341.2	426.7	400.3	26.35	16.192	
5,300.0	5,278.0	5,270.9	5,235.0	13.4	15.2	-92.83	-427.2	-350.3	437.2	410.4	26.88	16.268	
5,400.0	5,377.8	5,374.2	5,337.4	13.6	15.6	-92.58	-437.8	-359.7	447.5	420.2	27.35	16.362	
5,500.0	5,477.7	5,486.8	5,449.3	13.8	15.8	-92.06	-446.8	-367.7	455.5	427.7	27.74	16.417	
5,522.3	5,500.0	5,512.0	5,474.4	13.8	15.9	179.26	-448.3	-369.1	456.9	430.4	26.43	17.285	
5,600.0	5,577.7	5,600.0	5,562.3	14.0	16.1	179.73	-452.5	-372.8	460.5	433.7	26.78	17.197	
5,700.0	5,677.7	5,713.7	5,675.8	14.1	16.2	179.99	-454.9	-374.9	462.6	435.4	27.20	17.011	
5,800.0	5,777.7	5,816.6	5,778.8	14.3	16.4	-180.00	-455.0	-375.0	462.7	435.1	27.58	16.778	
5,900.0	5,877.7	5,916.6	5,878.8	14.5	16.5	-180.00	-455.0	-375.0	462.7	434.7	27.94	16.557	
6,000.0	5,977.7	6,016.6	5,978.8	14.7	16.7	-180.00	-455.0	-375.0	462.7	434.4	28.32	16.341	
6,100.0	6,077.7	6,116.6	6,078.8	14.9	16.8	-180.00	-455.0	-375.0	462.7	434.0	28.69	16.128	
6,200.0	6,177.7	6,216.6	6,178.8	15.1	17.0	-180.00	-455.0	-375.0	462.7	433.6	29.06	15.921	
6,263.5	6,241.2	6,280.1	6,242.2	15.2	17.1	-180.00	-455.0	-375.0	462.7	433.4	29.30	15.791	
6,295.7	6,273.4	6,312.3	6,274.4	15.3	17.1	180.00	-455.0	-375.0	462.7	433.3	29.42	15.726	
6,300.0	6,277.7	6,316.6	6,278.8	15.3	17.1	90.00	-455.0	-375.0	462.7	432.0	30.64	15.099	
6,350.0	6,327.7	6,366.6	6,328.7	15.4	17.2	89.99	-455.0	-373.0	462.7	431.9	30.78	15.030	
6,400.0	6,377.4	6,416.6	6,378.4	15.4	17.3	89.98	-455.0	-367.8	462.7	431.8	30.88	14.981	
6,450.0	6,426.7	6,466.6	6,427.7	15.5	17.3	89.97	-455.0	-359.3	462.7	431.7	30.95	14.950	
6,500.0	6,475.3	6,516.5	6,476.3	15.5	17.3	89.97	-455.0	-347.6	462.7	431.7	30.98	14.934	
6,550.0	6,523.1	6,566.5	6,524.0	15.5	17.3	89.96	-455.0	-332.7	462.7	431.7	30.99	14.930	
6,600.0	6,569.8	6,616.5	6,570.6	15.5	17.3	89.95	-455.0	-314.8	462.7	431.7	30.98	14.934	
6,650.0	6,615.2	6,666.5	6,616.0	15.5	17.2	89.94	-455.0	-293.9	462.7	431.7	30.97	14.940	
6,700.0	6,659.1	6,716.4	6,659.9	15.5	17.2	89.94	-455.0	-270.0	462.7	431.7	30.97	14.941	
6,750.0	6,701.4	6,766.4	6,702.1	15.5	17.2	89.93	-455.0	-243.4	462.7	431.7	30.99	14.930	
6,800.0	6,741.9	6,816.4	6,742.5	15.6	17.1	89.92	-455.0	-214.0	462.7	431.6	31.06	14.899	
6,850.0	6,780.4	6,866.3	6,780.9	15.7	17.1	89.92	-455.0	-182.1	462.7	431.5	31.18	14.837	
6,900.0	6,816.7	6,916.3	6,817.2	15.8	17.1	89.91	-455.0	-147.7	462.7	431.3	31.40	14.736	
6,950.0	6,850.6	6,966.2	6,851.1	15.9	17.1	89.91	-455.0	-111.0	462.7	431.0	31.72	14.587	
7,000.0	6,882.1	7,016.2	6,882.5	16.2	17.0	89.90	-455.0	-72.2	462.7	430.5	32.17	14.384	
