

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Loloff Farms 26I-402**

Surface Location: Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4677.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1376854.96	3271628.73	40.363770	-104.525210	

Original Well Elev WELL @ 4692.0ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 236'FSL & 320'FWL, Sec.26	1.0	0.0	0.0	Point
BHL 75'FSL & 2144'FWL, Sec.25	6750.0	-152.0	7106.2	Point

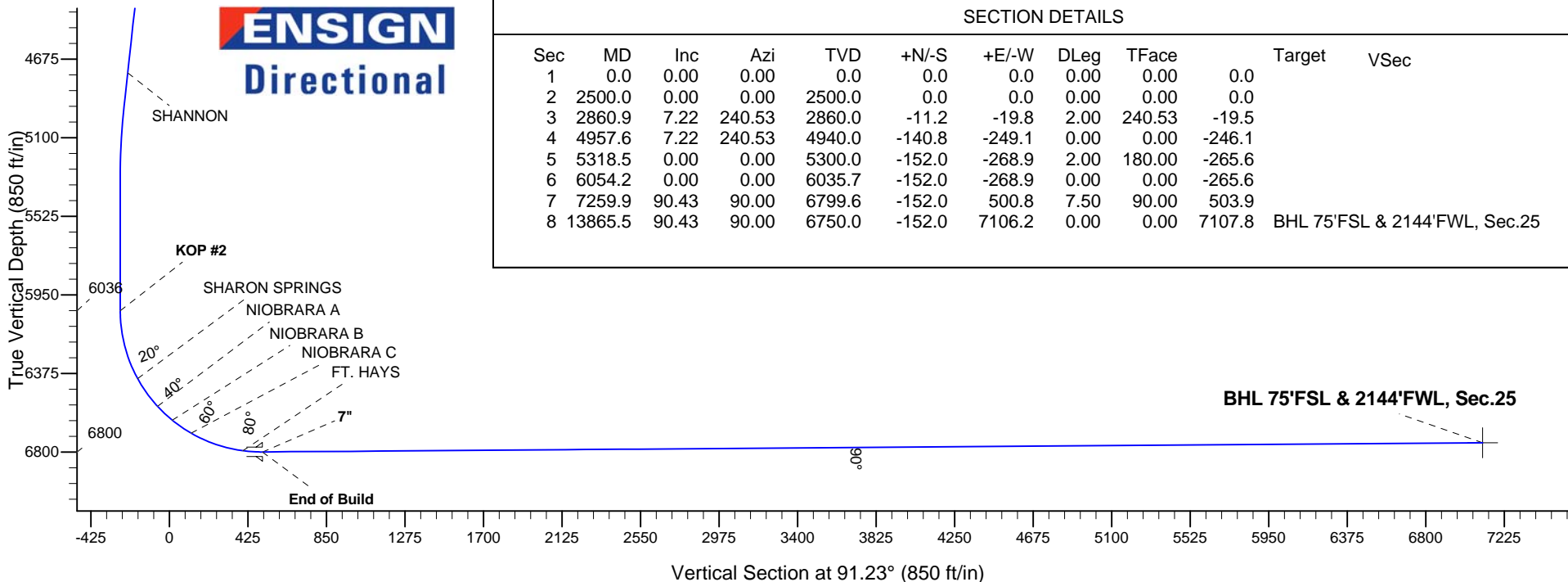
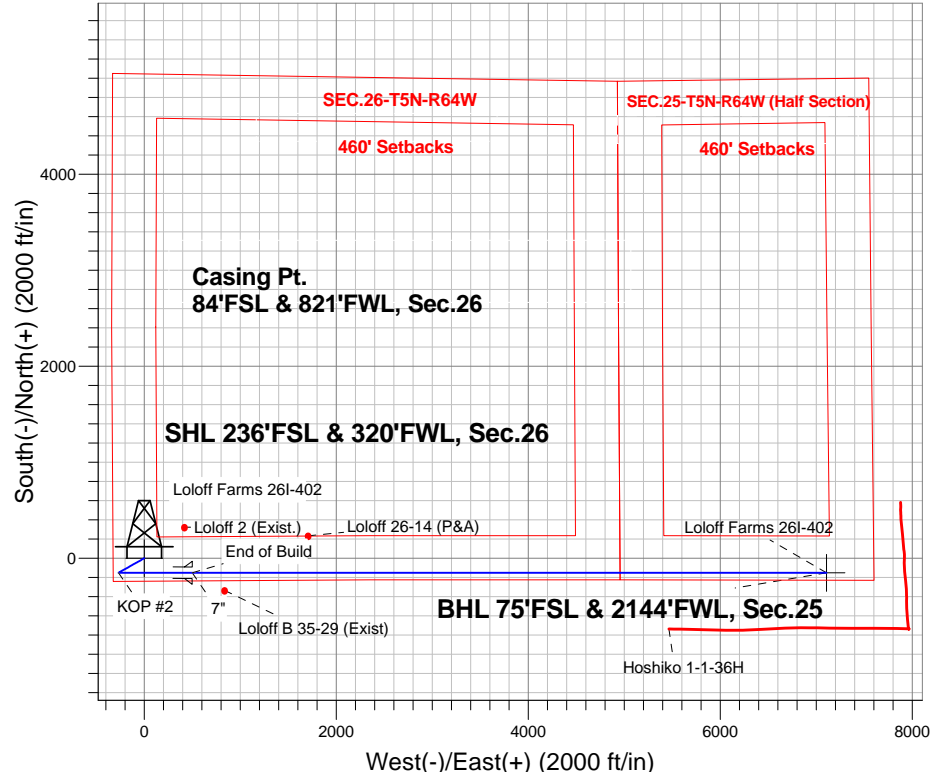


Azimuths to True North
 Magnetic North: 8.31°
 Magnetic Field
 Strength: 52805.3snT
 Dip Angle: 66.95°
 Date: 8/13/2014
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
2500.0	2500.0	KOP #1
6035.7	6054.2	KOP #2
6799.6	7259.9	End of Build

Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W
 Loloff Farms 26I-402
 Plan #1 (8-13-14)
 13:42, August 15 2014





PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.26-T5N-R64W

Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W

Loloff Farms 26I-402

Wellbore #1

Plan: Plan #1 (8-13-14)

Standard Planning Report

15 August, 2014

Database:	Landmark	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (8-13-14)		

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

Site						Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W											
Site Position:						Northing:			1,376,850.35 ft			Latitude:			40.363760		
From:			Lat/Long			Easting:			3,271,539.60 ft			Longitude:			-104.525530		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.63 °		

Well	Loloff Farms 26I-402					
Well Position	+N/-S	3.6 ft	Northing:	1,376,854.96 ft	Latitude:	40.363770
	+E/-W	89.2 ft	Easting:	3,271,628.73 ft	Longitude:	-104.525210
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,677.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/13/2014	8.31	66.95	52,805

Design	Plan #1 (8-13-14)			
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	91.23

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,860.9	7.22	240.53	2,860.0	-11.2	-19.8	2.00	2.00	0.00	240.53	
4,957.6	7.22	240.53	4,940.0	-140.8	-249.1	0.00	0.00	0.00	0.00	
5,318.5	0.00	0.00	5,300.0	-152.0	-268.9	2.00	-2.00	0.00	180.00	
6,054.2	0.00	0.00	6,035.7	-152.0	-268.9	0.00	0.00	0.00	0.00	
7,259.9	90.43	90.00	6,799.6	-152.0	500.8	7.50	7.50	0.00	90.00	
13,865.5	90.43	90.00	6,750.0	-152.0	7,106.2	0.00	0.00	0.00	0.00	BHL 75'FSL & 2144