7,050.0	6,911.0	7,066.1	6,911.3	16.5	17.1	89.90	-455.0	-31.4	462.7	429.9	32.76	14.125	
7,100.0	6,937.2	7,116.1	6,937.4	16.9	17.1	89.89	-455.0	11.2	462.7	429.2	33.51	13.809	
7,150.0	6,960.5	7,166.0	6,960.7	17.4	17.3	89.89	-455.0	55.3	462.7	428.3	34.42	13.443	
7,200.0	6,980.9	7,216.0	6,981.0	17.9	17.6	89.88	-455.0	100.9	462.7	427.2	35.50	13.033	
7,250.0	6,998.2	7,265.9	6,998.3	18.5	18.2	89.88	-455.0	147.8	462.7	425.9	36.75	12.591	
7,300.0	7,012.4	7,315.8	7,012.5	19.3	18.9	89.88	-455.0	195.6	462.7	424.5	38.15	12.127	
7,350.0	7,023.5	7,365.8	7,023.6	20.0	19.7	89.88	-455.0	244.3	462.7	423.0	39.70	11.654	
7,400.0	7,031.4	7,415.7	7,031.4	20.9	20.5	89.88	-455.0	293.6	462.7	421.3	41.37	11.183	
7,450.0	7,036.0	7,465.6	7,036.0	21.8	21.4	89.88	-455.0	343.4	462.7	419.5	43.16	10.721	
7,501.9	7,037.3	7,517.5	7,037.3	22.7	22.4	89.88	-455.0	395.2	462.7	417.6	45.10	10.260	
7,600.0	7,036.5	7,615.6	7,036.5	24.7	24.4	89.88	-455.0	493.3	462.7	413.7	49.02	9.439	
7,700.0	7,035.7	7,715.6	7,035.7	26.8	26.6	89.88	-455.0	593.3	462.7	409.4	53.30	8.681	
7,800.0	7,034.9	7,815.6	7,034.9	29.1	28.8	89.88	-455.0	693.2	462.7	404.9	57.81	8.004	
7,900.0	7,034.1	7,915.6	7,034.1	31.4	31.2	89.88	-455.0	793.2	462.7	400.2	62.49	7.404	
8,000.0	7,033.3	8,015.6	7,033.3	33.8	33.6	89.88	-455.0	893.2	462.7	395.4	67.32	6.873	
8,100.0	7,032.4	8,115.6	7,032.4	36.3	36.1	89.88	-455.0	993.2	462.7	390.4	72.26	6.403	
8,200.0	7,031.6	8,215.6	7,031.6	38.8	38.6	89.88	-455.0	1,093.2	462.7	385.4	77.29	5.986	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-202 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,300.0	7,030.8	8,315.6	7,030.8	41.4	41.1	89.88	-455.0	1,193.2	462.7	380.3	82.40	5.615	
8,400.0	7,030.0	8,415.6	7,030.0	44.0	43.7	89.88	-455.0	1,293.2	462.7	375.1	87.57	5.284	
8,500.0	7,029.2	8,515.6	7,029.2	46.6	46.3	89.88	-455.0	1,393.2	462.7	369.9	92.79	4.987	
8,600.0	7,028.3	8,615.6	7,028.3	49.2	49.0	89.88	-455.0	1,493.2	462.7	364.6	98.05	4.719	
8,700.0	7,027.5	8,715.6	7,027.5	51.8	51.6	89.88	-455.0	1,593.2	462.7	359.3	103.35	4.477	
8,800.0	7,026.7	8,815.6	7,026.7	54.5	54.3	89.88	-455.0	1,693.2	462.7	354.0	108.68	4.257	
8,900.0	7,025.9	8,915.6	7,025.9	57.2	57.0	89.88	-455.0	1,793.2	462.7	348.6	114.04	4.057	
9,000.0	7,025.1	9,015.6	7,025.1	59.9	59.6	89.88	-455.0	1,893.2	462.7	343.3	119.42	3.875	
9,100.0	7,024.2	9,115.6	7,024.2	62.6	62.3	89.88	-455.0	1,993.2	462.7	337.9	124.82	3.707	
9,200.0	7,023.4	9,215.6	7,023.4	65.3	65.0	89.88	-455.0	2,093.2	462.7	332.4	130.24	3.553	
9,300.0	7,022.6	9,315.6	7,022.6	68.0	67.8	89.88	-455.0	2,193.2	462.7	327.0	135.67	3.410	