Database:	Landmark	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (8-13-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 236'FSL & 320'FWL, Sec.26									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
2,600.0	2.00	240.53	2,600.0	-0.9	-1.5	-1.5	2.00	2.00	0.00
2,700.0	4.00	240.53	2,699.8	-3.4	-6.1	-6.0	2.00	2.00	0.00
2,800.0	6.00	240.53	2,799.5	-7.7	-13.7	-13.5	2.00	2.00	0.00
2,860.9	7.22	240.53	2,860.0	-11.2	-19.8	-19.5	2.00	2.00	0.00
2,900.0	7.22	240.53	2,898.7	-13.6	-24.0	-23.7	0.00	0.00	0.00
3,000.0	7.22	240.53	2,997.9	-19.8	-35.0	-34.6	0.00	0.00	0.00
3,100.0	7.22	240.53	3,097.2	-26.0	-45.9	-45.4	0.00	0.00	0.00
3,200.0	7.22	240.53	3,196.4	-32.1	-56.9	-56.2	0.00	0.00	0.00
3,300.0	7.22	240.53	3,295.6	-38.3	-67.8	-67.0	0.00	0.00	0.00
3,400.0	7.22	240.53	3,394.8	-44.5	-78.7	-77.8	0.00	0.00	0.00
3,500.0	7.22	240.53	3,494.0	-50.7	-89.7	-88.6	0.00	0.00	0.00
3,529.3	7.22	240.53	3,523.0	-52.5	-92.9	-91.7	0.00	0.00	0.00
PARKMAN									
3,600.0	7.22	240.53	3,593.2	-56.9	-100.6	-99.4	0.00	0.00	0.00
3,700.0	7.22	240.53	3,692.4	-63.1	-111.6	-110.2	0.00	0.00	0.00
3,800.0	7.22	240.53	3,791.6	-69.2	-122.5	-121.0	0.00	0.00	0.00
3,900.0	7.22	240.53	3,890.8	-75.4	-133.4	-131.8	0.00	0.00	0.00
4,000.0	7.22	240.53	3,990.0	-81.6	-144.4	-142.6	0.00	0.00	0.00
4,100.0	7.22	240.53	4,089.2	-87.8	-155.3	-153.4	0.00	0.00	0.00
4,177.4	7.22	240.53	4,166.0	-92.6	-163.8	-161.8	0.00	0.00	0.00
SUSSEX									
4,200.0	7.22	240.53	4,188.4	-94.0	-166.3	-164.2	0.00	0.00	0.00
4,300.0	7.22	240.53	4,287.6	-100.1	-177.2	-175.0	0.00	0.00	0.00

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Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (8-13-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,400.0	7.22	240.53	4,386.8	-106.3	-188.1	-185.8	0.00	0.00	0.00
4,500.0	7.22	240.53	4,486.1	-112.5	-199.1	-196.6	0.00	0.00	0.00
4,600.0	7.22	240.53	4,585.3	-118.7	-210.0	-207.4	0.00	0.00	0.00
4,700.0	7.22	240.53	4,684.5	-124.9	-221.0	-218.2	0.00	0.00	0.00
4,766.1	7.22	240.53	4,750.0	-129.0	-228.2	-225.4	0.00	0.00	0.00
SHANNON									
4,800.0	7.22	240.53	4,783.7	-131.1	-231.9	-229.0	0.00	0.00	0.00
4,900.0	7.22	240.53	4,882.9	-137.2	-242.8	-239.8	0.00	0.00	0.00
4,957.6	7.22	240.53	4,940.0	-140.8	-249.1	-246.1	0.00	0.00	0.00
5,000.0	6.37	240.53	4,982.1	-143.3	-253.5	-250.4	2.00	-2.00	0.00
5,100.0	4.37	240.53	5,081.7	-147.9	-261.6	-258.4	2.00	-2.00	0.00
5,200.0	2.37	240.53	5,181.5	-150.8	-266.8	-263.5	2.00	-2.00	0.00
5,300.0	0.37	240.53	5,281.5	-152.0	-268.8	-265.5	2.00	-2.00	0.00
5,318.5	0.00	0.00	5,300.0	-152.0	-268.9	-265.6	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,381.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,481.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,581.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,681.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,781.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,881.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,981.5	-152.0	-268.9	-265.6	0.00	0.00	0.00
6,054.2	0.00	0.00	6,035.7	-152.0	-268.9	-265.6	0.00	0.00	0.00
KOP #2									
6,100.0	3.44	90.00	6,081.4	-152.0	-267.5	-264.2	7.50	7.50	0.00
6,200.0	10.94	90.00	6,180.6	-152.0	-255.0	-251.7	7.50	7.50	0.00
6,300.0	18.44	90.00	6,277.3	-152.0	-229.7	-226.4	7.50	7.50	0.00
6,400.0	25.94	90.00	6,369.8	-152.0	-192.0	-188.7	7.50	7.50	0.00
6,437.4	28.74	90.00	6,403.0	-152.0	-174.8	-171.5	7.50	7.50	0.00
SHARON SPRINGS									
6,500.0	33.44	90.00	6,456.6	-152.0	-142.5	-139.2	7.50	7.50	0.00
6,600.0	40.94	90.00	6,536.2	-152.0	-82.1	-78.8	7.50	7.50	0.00
6,622.5	42.63	90.00	6,553.0	-152.0	-67.1	-63.8	7.50	7.50	0.00
NIORARA A									
6,700.0	48.44	90.00	6,607.3	-152.0	-11.8	-8.5	7.50	7.50	0.00
6,732.0	50.84	90.00	6,628.0	-152.0	12.6	15.9	7.50	7.50	0.00
NIORARA B									
6,800.0	55.94	90.00	6,668.5	-152.0	67.2	70.4	7.50	7.50	0.00
6,855.7	60.11	90.00	6,698.0	-152.0	114.4	117.6	7.50	7.50	0.00
NIORARA C									
6,900.0	63.44	90.00	6,719.0	-152.0	153.4	156.6	7.50	7.50	0.00
7,000.0	70.94	90.00	6,757.7	-152.0	245.5	248.7	7.50	7.50	0.00
7,100.0	78.44	90.00	6,784.1	-152.0	341.9	345.1	7.50	7.50	0.00
7,153.7	82.47	90.00	6,793.0	-152.0	394.9	398.0	7.50	7.50	0.00
FT. HAYS									
7,200.0	85.94	90.00	6,797.7	-152.0	440.9	444.1	7.50	7.50	0.00
7,259.9	90.43	90.00	6,799.6	-152.0	500.8	503.9	7.50	7.50	0.00
End of Build - 7"									
7,300.0	90.43	90.00	6,799.3	-152.0	540.9	544.0	0.00	0.00	0.00
7,400.0	90.43	90.00	6,798.5	-152.0	640.9	644.0	0.00	0.00	0.00
7,500.0	90.43	90.00	6,797.8	-152.0	740.9	743.9	0.00	0.00	0.00
7,600.0	90.43	90.00	6,797.0	-152.0	840.9	843.9	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
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Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (8-13-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,700.0	90.43	90.00	6,796.3	-152.0	940.9	943.9	0.00	0.00	0.00
7,800.0	90.43	90.00	6,795.5	-152.0	1,040.9	1,043.9	0.00	0.00	0.00
7,900.0	90.43	90.00	6,794.8	-152.0	1,140.8	1,143.8	0.00	0.00	0.00
8,000.0	90.43	90.00	6,794.0	-152.0	1,240.8	1,243.8	0.00	0.00	0.00
8,100.0	90.43	90.00	6,793.3	-152.0	1,340.8	1,343.8	0.00	0.00	0.00
8,200.0	90.43	90.00	6,792.5	-152.0	1,440.8	1,443.8	0.00	0.00	0.00
8,300.0	90.43	90.00	6,791.8	-152.0	1,540.8	1,543.7	0.00	0.00	0.00
8,400.0	90.43	90.00	6,791.0	-152.0	1,640.8	1,643.7	0.00	0.00	0.00
8,500.0	90.43	90.00	6,790.3	-152.0	1,740.8	1,743.7	0.00	0.00	0.00
8,600.0	90.43	90.00	6,789.5	-152.0	1,840.8	1,843.7	0.00	0.00	0.00
8,700.0	90.43	90.00	6,788.8	-152.0	1,940.8	1,943.6	0.00	0.00	0.00
8,800.0	90.43	90.00	6,788.0	-152.0	2,040.8	2,043.6	0.00	0.00	0.00
8,900.0	90.43	90.00	6,787.3	-152.0	2,140.8	2,143.6	0.00	0.00	0.00
9,000.0	90.43	90.00	6,786.5	-152.0	2,240.8	2,243.6	0.00	0.00	0.00
9,100.0	90.43	90.00	6,785.8	-152.0	2,340.8	2,343.5	0.00	0.00	0.00
9,200.0	90.43	90.00	6,785.0	-152.0	2,440.8	2,443.5	0.00	0.00	0.00
9,300.0	90.43	90.00	6,784.3	-152.0	2,540.8	2,543.5	0.00	0.00	0.00
9,400.0	90.43	90.00	6,783.5	-152.0	2,640.8	2,643.5	0.00	0.00	0.00
9,500.0	90.43	90.00	6,782.8	-152.0	2,740.8	2,743.4	0.00	0.00	0.00
9,600.0	90.43	90.00	6,782.0	-152.0	2,840.8	2,843.4	0.00	0.00	0.00
9,700.0	90.43	90.00	6,781.3	-152.0	2,940.8	2,943.4	0.00	0.00	0.00
9,800.0	90.43	90.00	6,780.5	-152.0	3,040.8	3,043.3	0.00	0.00	0.00
9,900.0	90.43	90.00	6,779.8	-152.0	3,140.8	3,143.3	0.00	0.00	0.00
10,000.0	90.43	90.00	6,779.0	-152.0	3,240.8	3,243.3	0.00	0.00	0.00
10,100.0	90.43	90.00	6,778.3	-152.0	3,340.8	3,343.3	0.00	0.00	0.00
10,200.0	90.43	90.00	6,777.5	-152.0	3,440.8	3,443.2	0.00	0.00	0.00
10,300.0	90.43	90.00	6,776.8	-152.0	3,540.8	3,543.2	0.00	0.00	0.00
10,400.0	90.43	90.00	6,776.0	-152.0	3,640.8	3,643.2	0.00	0.00	0.00
10,500.0	90.43	90.00	6,775.3	-152.0	3,740.8	3,743.2	0.00	0.00	0.00
10,600.0	90.43	90.00	6,774.5	-152.0	3,840.8	3,843.1	0.00	0.00	0.00
10,700.0	90.43	90.00	6,773.8	-152.0	3,940.8	3,943.1	0.00	0.00	0.00
10,800.0	90.43	90.00	6,773.0	-152.0	4,040.8	4,043.1	0.00	0.00	0.00
10,900.0	90.43	90.00	6,772.3	-152.0	4,140.8	4,143.1	0.00	0.00	0.00
11,000.0	90.43	90.00	6,771.5	-152.0	4,240.8	4,243.0	0.00	0.00	0.00
11,100.0	90.43	90.00	6,770.8	-152.0	4,340.8	4,343.0	0.00	0.00	0.00
11,200.0	90.43	90.00	6,770.0	-152.0	4,440.8	4,443.0	0.00	0.00	0.00
11,300.0	90.43	90.00	6,769.3	-152.0	4,540.8	4,543.0	0.00	0.00	0.00
11,400.0	90.43	90.00	6,768.5	-152.0	4,640.7	4,642.9	0.00	0.00	0.00
11,500.0	90.43	90.00	6,767.8	-152.0	4,740.7	4,742.9	0.00	0.00	0.00
11,600.0	90.43	90.00	6,767.0	-152.0	4,840.7	4,842.9	0.00	0.00	0.00
11,700.0	90.43	90.00	6,766.3	-152.0	4,940.7	4,942.9	0.00	0.00	0.00
11,800.0	90.43	90.00	6,765.5	-152.0	5,040.7	5,042.8	0.00	0.00	0.00
11,900.0	90.43	90.00	6,764.8	-152.0	5,140.7	5,142.8	0.00	0.00	0.00
12,000.0	90.43	90.00	6,764.0	-152.0	5,240.7	5,242.8	0.00	0.00	0.00
12,100.0	90.43	90.00	6,763.2	-152.0	5,340.7	5,342.8	0.00	0.00	0.00
12,200.0	90.43	90.00	6,762.5	-152.0	5,440.7	5,442.7	0.00	0.00	0.00
12,300.0	90.43	90.00	6,761.7	-152.0	5,540.7	5,542.7	0.00	0.00	0.00
12,400.0	90.43	90.00	6,761.0	-152.0	5,640.7	5,642.7	0.00	0.00	0.00
12,500.0	90.43	90.00	6,760.2	-152.0	5,740.7	5,742.7	0.00	0.00	0.00
12,600.0	90.43	90.00	6,759.5	-152.0	5,840.7	5,842.6	0.00	0.00	0.00
12,700.0	90.43	90.00	6,758.7	-152.0	5,940.7	5,942.6	0.00	0.00	0.00
12,800.0	90.43	90.00	6,758.0	-152.0	6,040.7	6,042.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Project:	SEC.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	North Reference:	True
Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (8-13-14)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
12,900.0	90.43	90.00	6,757.2	-152.0	6,140.7	6,142.6	0.00	0.00	0.00	
13,000.0	90.43	90.00	6,756.5	-152.0	6,240.7	6,242.5	0.00	0.00	0.00	
13,100.0	90.43	90.00	6,755.7	-152.0	6,340.7	6,342.5	0.00	0.00	0.00	
13,200.0	90.43	90.00	6,755.0	-152.0	6,440.7	6,442.5	0.00	0.00	0.00	
13,300.0	90.43	90.00	6,754.2	-152.0	6,540.7	6,542.4	0.00	0.00	0.00	
13,400.0	90.43	90.00	6,753.5	-152.0	6,640.7	6,642.4	0.00	0.00	0.00	
13,500.0	90.43	90.00	6,752.7	-152.0	6,740.7	6,742.4	0.00	0.00	0.00	
13,600.0	90.43	90.00	6,752.0	-152.0	6,840.7	6,842.4	0.00	0.00	0.00	
13,700.0	90.43	90.00	6,751.2	-152.0	6,940.7	6,942.3	0.00	0.00	0.00	
13,800.0	90.43	90.00	6,750.5	-152.0	7,040.7	7,042.3	0.00	0.00	0.00	
13,865.5	90.43	90.00	6,750.0	-152.0	7,106.2	7,107.8	0.00	0.00	0.00	
BHL 75'FSL & 2144'FWL, Sec.25										

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,259.9	6,799.6	7"	7	7-1/2

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,529.3	3,523.0	PARKMAN		0.00	
4,177.4	4,166.0	SUSSEX		0.00	
4,766.1	4,750.0	SHANNON		0.00	
6,437.4	6,403.0	SHARON SPRINGS		0.00	
6,622.5	6,553.0	NIOBRARA A		0.00	
6,732.0	6,628.0	NIOBRARA B		0.00	
6,855.7	6,698.0	NIOBRARA C		0.00	
7,153.7	6,793.0	FT. HAYS		0.00	
	6,815.0	CODELL		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
2,500.0	2,500.0	0.0	0.0	KOP #1	
6,054.2	6,035.7	-152.0	-268.9	KOP #2	
7,259.9	6,799.6	-152.0	500.8	End of Build	



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.26-T5N-R64W

Loloff Farms 5N64W26l Pad Sec.26-T5N-R64W

Loloff Farms 26l-402

Wellbore #1

Plan #1 (8-13-14)

Anticollision Report

15 August, 2014



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (8-13-14)
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.0ft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 1,000.0ft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic

Survey Tool Program		Date	8/15/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	13,864.7	Plan #1 (8-13-14) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells Pad Sec.26-T5N-R64W						
Loloff 2 (Exist.) - Wellbore #1 - Wellbore #1	7,177.0	6,771.7	476.2	319.9	3.046	CC, ES
Loloff 2 (Exist.) - Wellbore #1 - Wellbore #1	7,200.0	6,773.7	476.8	320.0	3.041	SF
Loloff 26-14 (P&A) - Wellbore #1 - Wellbore #1	8,464.6	6,743.5	385.2	197.8	2.055	CC, ES
Loloff 26-14 (P&A) - Wellbore #1 - Wellbore #1	8,500.0	6,743.3	386.8	198.5	2.054	SF
Hoshiko 34-25 Pad Sec.25-T5N-R64W						
Hoshiko 1-1-36H - Wellbore #1 - Wellbore #1	13,700.2	7,418.6	584.6	360.6	2.609	CC, ES
Hoshiko 1-1-36H - Wellbore #1 - Wellbore #1	13,800.0	7,328.1	585.7	360.6	2.602	SF
Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W						
Loloff Farms 26H-332 - Wellbore #1 - Plan #1 (8-13-14)	166.0	168.0	89.2	88.7	169.710	CC
Loloff Farms 26H-332 - Wellbore #1 - Plan #1 (8-13-14)	300.0	301.4	89.6	88.5	79.364	ES
Loloff Farms 26H-332 - Wellbore #1 - Plan #1 (8-13-14)	13,865.5	13,835.6	996.3	593.2	2.472	SF
Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-14)	966.3	967.3	58.5	54.4	14.199	CC
Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-14)	1,000.0	1,001.0	58.5	54.2	13.696	ES
Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-14)	13,865.5	13,879.4	659.4	254.7	1.629	SF
Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)	1,766.3	1,767.3	27.9	20.1	3.611	CC
Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)	1,800.0	1,801.0	27.9	20.0	3.541	ES
Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)	13,865.5	13,728.4	384.1	30.4	1.086	Level 2, SF
Suden (Existing) Pad Sec.34-T5N-R64W						
Loloff B 35-29 (Exist) - Wellbore #1 - Wellbore #1	7,595.2	6,767.1	183.2	145.5	4.862	CC
Loloff B 35-29 (Exist) - Wellbore #1 - Wellbore #1	7,600.0	6,767.0	183.2	145.4	4.849	ES, SF