9,400.0	7,021.8	9,415.6	7,021.8	70.7	70.5	89.88	-455.0	2,293.2	462.7	321.6	141.12	3.279	
9,500.0	7,020.9	9,515.6	7,021.0	73.4	73.2	89.88	-455.0	2,393.2	462.7	316.1	146.58	3.157	
9,600.0	7,020.1	9,615.6	7,020.1	76.2	75.9	89.88	-455.0	2,493.2	462.7	310.6	152.05	3.043	
9,700.0	7,019.3	9,715.6	7,019.3	78.9	78.7	89.88	-455.0	2,593.2	462.7	305.2	157.53	2.937	
9,800.0	7,018.5	9,815.6	7,018.5	81.7	81.4	89.88	-455.0	2,693.2	462.7	299.7	163.02	2.838	
9,900.0	7,017.7	9,915.6	7,017.7	84.4	84.2	89.88	-455.0	2,793.2	462.7	294.2	168.51	2.746	
10,000.0	7,016.8	10,015.6	7,016.8	87.2	86.9	89.88	-455.0	2,893.2	462.7	288.7	174.02	2.659	
10,100.0	7,016.0	10,115.6	7,016.0	89.9	89.7	89.88	-455.0	2,993.2	462.7	283.2	179.53	2.577	
10,200.0	7,015.2	10,215.6	7,015.2	92.7	92.4	89.88	-455.0	3,093.2	462.7	277.6	185.05	2.500	
10,300.0	7,014.4	10,315.6	7,014.4	95.4	95.2	89.88	-455.0	3,193.2	462.7	272.1	190.57	2.428	
10,400.0	7,013.6	10,415.6	7,013.6	98.2	98.0	89.88	-455.0	3,293.2	462.7	266.6	196.10	2.359	
10,500.0	7,012.7	10,515.6	7,012.7	101.0	100.7	89.88	-455.0	3,393.2	462.7	261.1	201.63	2.295	
10,600.0	7,011.9	10,615.6	7,011.9	103.7	103.5	89.88	-455.0	3,493.2	462.7	255.5	207.16	2.233	
10,700.0	7,011.1	10,715.6	7,011.1	106.5	106.3	89.88	-455.0	3,593.2	462.7	250.0	212.70	2.175	
10,800.0	7,010.3	10,815.6	7,010.3	109.3	109.0	89.88	-455.0	3,693.1	462.7	244.4	218.25	2.120	
10,900.0	7,009.5	10,915.6	7,009.5	112.0	111.8	89.88	-455.0	3,793.1	462.7	238.9	223.79	2.067	
11,000.0	7,008.6	11,015.6	7,008.6	114.8	114.6	89.88	-455.0	3,893.1	462.7	233.3	229.34	2.017	
11,100.0	7,007.8	11,115.6	7,007.8	117.6	117.4	89.88	-455.0	3,993.1	462.7	227.8	234.90	1.970	
11,200.0	7,007.0	11,215.6	7,007.0	120.4	120.1	89.88	-455.0	4,093.1	462.7	222.2	240.45	1.924	
11,300.0	7,006.2	11,315.6	7,006.2	123.2	122.8	89.88	-455.0	4,193.1	462.7	216.8	245.85	1.882	
11,322.5	7,006.0	11,338.0	7,006.0	123.8	123.2	89.88	-455.0	4,215.6	462.7	215.8	246.88	1.874 SF	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-312 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-180.00	-18.2	0.0	18.2	18.2	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-180.00	-18.2	0.0	18.2	18.0	0.23	80.236	
200.0	200.0	201.0	201.0	0.3	0.3	-180.00	-18.2	0.0	18.2	17.5	0.68	26.924	
300.0	300.0	301.0	301.0	0.6	0.6	-180.00	-18.2	0.0	18.2	17.1	1.13	16.176	
400.0	400.0	401.0	401.0	0.8	0.8	-180.00	-18.2	0.0	18.2	16.6	1.58	11.561	
500.0	500.0	501.0	501.0	1.0	1.0	-180.00	-18.2	0.0	18.2	16.2	2.03	8.995	
600.0	600.0	601.0	601.0	1.2	1.2	-180.00	-18.2	0.0	18.2	15.7	2.47	7.361	