Offset Design	Existing Wells Pad Sec.26-T5N-R64W - Loloff 2 (Exist.) - Wellbore #1 - Wellbore #1										Offset Site Error:	0.0 ft
Survey Program:	6870-UNKNOWN										Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Separation Factor			
0.0	0.0	0.0	0.0	52.20	324.2	418.0	529.6					
100.0	100.0	0.1	1.5	52.20	324.2	418.0	529.0	527.4	1.63	324.036		
200.0	200.0	0.3	3.5	52.20	324.2	418.0	529.0	525.2	3.86	137.145		
300.0	300.0	0.6	5.5	52.20	324.2	418.0	529.0	522.9	6.08	86.979		

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Loloff 2 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 6870-UNKNOWN													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis			Distance								Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
400.0	400.0	376.0	376.0	0.8	7.5	52.20	324.2	418.0	529.0	520.7	8.31	63.684		
500.0	500.0	476.0	476.0	1.0	9.5	52.20	324.2	418.0	529.0	518.5	10.53	50.231		
600.0	600.0	576.0	576.0	1.2	11.5	52.20	324.2	418.0	529.0	516.3	12.76	41.471		
700.0	700.0	676.0	676.0	1.5	13.5	52.20	324.2	418.0	529.0	514.0	14.98	35.312		
800.0	800.0	776.0	776.0	1.7	15.5	52.20	324.2	418.0	529.0	511.8	17.21	30.746		
900.0	900.0	876.0	876.0	1.9	17.5	52.20	324.2	418.0	529.0	509.6	19.43	27.226		
1,000.0	1,000.0	976.0	976.0	2.1	19.5	52.20	324.2	418.0	529.0	507.4	21.66	24.429		
1,100.0	1,100.0	1,076.0	1,076.0	2.4	21.5	52.20	324.2	418.0	529.0	505.1	23.88	22.153		
1,200.0	1,200.0	1,176.0	1,176.0	2.6	23.5	52.20	324.2	418.0	529.0	502.9	26.10	20.265		
1,300.0	1,300.0	1,276.0	1,276.0	2.8	25.5	52.20	324.2	418.0	529.0	500.7	28.33	18.673		
1,400.0	1,400.0	1,376.0	1,376.0	3.0	27.5	52.20	324.2	418.0	529.0	498.5	30.55	17.314		
1,500.0	1,500.0	1,476.0	1,476.0	3.3	29.5	52.20	324.2	418.0	529.0	496.2	32.78	16.139		
1,600.0	1,600.0	1,576.0	1,576.0	3.5	31.5	52.20	324.2	418.0	529.0	494.0	35.00	15.113		
1,700.0	1,700.0	1,676.0	1,676.0	3.7	33.5	52.20	324.2	418.0	529.0	491.8	37.23	14.210		
1,800.0	1,800.0	1,776.0	1,776.0	3.9	35.5	52.20	324.2	418.0	529.0	489.6	39.45	13.409		
1,900.0	1,900.0	1,876.0	1,876.0	4.2	37.5	52.20	324.2	418.0	529.0	487.3	41.68	12.693		
2,000.0	2,000.0	1,976.0	1,976.0	4.4	39.5	52.20	324.2	418.0	529.0	485.1	43.90	12.050		
2,100.0	2,100.0	2,076.0	2,076.0	4.6	41.5	52.20	324.2	418.0	529.0	482.9	46.13	11.468		
2,200.0	2,200.0	2,176.0	2,176.0	4.8	43.5	52.20	324.2	418.0	529.0	480.7	48.35	10.941		
2,300.0	2,300.0	2,276.0	2,276.0	5.1	45.5	52.20	324.2	418.0	529.0	478.4	50.58	10.460		
2,400.0	2,400.0	2,376.0	2,376.0	5.3	47.5	52.20	324.2	418.0	529.0	476.2	52.80	10.019		
2,500.0	2,500.0	2,476.0	2,476.0	5.5	49.5	52.20	324.2	418.0	529.0	474.0	55.03	9.614		
2,600.0	2,600.0	2,576.0	2,576.0	5.7	51.5	171.70	324.2	418.0	530.7	473.5	57.20	9.279		
2,700.0	2,699.8	2,675.8	2,675.8	5.9	53.5	171.76	324.2	418.0	535.9	476.6	59.27	9.042		
2,800.0	2,799.5	2,775.5	2,775.5	6.1	55.5	171.87	324.2	418.0	544.5	483.3	61.27	8.888		
2,900.0	2,898.7	2,874.7	2,874.7	6.3	57.5	172.02	324.2	418.0	556.4	493.1	63.28	8.792		
3,000.0	2,997.9	2,973.9	2,973.9	6.5	59.5	172.20	324.2	418.0	568.8	503.4	65.44	8.692		
3,100.0	3,097.2	3,073.2	3,073.2	6.7	61.5	172.37	324.2	418.0	581.3	513.6	67.61	8.597		
3,200.0	3,196.4	3,172.4	3,172.4	7.0	63.4	172.53	324.2	418.0	593.7	523.9	69.78	8.509		
3,300.0	3,295.6	3,271.6	3,271.6	7.2	65.4	172.68	324.2	418.0	606.2	534.2	71.95	8.425		
3,400.0	3,394.8	3,370.8	3,370.8	7.5	67.4	172.83	324.2	418.0	618.6	544.5	74.12	8.346		
3,500.0	3,494.0	3,470.0	3,470.0	7.7	69.4	172.97	324.2	418.0	631.1	554.8	76.30	8.272		
3,600.0	3,593.2	3,569.2	3,569.2	8.0	71.4	173.11	324.2	418.0	643.6	565.1	78.47	8.201		
3,700.0	3,692.4	3,668.4	3,668.4	8.3	73.4	173.24	324.2	418.0	656.1	575.4	80.65	8.134		
3,800.0	3,791.6	3,767.6	3,767.6	8.5	75.4	173.37	324.2	418.0	668.6	585.7	82.84	8.071		
3,900.0	3,890.8	3,866.8	3,866.8	8.8	77.3	173.49	324.2	418.0	681.0	596.0	85.02	8.010		
4,000.0	3,990.0	3,966.0	3,966.0	9.1	79.3	173.61	324.2	418.0	693.5	606.3	87.20	7.953		
4,100.0	4,089.2	4,065.2	4,065.2	9.4	81.3	173.72	324.2	418.0	706.0	616.6	89.39	7.898		
4,200.0	4,188.4	4,164.4	4,164.4	9.6	83.3	173.83	324.2	418.0	718.5	626.9	91.58	7.846		
4,300.0	4,287.6	4,263.6	4,263.6	9.9	85.3	173.94	324.2	418.0	731.0	637.2	93.76	7.796		
4,400.0	4,386.8	4,362.8	4,362.8	10.2	87.3	174.04	324.2	418.0	743.5	647.5	95.95	7.749		
4,500.0	4,486.1	4,462.1	4,462.1	10.5	89.2	174.14	324.2	418.0	756.0	657.9	98.14	7.703		
4,600.0	4,585.3	4,561.3	4,561.3	10.8	91.2	174.23	324.2	418.0	768.5	668.2	100.33	7.659		
4,700.0	4,684.5	4,660.5	4,660.5	11.1	93.2	174.33	324.2	418.0	781.0	678.5	102.53	7.618		
4,800.0	4,783.7	4,759.7	4,759.7	11.4	95.2	174.42	324.2	418.0	793.5	688.8	104.72	7.578		
4,900.0	4,882.9	4,858.9	4,858.9	11.7	97.2	174.50	324.2	418.0	806.0	699.1	106.91	7.539		
5,000.0	4,982.1	4,958.1	4,958.1	12.0	99.2	174.60	324.2	418.0	818.2	708.9	109.28	7.487		
5,100.0	5,081.7	5,057.7	5,057.7	12.2	101.2	174.67	324.2	418.0	827.5	715.7	111.81	7.401		
5,200.0	5,181.5	5,157.5	5,157.5	12.5	103.2	174.72	324.2	418.0	833.4	719.2	114.21	7.297		
5,300.0	5,281.5	5,257.5	5,257.5	12.6	105.1	174.74	324.2	418.0	835.8	719.3	116.49	7.175		
5,400.0	5,381.5	5,357.5	5,357.5	12.8	107.1	55.27	324.2	418.0	835.8	715.9	119.96	6.968		