700.0	700.0	701.0	701.0	1.5	1.5	-180.00	-18.2	0.0	18.2	15.3	2.92	6.229	
800.0	800.0	801.0	801.0	1.7	1.7	-180.00	-18.2	0.0	18.2	14.8	3.37	5.399	
900.0	900.0	901.0	901.0	1.9	1.9	-180.00	-18.2	0.0	18.2	14.4	3.82	4.764	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-180.00	-18.2	0.0	18.2	13.9	4.27	4.263	
1,100.0	1,100.0	1,101.0	1,101.0	2.4	2.4	-180.00	-18.2	0.0	18.2	13.5	4.72	3.857	
1,200.0	1,200.0	1,201.0	1,201.0	2.6	2.6	-180.00	-18.2	0.0	18.2	13.0	5.17	3.522	
1,300.0	1,300.0	1,301.0	1,301.0	2.8	2.8	-180.00	-18.2	0.0	18.2	12.6	5.62	3.240	
1,366.3	1,366.3	1,367.3	1,367.3	3.0	3.0	-180.00	-18.2	0.0	18.2	12.3	5.92	3.077 CC	
1,400.0	1,400.0	1,401.0	1,401.0	3.0	3.0	-180.00	-18.2	0.0	18.2	12.1	6.07	3.001	
1,500.0	1,500.0	1,500.8	1,500.7	3.3	3.2	-176.46	-18.8	-1.2	18.9	12.4	6.50	2.907	
1,600.0	1,600.0	1,600.4	1,600.3	3.5	3.4	-167.44	-20.7	-4.6	21.2	14.3	6.91	3.075	
1,700.0	1,700.0	1,699.7	1,699.4	3.7	3.6	-156.57	-23.8	-10.3	26.0	18.7	7.33	3.550	
1,800.0	1,800.0	1,798.6	1,797.9	3.9	3.8	-147.01	-28.1	-18.3	33.7	25.9	7.76	4.342	
1,900.0	1,900.0	1,897.0	1,895.6	4.2	4.1	-139.84	-33.6	-28.4	44.3	36.1	8.20	5.403	
2,000.0	2,000.0	1,996.0	1,993.7	4.4	4.3	-134.96	-40.0	-40.0	57.0	48.3	8.67	6.576	
2,100.0	2,100.0	2,095.1	2,092.0	4.6	4.6	-43.43	-46.3	-51.7	69.4	60.4	9.03	7.687	
2,200.0	2,200.0	2,194.5	2,190.4	4.8	4.8	-42.36	-52.7	-63.4	80.5	71.1	9.43	8.539	
2,300.0	2,299.9	2,294.0	2,289.0	5.0	5.1	-42.28	-59.1	-75.2	90.4	80.6	9.85	9.183	
2,400.0	2,399.7	2,393.6	2,387.7	5.2	5.4	-42.89	-65.4	-86.9	99.1	88.8	10.27	9.644	
2,500.0	2,499.4	2,493.3	2,486.5	5.4	5.7	-44.05	-71.8	-98.7	106.4	95.7	10.71	9.943	
2,600.0	2,598.9	2,593.1	2,585.4	5.7	6.0	-45.69	-78.2	-110.5	112.6	101.5	11.15	10.101	
2,700.0	2,698.3	2,692.9	2,684.3	5.9	6.3	-47.79	-84.6	-122.3	117.7	106.1	11.61	10.139	
2,722.9	2,721.0	2,715.7	2,706.9	5.9	6.3	-48.33	-86.1	-124.9	118.8	107.0	11.72	10.133	
2,800.0	2,797.5	2,792.6	2,783.1	6.1	6.6	-50.17	-91.0	-134.0	122.2	110.1	12.10	10.101	
2,900.0	2,896.7	2,892.4	2,882.0	6.4	6.9	-52.40	-97.4	-145.8	126.8	114.2	12.60	10.067	
3,000.0	2,995.9	2,992.2	2,980.9	6.7	7.2	-54.47	-103.8	-157.6	131.7	118.5	13.11	10.039	
3,100.0	3,095.1	3,092.0	3,079.7	6.9	7.5	-56.40	-110.2	-169.3	136.6	123.0	13.64	10.016	
3,200.0	3,194.3	3,191.7	3,178.6	7.2	7.8	-58.19	-116.6	-181.1	141.8	127.6	14.18	9.996	
3,300.0	3,293.5	3,291.5	3,277.5	7.5	8.2	-59.85	-123.0	-192.9	147.0	132.3	14.73	9.980	
3,400.0	3,392.7	3,391.3	3,376.4	7.8	8.5	-61.39	-129.4	-204.7	152.4	137.1	15.29	9.965	
3,500.0	3,491.9	3,491.1	3,475.2	8.0	8.8	-62.83	-135.8	-216.4	157.8	142.0	15.86	9.953	
3,600.0	3,591.1	3,590.8	3,574.1	8.3	9.1	-64.18	-142.2	-228.2	163.4	146.9	16.43	9.943	
3,700.0	3,690.3	3,690.6	3,673.0	8.6	9.5	-65.43	-148.6	-240.0	169.0	152.0	17.02	9.934	
3,800.0	3,789.5	3,790.4	3,771.8	8.9	9.8	-66.61	-155.0	-251.8	174.7	157.1	17.60	9.926	
3,900.0	3,888.7	3,890.2	3,870.7	9.2	10.1	-67.70	-161.4	-263.5	180.5	162.3	18.20	9.919	
4,000.0	3,987.9	3,989.9	3,969.6	9.5	10.5	-68.73	-167.8	-275.3	186.4	167.6	18.80	9.913	
4,100.0	4,087.1	4,089.7	4,068.5	9.8	10.8	-69.70	-174.2	-287.1	192.3	172.9	19.41	9.908	
4,200.0	4,186.3	4,189.5	4,167.3	10.1	11.1	-70.61	-180.6	-298.9	198.2	178.2	20.01	9.904	
4,300.0	4,285.5	4,289.3	4,266.2	10.4	11.4	-71.47	-186.9	-310.6	204.2	183.6	20.63	9.900	
4,400.0	4,384.8	4,389.0	4,365.1	10.7	11.8	-72.27	-193.3	-322.4	210.3	189.0	21.25	9.898	
4,500.0	4,484.0	4,488.8	4,463.9	11.0	12.1	-73.04	-199.7	-334.2	216.4	194.5	21.87	9.895	
4,600.0	4,583.2	4,588.6	4,562.8	11.3	12.4	-73.76	-206.1	-345.9	222.5	200.0	22.49	9.893	
4,700.0	4,682.4	4,691.2	4,664.5	11.6	12.8	-74.53	-212.5	-357.7	228.3	205.2	23.11	9.881	
4,800.0	4,781.6	4,796.9	4,769.7	12.0	13.0	-75.88	-217.5	-366.9	232.1	208.3	23.72	9.783	

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

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-312 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.0	4,880.8	4,902.4	4,875.0	12.3	13.2	-77.89	-220.6	-372.6	233.4	209.1	24.34	9.588	
5,000.0	4,980.0	5,007.4	4,980.0	12.6	13.4	-80.59	-221.9	-374.9	232.7	207.7	24.98	9.316	
5,100.0	5,079.2	5,107.6	5,080.2	12.9	13.6	-83.66	-221.9	-375.0	231.0	205.4	25.61	9.019	
5,160.8	5,139.5	5,168.0	5,140.5	13.1	13.7	-85.54	-221.9	-375.0	230.3	204.3	25.99	8.859	
5,200.0	5,178.4	5,206.9	5,179.4	13.2	13.7	-86.68	-221.9	-375.0	230.0	203.7	26.22	8.772	
5,300.0	5,278.0	5,306.4	5,279.0	13.4	13.9	-89.03	-221.9	-375.0	229.6	202.9	26.70	8.598	
5,357.9	5,335.7	5,364.2	5,336.7	13.5	14.0	-90.00	-221.9	-375.0	229.6	202.6	26.96	8.516	
5,400.0	5,377.8	5,406.2	5,378.8	13.6	14.1	-90.53	-221.9	-375.0	229.6	202.4	27.13	8.461	
5,500.0	5,477.7	5,506.2	5,478.8	13.8	14.2	-91.15	-221.9	-375.0	229.6	202.1	27.51	8.347	
5,522.3	5,500.0	5,528.4	5,501.0	13.8	14.3	-180.00	-221.9	-375.0	229.6	205.0	24.58	9.341	
5,600.0	5,577.7	5,606.2	5,578.8	14.0	14.4	-180.00	-221.9	-375.0	229.6	204.7	24.88	9.227	
5,700.0	5,677.7	5,706.2	5,678.8	14.1	14.6	-180.00	-221.9	-375.0	229.6	204.3	25.29	9.080	
5,800.0	5,777.7	5,806.2	5,778.8	14.3	14.7	-180.00	-221.9	-375.0	229.6	203.9	25.69	8.938	
5,900.0	5,877.7	5,906.2	5,878.8	14.5	14.9	-180.00	-221.9	-375.0	229.6	203.5	26.09	8.799	