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Loloff 2 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft
Survey Program: 6870-UNKNOWN													Offset Well Error: 0.0 ft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,500.0	5,481.5	5,457.5	5,457.5	13.0	109.1	55.27	324.2	418.0	835.8	713.7	122.15	6.843	
5,600.0	5,581.5	5,557.5	5,557.5	13.2	111.1	55.27	324.2	418.0	835.8	711.5	124.34	6.722	
5,700.0	5,681.5	5,657.5	5,657.5	13.4	113.1	55.27	324.2	418.0	835.8	709.3	126.54	6.605	
5,800.0	5,781.5	5,757.5	5,757.5	13.6	115.1	55.27	324.2	418.0	835.8	707.1	128.73	6.493	
5,900.0	5,881.5	5,857.5	5,857.5	13.8	117.1	55.27	324.2	418.0	835.8	704.9	130.93	6.384	
6,000.0	5,981.5	5,957.5	5,957.5	14.0	119.1	55.27	324.2	418.0	835.8	702.7	133.13	6.279	
6,100.0	6,081.4	6,057.4	6,057.4	14.2	121.1	-34.84	324.2	418.0	834.7	700.7	133.98	6.230	
6,200.0	6,180.6	6,156.6	6,156.6	14.3	123.1	-35.78	324.2	418.0	824.5	689.8	134.66	6.122	
6,300.0	6,277.3	6,253.3	6,253.3	14.4	125.1	-37.78	324.2	418.0	803.9	669.9	134.02	5.999	
6,400.0	6,369.8	6,345.8	6,345.8	14.4	126.9	-40.96	324.2	418.0	773.8	641.2	132.61	5.835	
6,500.0	6,456.6	6,432.6	6,432.6	14.5	128.7	-45.52	324.2	418.0	735.5	604.0	131.47	5.594	
6,600.0	6,536.2	6,512.2	6,512.2	14.6	130.2	-51.58	324.2	418.0	690.5	558.6	131.97	5.232	
6,700.0	6,607.3	6,583.3	6,583.3	14.9	131.7	-59.09	324.2	418.0	641.5	506.3	135.19	4.745	
6,800.0	6,668.5	6,644.5	6,644.5	15.6	132.9	-67.58	324.2	418.0	591.5	450.7	140.79	4.201	
6,900.0	6,719.0	6,695.0	6,695.0	16.5	133.9	-76.05	324.2	418.0	544.8	397.9	146.87	3.709	
7,000.0	6,757.7	6,733.7	6,733.7	17.8	134.7	-83.25	324.2	418.0	506.5	354.9	151.57	3.342	
7,100.0	6,784.1	6,760.1	6,760.1	19.5	135.2	-88.17	324.2	418.0	482.3	327.7	154.59	3.120	
7,177.0	6,795.7	6,771.7	6,771.7	20.9	135.4	-90.00	324.2	418.0	476.2	319.9	156.33	3.046 CC, ES	
7,200.0	6,797.7	6,773.7	6,773.7	21.3	135.5	-90.20	324.2	418.0	476.8	320.0	156.80	3.041 SF	
7,300.0	6,799.3	6,775.3	6,775.3	23.4	135.5	-89.89	324.2	418.0	491.8	333.0	158.86	3.096	
7,400.0	6,798.5	6,774.5	6,774.5	25.5	135.5	-89.80	324.2	418.0	525.8	364.8	161.02	3.265	
7,500.0	6,797.8	6,773.8	6,773.8	27.8	135.5	-89.71	324.2	418.0	575.3	412.1	163.29	3.524	
7,600.0	6,797.0	6,773.0	6,773.0	30.2	135.5	-89.62	324.2	418.0	636.9	471.2	165.64	3.845	
7,700.0	6,796.3	6,772.3	6,772.3	32.6	135.4	-89.53	324.2	418.0	707.2	539.2	168.07	4.208	
7,800.0	6,795.5	6,771.5	6,771.5	35.1	135.4	-89.44	324.2	418.0	784.0	613.5	170.55	4.597	
7,900.0	6,794.8	6,770.8	6,770.8	37.7	135.4	-89.35	324.2	418.0	865.6	692.5	173.07	5.002	
8,000.0	6,794.0	6,770.0	6,770.0	40.3	135.4	-89.26	324.2	418.0	950.7	775.1	175.63	5.413	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Pad Sec.26-T5N-R64W - Loloff 26-14 (P&A) - Wellbore #1 - Wellbore #1													Offset Site Error: 0.0 ft
Survey Program: 6970-UNKNOWN													Offset Well Error: 0.0 ft
Reference	Offset	Semi Major Axis		Distance		Warning							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,600.0	6,797.0	6,750.0	6,750.0	30.2	135.0	-90.97	233.2	1,705.5	946.5	781.4	165.17	5.731	
7,700.0	6,796.3	6,749.3	6,749.3	32.6	135.0	-90.85	233.2	1,705.5	856.1	688.5	167.60	5.108	
7,800.0	6,795.5	6,748.5	6,748.5	35.1	135.0	-90.74	233.2	1,705.5	768.2	598.1	170.09	4.516	
7,900.0	6,794.8	6,747.8	6,747.8	37.7	135.0	-90.63	233.2	1,705.5	683.5	510.9	172.62	3.960	
8,000.0	6,794.0	6,747.0	6,747.0	40.3	134.9	-90.52	233.2	1,705.5	603.5	428.3	175.18	3.445	
8,100.0	6,793.3	6,746.3	6,746.3	42.9	134.9	-90.41	233.2	1,705.5	530.4	352.6	177.77	2.984	
8,200.0	6,792.5	6,745.5	6,745.5	45.5	134.9	-90.30	233.2	1,705.5	467.3	286.9	180.39	2.591	
8,300.0	6,791.8	6,744.8	6,744.8	48.1	134.9	-90.18	233.2	1,705.5	418.9	235.9	183.03	2.289	
8,400.0	6,791.0	6,744.0	6,744.0	50.8	134.9	-90.07	233.2	1,705.5	390.6	204.9	185.68	2.103	
8,464.6	6,790.5	6,743.5	6,743.5	52.5	134.9	-90.00	233.2	1,705.5	385.2	197.8	187.40	2.055 CC, ES	
8,500.0	6,790.3	6,743.3	6,743.3	53.5	134.9	-89.96	233.2	1,705.5	386.8	198.5	188.35	2.054 SF	
8,600.0	6,789.5	6,742.5	6,742.5	56.2	134.9	-89.85	233.2	1,705.5	408.3	217.3	191.03	2.137	
8,700.0	6,788.8	6,741.8	6,741.8	58.9	134.8	-89.74	233.2	1,705.5	451.4	257.7	193.71	2.330	
8,800.0	6,788.0	6,741.0	6,741.0	61.6	134.8	-89.63	233.2	1,705.5	510.7	314.3	196.41	2.600	
8,900.0	6,787.3	6,740.3	6,740.3	64.3	134.8	-89.51	233.2	1,705.5	581.3	382.2	199.12	2.919	
9,000.0	6,786.5	6,739.5	6,739.5	67.1	134.8	-89.40	233.2	1,705.5	659.5	457.7	201.83	3.268	
9,100.0	6,785.8	6,738.8	6,738.8	69.8	134.8	-89.29	233.2	1,705.5	743.0	538.5	204.54	3.633	
9,200.0	6,785.0	6,738.0	6,738.0	72.5	134.8	-89.18	233.2	1,705.5	830.1	622.9	207.26	4.005	
9,300.0	6,784.3	6,737.3	6,737.3	75.3	134.7	-89.07	233.2	1,705.5	919.9	709.9	209.99	4.381	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:		0.0 ft	
Survey Program: 124-Reference												Offset Well Error:		0.0 ft	
Offset				Semi Major Axis				Distance				Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)			Separation Factor	
11,500.0	6,767.8	8,897.0	6,483.5	136.3	69.8	72.03	-737.3	5,463.6	950.3	753.9	196.42	4.838			
11,600.0	6,767.0	8,897.0	6,483.5	139.1	69.8	72.03	-737.3	5,463.6	876.5	677.5	199.08	4.403			
11,700.0	6,766.3	8,897.0	6,483.5	141.9	69.8	72.03	-737.3	5,463.6	808.4	606.6	201.74	4.007			
11,800.0	6,765.5	8,897.0	6,483.5	144.7	69.8	72.03	-737.3	5,463.6	747.4	543.0	204.41	3.656			
11,900.0	6,764.8	8,897.0	6,483.5	147.5	69.8	72.03	-737.3	5,463.6	695.5	488.5	207.07	3.359			
12,000.0	6,764.0	8,897.0	6,483.5	150.3	69.8	72.03	-737.3	5,463.6	654.9	445.2	209.74	3.123			
12,100.0	6,763.2	8,897.0	6,483.5	153.1	69.8	72.03	-737.3	5,463.6	627.7	415.3	212.40	2.955			
12,200.0	6,762.5	8,897.0	6,483.5	155.9	69.8	72.03	-737.3	5,463.6	615.8	400.7	215.07	2.863			
12,300.0	6,761.7	8,819.5	6,488.2	158.7	67.7	72.53	-738.4	5,540.9	614.8	398.5	216.26	2.843			
12,335.3	6,761.5	8,785.5	6,490.2	159.7	66.8	72.76	-739.1	5,574.8	614.8	398.2	216.56	2.839			
12,400.0	6,761.0	8,721.5	6,494.1	161.5	65.1	73.18	-740.5	5,638.7	614.8	397.8	217.06	2.833			
12,500.0	6,760.2	8,625.9	6,498.6	164.3	62.6	73.71	-742.9	5,734.2	615.7	397.9	217.79	2.827			
12,600.0	6,759.5	8,530.1	6,501.9	167.1	60.2	74.13	-745.3	5,829.8	616.9	398.5	218.41	2.825			
12,700.0	6,758.7	8,430.4	6,504.0	169.9	57.6	74.45	-747.8	5,929.5	618.6	399.7	218.83	2.827			
12,800.0	6,758.0	8,324.9	6,507.4	172.7	54.9	74.88	-750.3	6,034.9	619.8	400.6	219.21	2.827			
12,900.0	6,757.2	8,206.1	6,512.8	175.5	51.9	75.47	-751.5	6,153.6	619.5	400.1	219.39	2.823			
13,000.0	6,756.5	8,093.7	6,516.6	178.3	49.1	75.84	-749.3	6,265.9	616.6	397.0	219.57	2.808			
13,100.0	6,755.7	7,978.3	6,520.6	181.1	46.3	76.16	-744.0	6,381.1	611.1	391.5	219.66	2.782			
13,200.0	6,755.0	7,880.8	6,524.7	183.9	43.9	76.48	-738.3	6,478.3	604.2	384.0	220.22	2.744			
13,300.0	6,754.2	7,784.1	6,527.9	186.7	41.6	76.72	-733.0	6,574.8	598.0	377.2	220.77	2.709			
13,400.0	6,753.5	7,691.6	6,531.7	189.5	39.5	77.05	-728.9	6,667.2	592.6	371.1	221.52	2.675			
13,500.0	6,752.7	7,596.6	6,535.5	192.3	37.4	77.42	-725.8	6,762.1	588.3	366.1	222.26	2.647			
13,600.0	6,752.0	7,508.5	6,538.2	195.1	35.6	77.71	-724.4	6,850.1	585.9	362.8	223.14	2.626			
13,700.0	6,751.2	7,418.7	6,541.0	197.9	33.9	78.03	-723.9	6,939.8	584.6	360.6	224.05	2.609			
13,700.2	6,751.2	7,418.6	6,541.0	197.9	33.9	78.03	-723.9	6,940.0	584.6	360.6	224.06	2.609 CC, ES			
13,800.0	6,750.5	7,328.1	6,545.0	200.7	32.3	78.52	-725.9	7,030.4	585.7	360.6	225.11	2.602 SF			
13,865.5	6,750.0	7,257.3	6,547.2	201.9	31.3	78.82	-727.8	7,101.1	586.9	362.0	224.94	2.609			