6,000.0	5,977.7	6,006.2	5,978.8	14.7	15.1	-180.00	-221.9	-375.0	229.6	203.1	26.50	8.664	
6,100.0	6,077.7	6,106.2	6,078.8	14.9	15.3	-180.00	-221.9	-375.0	229.6	202.7	26.91	8.533	
6,200.0	6,177.7	6,206.2	6,178.8	15.1	15.5	-180.00	-221.9	-375.0	229.6	202.3	27.32	8.405	
6,295.7	6,273.4	6,301.9	6,274.4	15.3	15.6	-180.00	-221.9	-375.0	229.6	201.9	27.71	8.286	
6,297.6	6,275.4	6,303.8	6,276.4	15.3	15.6	90.00	-221.9	-375.0	229.6	199.1	30.47	7.535	
6,300.0	6,277.7	6,306.2	6,278.8	15.3	15.6	90.00	-221.9	-375.0	229.6	199.1	30.48	7.533	
6,308.0	6,285.7	6,314.2	6,286.7	15.3	15.7	90.02	-221.9	-375.0	229.6	199.1	30.51	7.527	
6,350.0	6,327.7	6,356.1	6,328.7	15.4	15.7	90.48	-221.9	-375.0	229.6	199.0	30.63	7.496	
6,400.0	6,377.4	6,406.2	6,378.7	15.4	15.8	91.54	-221.9	-374.1	229.7	199.0	30.73	7.474	
6,450.0	6,426.7	6,456.5	6,428.9	15.5	15.9	92.62	-221.9	-369.9	229.9	199.1	30.79	7.465	
6,500.0	6,475.3	6,507.2	6,479.0	15.5	15.9	93.69	-221.9	-362.4	230.1	199.3	30.82	7.467	
6,550.0	6,523.1	6,558.1	6,528.8	15.5	15.9	94.74	-221.9	-351.6	230.4	199.6	30.81	7.478	
6,600.0	6,569.8	6,609.4	6,578.0	15.5	15.9	95.77	-221.9	-337.3	230.8	200.0	30.78	7.498	
6,650.0	6,615.2	6,660.9	6,626.4	15.5	15.9	96.78	-221.9	-319.7	231.2	200.5	30.74	7.522	
6,700.0	6,659.1	6,712.8	6,673.8	15.5	15.9	97.76	-221.9	-298.7	231.7	201.1	30.70	7.549	
6,750.0	6,701.4	6,764.9	6,719.9	15.5	15.9	98.70	-221.9	-274.4	232.3	201.6	30.67	7.575	
6,800.0	6,741.9	6,817.3	6,764.5	15.6	15.9	99.61	-221.9	-246.9	232.9	202.2	30.67	7.595	
6,850.0	6,780.4	6,870.0	6,807.3	15.7	15.9	100.46	-221.9	-216.2	233.5	202.8	30.71	7.603	
6,900.0	6,816.7	6,922.9	6,848.1	15.8	16.0	101.27	-221.9	-182.5	234.1	203.3	30.83	7.594	
6,950.0	6,850.6	6,976.1	6,886.7	15.9	16.0	102.03	-221.9	-145.8	234.8	203.7	31.05	7.562	
7,000.0	6,882.1	7,029.6	6,922.7	16.2	16.1	102.73	-221.9	-106.4	235.4	204.0	31.38	7.502	
7,050.0	6,911.0	7,083.3	6,956.0	16.5	16.3	103.38	-221.9	-64.3	236.0	204.2	31.85	7.410	
7,100.0	6,937.2	7,137.2	6,986.5	16.9	16.6	103.96	-221.9	-19.9	236.6	204.1	32.48	7.285	
7,150.0	6,960.5	7,191.2	7,013.8	17.4	17.0	104.48	-221.9	26.8	237.2	203.9	33.28	7.127	
7,200.0	6,980.9	7,245.5	7,037.7	17.9	17.5	104.93	-221.9	75.5	237.6	203.4	34.25	6.938	
7,250.0	6,998.2	7,299.9	7,058.3	18.5	18.2	105.32	-221.9	125.8	238.1	202.7	35.40	6.724	
7,300.0	7,012.4	7,354.4	7,075.2	19.3	18.9	105.64	-221.9	177.6	238.4	201.7	36.74	6.490	
7,350.0	7,023.5	7,409.0	7,088.4	20.0	19.7	105.88	-221.9	230.6	238.7	200.5	38.24	6.243	
7,400.0	7,031.4	7,463.7	7,097.9	20.9	20.6	106.06	-221.9	284.5	238.9	199.0	39.88	5.991	
7,450.0	7,036.0	7,518.5	7,103.4	21.8	21.6	106.16	-221.9	338.9	239.0	197.4	41.65	5.739	
7,501.9	7,037.3	7,575.3	7,105.0	22.7	22.7	106.19	-221.9	395.8	239.1	195.5	43.60	5.483	
7,600.0	7,036.5	7,673.4	7,104.2	24.7	24.6	106.18	-221.9	493.8	239.1	191.7	47.39	5.045	
7,700.0	7,035.7	7,773.4	7,103.3	26.8	26.8	106.18	-221.9	593.8	239.1	187.6	51.51	4.641	
7,800.0	7,034.9	7,873.4	7,102.5	29.1	29.0	106.18	-221.9	693.8	239.1	183.2	55.86	4.280	
7,900.0	7,034.1	7,973.4	7,101.7	31.4	31.4	106.17	-221.9	793.8	239.1	178.7	60.37	3.959	
8,000.0	7,033.3	8,073.4	7,100.8	33.8	33.8	106.17	-221.9	893.8	239.0	174.0	65.03	3.676	

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Offset Design High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W - High Pointe LLC 10F-312 - Wellbore #1 - Plan #1

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

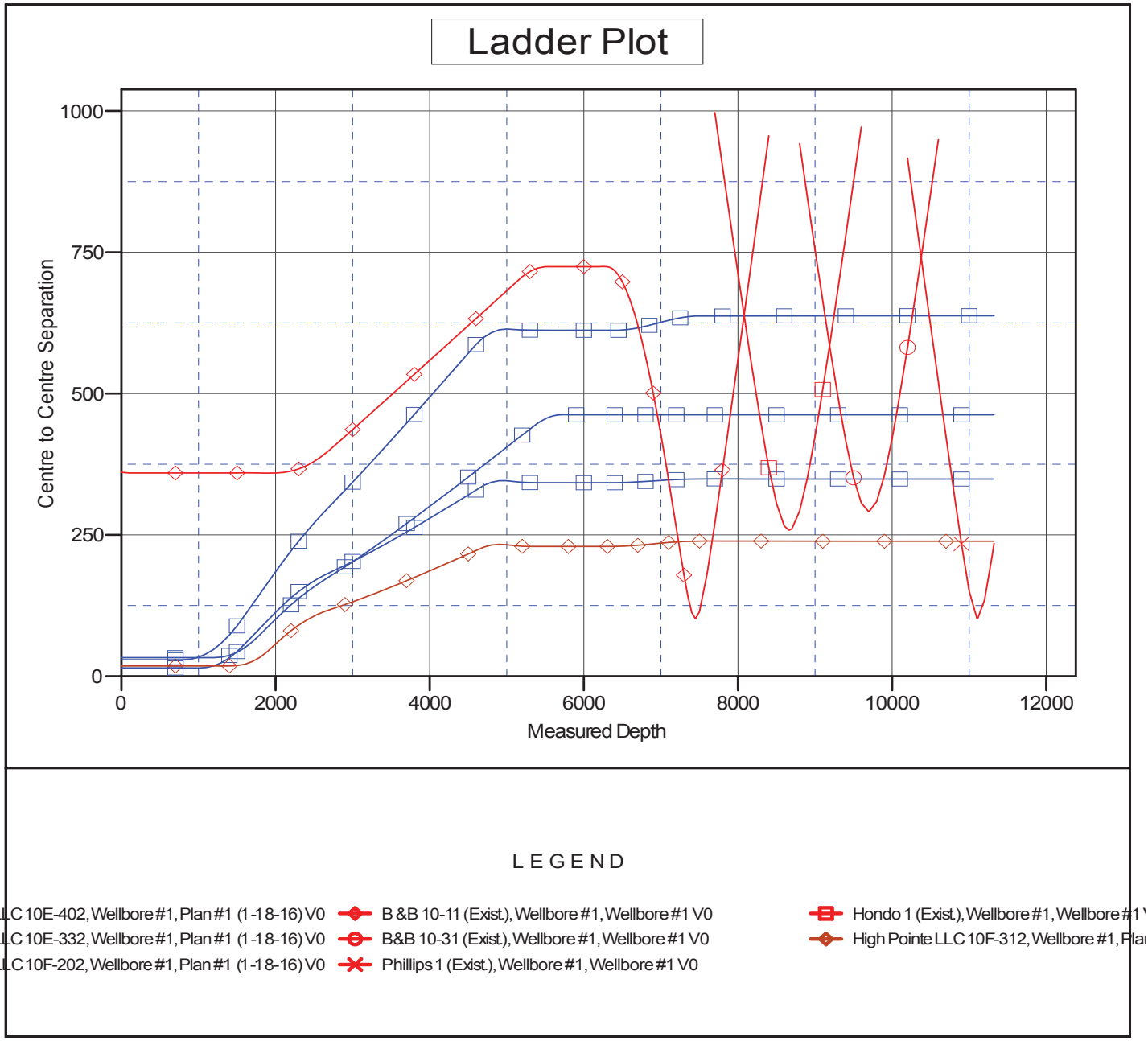
Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,100.0	7,032.4	8,173.4	7,100.0	36.3	36.2	106.17	-221.9	993.8	239.0	169.2	69.79	3.425	
8,200.0	7,031.6	8,273.4	7,099.2	38.8	38.8	106.16	-221.9	1,093.8	239.0	164.4	74.64	3.203	
8,300.0	7,030.8	8,373.4	7,098.3	41.4	41.3	106.16	-221.9	1,193.8	239.0	159.5	79.56	3.004	
8,400.0	7,030.0	8,473.4	7,097.5	44.0	43.9	106.15	-221.9	1,293.8	239.0	154.5	84.54	2.827	
8,500.0	7,029.2	8,573.4	7,096.6	46.6	46.5	106.15	-221.9	1,393.8	239.0	149.4	89.57	2.668	
8,600.0	7,028.3	8,673.4	7,095.8	49.2	49.1	106.15	-221.9	1,493.8	239.0	144.4	94.65	2.525	
8,700.0	7,027.5	8,773.4	7,095.0	51.8	51.8	106.14	-221.9	1,593.8	239.0	139.2	99.76	2.396	
8,800.0	7,026.7	8,873.4	7,094.1	54.5	54.4	106.14	-221.9	1,693.8	239.0	134.1	104.89	2.278	
8,900.0	7,025.9	8,973.4	7,093.3	57.2	57.1	106.13	-221.9	1,793.8	239.0	128.9	110.06	2.171	
9,000.0	7,025.1	9,073.4	7,092.5	59.9	59.8	106.13	-221.9	1,893.8	239.0	123.7	115.25	2.074	
9,100.0	7,024.2	9,173.4	7,091.6	62.6	62.5	106.13	-221.9	1,993.8	239.0	118.5	120.45	1.984	
9,200.0	7,023.4	9,273.4	7,090.8	65.3	65.2	106.12	-221.9	2,093.8	239.0	113.3	125.68	1.901	
9,300.0	7,022.6	9,373.4	7,089.9	68.0	67.9	106.12	-221.9	2,193.8	239.0	108.0	130.92	1.825	
9,400.0	7,021.8	9,473.4	7,089.1	70.7	70.7	106.11	-221.9	2,293.8	238.9	102.8	136.17	1.755	
9,500.0	7,020.9	9,573.4	7,088.3	73.4	73.4	106.11	-221.9	2,393.8	238.9	97.5	141.44	1.689	
9,600.0	7,020.1	9,673.4	7,087.4	76.2	76.1	106.11	-221.9	2,493.8	238.9	92.2	146.71	1.629	
9,700.0	7,019.3	9,773.4	7,086.6	78.9	78.9	106.10	-221.9	2,593.8	238.9	86.9	152.00	1.572	
9,800.0	7,018.5	9,873.4	7,085.8	81.7	81.6	106.10	-221.9	2,693.8	238.9	81.6	157.29	1.519	