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design										Survey Program: 0-MWD				Offset Site Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Offset Well Error: 0.0 ft			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0.0	0.0	2.0	2.0	0.0	0.0	-92.34	-3.6	-89.2	89.2	89.2	0.00	N/A			
100.0	100.0	102.0	102.0	0.1	0.1	-92.34	-3.6	-89.2	89.2	89.0	0.23	389.289			
166.0	166.0	168.0	168.0	0.3	0.3	-92.34	-3.6	-89.2	89.2	88.7	0.53	169.710 CC			
200.0	200.0	202.0	202.0	0.3	0.3	-92.34	-3.6	-89.2	89.2	88.6	0.68	131.479			
300.0	300.0	301.4	301.4	0.6	0.6	-91.21	-1.9	-89.6	89.6	88.5	1.13	79.364 ES			
400.0	400.0	400.6	400.4	0.8	0.8	-87.97	3.2	-90.7	90.8	89.2	1.59	57.212			
500.0	500.0	499.3	498.7	1.0	1.0	-82.85	11.6	-92.5	93.3	91.3	2.05	45.423			
600.0	600.0	597.3	596.0	1.2	1.3	-76.28	23.2	-95.1	98.1	95.5	2.55	38.527			
700.0	700.0	694.6	692.2	1.5	1.6	-68.91	37.9	-98.3	105.8	102.8	3.08	34.415			
800.0	800.0	793.3	789.4	1.7	2.0	-62.10	53.9	-101.8	115.9	112.3	3.64	31.852			
900.0	900.0	891.9	886.7	1.9	2.3	-56.43	69.9	-105.4	127.4	123.1	4.22	30.178			
1,000.0	1,000.0	990.5	983.9	2.1	2.7	-51.72	85.9	-108.9	139.9	135.1	4.81	29.077			
1,100.0	1,100.0	1,089.1	1,081.2	2.4	3.0	-47.80	101.9	-112.4	153.1	147.7	5.40	28.346			
1,200.0	1,200.0	1,187.7	1,178.4	2.6	3.4	-44.51	117.9	-115.9	167.0	161.0	6.00	27.858			
1,300.0	1,300.0	1,286.3	1,275.6	2.8	3.8	-41.73	133.9	-119.4	181.4	174.8	6.59	27.532			
1,400.0	1,400.0	1,384.9	1,372.9	3.0	4.1	-39.35	149.9	-122.9	196.1	188.9	7.18	27.317			
1,500.0	1,500.0	1,483.5	1,470.1	3.3	4.5	-37.31	165.9	-126.5	211.0	203.3	7.77	27.176			
1,600.0	1,600.0	1,582.1	1,567.4	3.5	4.9	-35.55	181.9	-130.0	226.3	217.9	8.35	27.088			
1,700.0	1,700.0	1,680.8	1,664.6	3.7	5.3	-34.00	197.9	-133.5	241.7	232.7	8.94	27.037			
1,800.0	1,800.0	1,779.4	1,761.8	3.9	5.6	-32.64	213.9	-137.0	257.2	247.7	9.52	27.012			
1,900.0	1,900.0	1,878.0	1,859.1	4.2	6.0	-31.43	229.9	-140.5	272.9	262.8	10.10	27.006			
2,000.0	2,000.0	1,976.6	1,956.3	4.4	6.4	-30.36	245.9	-144.1	288.7	278.0	10.69	27.013			
2,100.0	2,100.0	2,075.2	2,053.6	4.6	6.7	-29.40	261.9	-147.6	304.5	293.3	11.27	27.029			
2,200.0	2,200.0	2,173.8	2,150.8	4.8	7.1	-28.53	277.9	-151.1	320.5	308.6	11.85	27.052			
2,300.0	2,300.0	2,272.4	2,248.0	5.1	7.5	-27.75	293.9	-154.6	336.5	324.0	12.43	27.079			
2,400.0	2,400.0	2,371.0	2,345.3	5.3	7.9	-27.03	309.9	-158.1	352.5	339.5	13.00	27.110			
2,500.0	2,500.0	2,469.6	2,442.5	5.5	8.2	-26.38	325.9	-161.7	368.6	355.1	13.58	27.143			
2,600.0	2,600.0	2,568.1	2,539.7	5.7	8.6	93.62	341.9	-165.2	384.9	372.9	14.16	32.126			
2,700.0	2,699.8	2,666.4	2,636.5	5.9	9.0	94.57	357.9	-168.7	401.5	389.1	12.40	32.390			
2,800.0	2,799.5	2,764.2	2,733.0	6.1	9.4	95.89	373.7	-172.2	418.7	405.9	12.81	32.684			
2,900.0	2,898.7	2,861.5	2,828.9	6.3	9.7	97.61	389.5	-175.6	436.6	423.4	13.23	33.011			
3,000.0	2,997.9	2,958.7	2,924.8	6.5	10.1	99.47	405.3	-179.1	455.1	441.4	13.65	33.328			
3,100.0	3,097.2	3,055.9	3,020.7	6.7	10.5	101.19	421.1	-182.6	474.0	459.9	14.10	33.622			
3,200.0	3,196.4	3,153.1	3,116.5	7.0	10.8	102.79	436.8	-186.0	493.3	478.7	14.55	33.894			
3,300.0	3,295.6	3,250.3	3,212.4	7.2	11.2	104.26	452.6	-189.5	512.9	497.9	15.02	34.144			
3,400.0	3,394.8	3,347.6	3,308.2	7.5	11.6	105.62	468.4	-193.0	532.9	517.4	15.50	34.377			
3,500.0	3,494.0	3,444.8	3,404.1	7.7	11.9	106.89	484.2	-196.4	553.1	537.1	15.99	34.592			
3,600.0	3,593.2	3,542.0	3,500.0	8.0	12.3	108.07	499.9	-199.9	573.5	557.1	16.48	34.793			
3,700.0	3,692.4	3,639.2	3,595.8	8.3	12.7	109.17	515.7	-203.4	594.2	577.2	16.99	34.980			
3,800.0	3,791.6	3,736.4	3,691.7	8.5	13.0	110.19	531.5	-206.9	615.1	597.6	17.50	35.155			
3,900.0	3,890.8	3,833.6	3,787.6	8.8	13.4	111.15	547.3	-210.3	636.2	618.2	18.01	35.320			
4,000.0	3,990.0	3,930.9	3,883.4	9.1	13.8	112.04	563.0	-213.8	657.4	638.9	18.53	35.474			
4,100.0	4,089.2	4,028.1	3,979.3	9.4	14.1	112.89	578.8	-217.3	678.8	659.7	19.06	35.620			
4,200.0	4,188.4	4,125.3	4,075.2	9.6	14.5	113.68	594.6	-220.7	700.2	680.7	19.58	35.758			
4,300.0	4,287.6	4,222.5	4,171.0	9.9	14.9	114.42	610.4	-224.2	721.9	701.8	20.11	35.889			
4,400.0	4,386.8	4,319.7	4,266.9	10.2	15.3	115.12	626.1	-227.7	743.6	722.9	20.65	36.013			
4,500.0	4,486.1	4,416.9	4,362.8	10.5	15.6	115.78	641.9	-231.1	765.4	744.2	21.18	36.131			
4,600.0	4,585.3	4,514.1	4,458.6	10.8	16.0	116.40	657.7	-234.6	787.3	765.6	21.72	36.243			
4,700.0	4,684.5	4,611.4	4,554.5	11.1	16.4	116.99	673.5	-238.1	809.3	787.1	22.27	36.351			
4,800.0	4,783.7	4,708.6	4,650.3	11.4	16.7	117.55	689.2	-241.5	831.4	808.6	22.81	36.453			
4,900.0	4,882.9	4,805.8	4,746.2	11.7	17.1	118.08	705.0	-245.0	853.6	830.2	23.35	36.551			