9,900.0	7,017.7	9,973.4	7,084.9	84.4	84.4	106.10	-221.9	2,793.7	238.9	76.3	162.59	1.469	Level 3
10,000.0	7,016.8	10,073.4	7,084.1	87.2	87.1	106.09	-221.9	2,893.7	238.9	71.0	167.90	1.423	Level 3
10,100.0	7,016.0	10,173.4	7,083.2	89.9	89.9	106.09	-221.9	2,993.7	238.9	65.7	173.22	1.379	Level 3
10,200.0	7,015.2	10,273.4	7,082.4	92.7	92.6	106.08	-221.9	3,093.7	238.9	60.4	178.54	1.338	Level 3
10,300.0	7,014.4	10,373.4	7,081.6	95.4	95.4	106.08	-221.9	3,193.7	238.9	55.0	183.87	1.299	Level 3
10,400.0	7,013.6	10,473.4	7,080.7	98.2	98.1	106.08	-221.9	3,293.7	238.9	49.7	189.20	1.263	Level 3
10,500.0	7,012.7	10,573.4	7,079.9	101.0	100.9	106.07	-221.9	3,393.7	238.9	44.3	194.54	1.228	Level 2
10,600.0	7,011.9	10,673.4	7,079.0	103.7	103.7	106.07	-221.9	3,493.7	238.9	39.0	199.88	1.195	Level 2
10,700.0	7,011.1	10,773.4	7,078.2	106.5	106.4	106.06	-221.9	3,593.7	238.9	33.6	205.22	1.164	Level 2
10,800.0	7,010.3	10,873.4	7,077.4	109.3	109.2	106.06	-221.9	3,693.7	238.9	28.3	210.57	1.134	Level 2
10,900.0	7,009.5	10,973.4	7,076.5	112.0	112.0	106.06	-221.9	3,793.7	238.8	22.9	215.92	1.106	Level 2
11,000.0	7,008.6	11,073.4	7,075.7	114.8	114.8	106.05	-221.9	3,893.7	238.8	17.6	221.28	1.079	Level 2
11,100.0	7,007.8	11,173.4	7,074.9	117.6	117.5	106.05	-221.9	3,993.7	238.8	12.2	226.63	1.054	Level 2
11,200.0	7,007.0	11,273.4	7,074.0	120.4	120.3	106.05	-221.9	4,093.7	238.8	6.8	232.00	1.029	Level 2
11,300.0	7,006.2	11,373.4	7,073.2	123.2	123.1	106.04	-221.9	4,193.7	238.8	1.5	237.36	1.006	Level 2
11,322.5	7,006.0	11,395.9	7,073.0	123.8	123.7	106.04	-221.9	4,216.2	238.8	0.3	238.56	1.001	Level 2, ES, SF

Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4936.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: High Pointe LLC 10F-212
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.40°



Company:	PETROLEUM DEVELOPMENT CORP DJ Basin	**Local Co-ordinate Reference:**	Well High Pointe LLC 10F-212
Project:	SEC.10-T5N-R67W	**TVD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Reference Site:	High Pointe LLC 5N67W10A Pad Sec.10-T5N-R67W	**MD Reference:**	WELL @ 4936.0ft (Original Well Elev)
Site Error:	0.0 ft	**North Reference:**	True
Reference Well:	High Pointe LLC 10F-212	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0 ft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	US_EDM
Reference Design:	Plan #1 (1-18-16)	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 4936.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: High Pointe LLC 10F-212
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.40°