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,000.0	4,982.1	4,903.1	4,842.1	12.0	17.5	118.74	720.8	-248.5	875.7	851.8	23.91	36.621			
5,100.0	5,081.7	5,000.8	4,938.5	12.2	17.8	119.40	736.6	-252.0	896.4	872.0	24.45	36.665			
5,200.0	5,181.5	5,098.9	5,035.3	12.5	18.2	119.83	752.6	-255.5	915.5	890.5	24.96	36.675			
5,300.0	5,281.5	5,197.4	5,132.4	12.6	18.6	120.04	768.5	-259.0	932.9	907.4	25.45	36.660			
5,400.0	5,381.5	5,296.0	5,229.6	12.8	19.0	0.39	784.5	-262.5	949.1	918.6	30.53	31.088			
5,500.0	5,481.5	5,396.0	5,328.2	13.0	19.3	0.17	800.8	-266.1	965.3	934.2	31.11	31.028			
5,600.0	5,581.5	5,544.1	5,474.9	13.2	19.7	-0.09	820.9	-270.5	978.9	947.2	31.72	30.865			
5,700.0	5,681.5	5,694.1	5,624.2	13.4	20.1	-0.26	833.7	-273.3	987.5	955.2	32.25	30.622			
5,800.0	5,781.5	5,845.0	5,775.0	13.6	20.3	-0.32	838.9	-274.5	990.9	958.2	32.69	30.315			
5,900.0	5,881.5	5,953.4	5,883.5	13.8	20.4	-0.32	839.0	-274.5	991.0	957.9	33.04	29.996			
6,000.0	5,981.5	6,053.6	5,983.6	14.0	20.6	-0.30	839.0	-274.1	991.0	957.6	33.38	29.687			
6,079.1	6,060.5	6,132.9	6,062.6	14.1	20.6	-90.03	839.0	-267.5	990.9	962.2	28.78	34.437			
6,100.0	6,081.4	6,153.4	6,083.0	14.2	20.7	-89.82	839.0	-264.5	991.0	962.1	28.85	34.348			
6,200.0	6,180.6	6,251.9	6,178.8	14.3	20.7	-89.24	839.0	-242.4	991.0	961.9	29.10	34.051			
6,300.0	6,277.3	6,349.1	6,270.0	14.4	20.8	-88.68	839.0	-208.7	991.2	961.9	29.30	33.829			
6,400.0	6,369.8	6,445.2	6,355.1	14.4	20.8	-88.14	839.0	-164.3	991.5	962.0	29.51	33.603			
6,500.0	6,456.6	6,540.2	6,433.2	14.5	20.9	-87.64	839.0	-110.2	991.8	962.0	29.82	33.263			
6,600.0	6,536.2	6,634.4	6,503.3	14.6	20.9	-87.17	839.0	-47.6	992.2	961.8	30.36	32.680			
6,700.0	6,607.3	6,727.6	6,564.7	14.9	21.0	-86.75	839.0	22.6	992.5	961.3	31.29	31.723			
6,800.0	6,668.5	6,820.2	6,616.7	15.6	21.2	-86.39	839.0	99.2	992.9	960.2	32.72	30.350			
6,900.0	6,719.0	6,912.2	6,658.8	16.5	21.5	-86.08	839.0	180.9	993.3	958.5	34.73	28.602			
7,000.0	6,757.7	7,003.7	6,690.7	17.8	22.1	-85.84	839.0	266.6	993.6	956.2	37.34	26.612			
7,100.0	6,784.1	7,094.9	6,712.0	19.5	23.0	-85.66	839.0	355.1	993.8	953.3	40.49	24.544			
7,200.0	6,797.7	7,185.8	6,722.6	21.3	24.4	-85.55	839.0	445.4	993.9	949.9	44.08	22.551			
7,300.0	6,799.3	7,280.4	6,723.4	23.4	26.1	-85.50	839.0	540.0	994.0	946.0	48.02	20.698			
7,400.0	6,798.5	7,380.4	6,722.2	25.5	28.0	-85.48	839.0	640.0	994.0	941.7	52.33	18.994			
7,500.0	6,797.8	7,480.4	6,721.1	27.8	30.2	-85.46	839.0	740.0	994.1	937.2	56.86	17.482			
7,600.0	6,797.0	7,580.4	6,720.0	30.2	32.4	-85.44	839.0	840.0	994.1	932.5	61.57	16.146			
7,700.0	6,796.3	7,680.4	6,718.8	32.6	34.8	-85.42	839.0	940.0	994.1	927.7	66.41	14.969			
7,800.0	6,795.5	7,780.4	6,717.7	35.1	37.2	-85.39	839.0	1,039.9	994.2	922.8	71.37	13.930			
7,900.0	6,794.8	7,880.4	6,716.6	37.7	39.7	-85.37	839.0	1,139.9	994.2	917.8	76.41	13.011			
8,000.0	6,794.0	7,980.4	6,715.4	40.3	42.2	-85.35	839.0	1,239.9	994.2	912.7	81.53	12.195			
8,100.0	6,793.3	8,080.4	6,714.3	42.9	44.7	-85.33	839.0	1,339.9	994.2	907.5	86.70	11.467			
8,200.0	6,792.5	8,180.4	6,713.2	45.5	47.3	-85.31	839.0	1,439.9	994.3	902.4	91.93	10.816			
8,300.0	6,791.8	8,280.4	6,712.0	48.1	49.9	-85.28	839.0	1,539.9	994.3	897.1	97.20	10.230			
8,400.0	6,791.0	8,380.4	6,710.9	50.8	52.5	-85.26	839.0	1,639.9	994.3	891.8	102.50	9.701			
8,500.0	6,790.3	8,480.4	6,709.8	53.5	55.1	-85.24	839.0	1,739.9	994.4	886.5	107.83	9.222			
8,600.0	6,789.5	8,580.4	6,708.6	56.2	57.8	-85.22	839.0	1,839.9	994.4	881.2	113.19	8.786			
8,700.0	6,788.8	8,680.4	6,707.5	58.9	60.5	-85.20	839.0	1,939.9	994.4	875.9	118.57	8.387			
8,800.0	6,788.0	8,780.4	6,706.3	61.6	63.1	-85.17	839.0	2,039.9	994.5	870.5	123.96	8.022			
8,900.0	6,787.3	8,880.4	6,705.2	64.3	65.8	-85.15	839.0	2,139.9	994.5	865.1	129.38	7.687			
9,000.0	6,786.5	8,980.4	6,704.1	67.1	68.5	-85.13	839.0	2,239.9	994.5	859.7	134.81	7.377			
9,100.0	6,785.8	9,080.4	6,702.9	69.8	71.2	-85.11	839.0	2,339.9	994.6	854.3	140.25	7.091			
9,200.0	6,785.0	9,180.4	6,701.8	72.5	74.0	-85.09	839.0	2,439.8	994.6	848.9	145.70	6.826			
9,300.0	6,784.3	9,280.4	6,700.7	75.3	76.7	-85.06	839.0	2,539.8	994.6	843.5	151.17	6.580			
9,400.0	6,783.5	9,380.4	6,699.5	78.0	79.4	-85.04	839.0	2,639.8	994.7	838.0	156.64	6.350			
9,500.0	6,782.8	9,480.4	6,698.4	80.8	82.2	-85.02	839.0	2,739.8	994.7	832.6	162.12	6.136			
9,600.0	6,782.0	9,580.4	6,697.3	83.5	84.9	-85.00	839.0	2,839.8	994.7	827.1	167.61	5.935			
9,700.0	6,781.3	9,680.4	6,696.1	86.3	87.6	-84.98	839.0	2,939.8	994.8	821.7	173.10	5.747			
9,800.0	6,780.5	9,780.4	6,695.0	89.1	90.4	-84.95	839.0	3,039.8	994.8	816.2	178.60	5.570			

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26H-332 - Wellbore #1 - Plan #1 (8-13-1)										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
9,900.0	6,779.8	9,880.4	6,693.9	91.8	93.1	-84.93	839.0	3,139.8	994.8	810.7	184.11	5.404			
10,000.0	6,779.0	9,980.4	6,692.7	94.6	95.9	-84.91	839.0	3,239.8	994.9	805.3	189.62	5.247			
10,100.0	6,778.3	10,080.4	6,691.6	97.4	98.7	-84.89	839.0	3,339.8	994.9	799.8	195.13	5.099			
10,200.0	6,777.5	10,180.4	6,690.5	100.2	101.4	-84.87	839.0	3,439.8	994.9	794.3	200.65	4.959			
10,300.0	6,776.8	10,280.4	6,689.3	102.9	104.2	-84.84	839.0	3,539.8	995.0	788.8	206.17	4.826			
10,400.0	6,776.0	10,380.4	6,688.2	105.7	106.9	-84.82	839.0	3,639.8	995.0	783.3	211.70	4.700			
10,500.0	6,775.3	10,480.4	6,687.1	108.5	109.7	-84.80	839.0	3,739.8	995.0	777.8	217.22	4.581			
10,600.0	6,774.5	10,580.4	6,685.9	111.3	112.5	-84.78	839.0	3,839.7	995.1	772.3	222.75	4.467			
10,700.0	6,773.8	10,680.4	6,684.8	114.1	115.2	-84.76	839.0	3,939.7	995.1	766.8	228.29	4.359			
10,800.0	6,773.0	10,780.4	6,683.7	116.8	118.0	-84.73	839.0	4,039.7	995.1	761.3	233.82	4.256			
10,900.0	6,772.3	10,880.4	6,682.5	119.6	120.8	-84.71	839.0	4,139.7	995.2	755.8	239.36	4.158			
11,000.0	6,771.5	10,980.4	6,681.4	122.4	123.6	-84.69	839.0	4,239.7	995.2	750.3	244.90	4.064			
11,100.0	6,770.8	11,080.4	6,680.3	125.2	126.4	-84.67	839.0	4,339.7	995.3	744.8	250.44	3.974			
11,200.0	6,770.0	11,180.4	6,679.1	128.0	129.1	-84.64	839.0	4,439.7	995.3	739.3	255.99	3.888			
11,300.0	6,769.3	11,280.4	6,678.0	130.8	131.9	-84.62	839.0	4,539.7	995.3	733.8	261.53	3.806			
11,400.0	6,768.5	11,380.4	6,676.9	133.6	134.7	-84.60	839.0	4,639.7	995.4	728.3	267.08	3.727			
11,500.0	6,767.8	11,480.4	6,675.7	136.3	137.5	-84.58	839.0	4,739.7	995.4	722.8	272.63	3.651			
11,600.0	6,767.0	11,580.4	6,674.6	139.1	140.3	-84.56	839.0	4,839.7	995.4	717.3	278.17	3.578			
11,700.0	6,766.3	11,680.4	6,673.4	141.9	143.0	-84.53	839.0	4,939.7	995.5	711.7	283.72	3.509			
11,800.0	6,765.5	11,780.4	6,672.3	144.7	145.8	-84.51	839.0	5,039.7	995.5	706.2	289.28	3.441			
11,900.0	6,764.8	11,880.4	6,671.2	147.5	148.6	-84.49	839.0	5,139.7	995.5	700.7	294.83	3.377			
12,000.0	6,764.0	11,980.4	6,670.0	150.3	151.4	-84.47	839.0	5,239.6	995.6	695.2	300.38	3.314			
12,100.0	6,763.2	12,080.4	6,668.9	153.1	154.2	-84.45	839.0	5,339.6	995.6	689.7	305.93	3.254			
12,200.0	6,762.5	12,180.4	6,667.8	155.9	157.0	-84.42	839.0	5,439.6	995.7	684.2	311.49	3.196			
12,300.0	6,761.7	12,280.4	6,666.6	158.7	159.8	-84.40	839.0	5,539.6	995.7	678.7	317.04	3.141			
12,400.0	6,761.0	12,380.4	6,665.5	161.5	162.6	-84.38	839.0	5,639.6	995.7	673.1	322.60	3.087			
12,500.0	6,760.2	12,480.4	6,664.4	164.3	165.4	-84.36	839.0	5,739.6	995.8	667.6	328.15	3.034			
12,600.0	6,759.5	12,580.4	6,663.2	167.1	168.1	-84.34	839.0	5,839.6	995.8	662.1	333.71	2.984			
12,700.0	6,758.7	12,680.4	6,662.1	169.9	170.9	-84.32	839.0	5,939.6	995.8	656.6	339.27	2.935			
12,800.0	6,758.0	12,780.4	6,661.0	172.7	173.7	-84.29	839.0	6,039.6	995.9	651.1	344.82	2.888			
12,900.0	6,757.2	12,880.4	6,659.8	175.5	176.5	-84.27	839.0	6,139.6	995.9	645.5	350.38	2.842			
13,000.0	6,756.5	12,980.4	6,658.7	178.3	179.3	-84.25	839.0	6,239.6	996.0	640.0	355.94	2.798			
13,100.0	6,755.7	13,080.4	6,657.6	181.1	182.1	-84.23	839.0	6,339.6	996.0	634.5	361.50	2.755			
13,200.0	6,755.0	13,180.4	6,656.4	183.9	184.9	-84.21	839.0	6,439.6	996.0	629.0	367.05	2.714			
13,300.0	6,754.2	13,280.4	6,655.3	186.7	187.7	-84.18	839.0	6,539.6	996.1	623.5	372.61	2.673			
13,400.0	6,753.5	13,380.4	6,654.2	189.5	190.5	-84.16	839.0	6,639.5	996.1	617.9	378.17	2.634			
13,500.0	6,752.7	13,480.4	6,653.0	192.3	193.3	-84.14	839.0	6,739.5	996.2	612.4	383.73	2.596			
13,600.0	6,752.0	13,580.4	6,651.9	195.1	196.1	-84.12	839.0	6,839.5	996.2	606.9	389.29	2.559			
13,700.0	6,751.2	13,680.4	6,650.8	197.9	198.9	-84.10	839.0	6,939.5	996.2	601.4	394.85	2.523			
13,800.0	6,750.5	13,780.4	6,649.6	200.7	201.7	-84.07	839.0	7,039.5	996.3	595.9	400.41	2.488			
13,832.3	6,750.2	13,812.7	6,649.3	201.3	202.6	-84.07	839.0	7,071.8	996.3	594.4	401.88	2.479			
13,865.5	6,750.0	13,835.6	6,649.0	201.9	203.2	-84.06	839.0	7,094.7	996.3	593.2	403.11	2.472 SF			

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-1										Offset Site Error:		0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	1.0	1.0	0.0	0.0	-90.00	0.0	-58.5	58.5	58.5	0.00	N/A		
100.0	100.0	101.0	101.0	0.1	0.1	-90.00	0.0	-58.5	58.5	58.3	0.23	257.786		
200.0	200.0	201.0	201.0	0.3	0.3	-90.00	0.0	-58.5	58.5	57.8	0.68	86.500		
300.0	300.0	301.0	301.0	0.6	0.6	-90.00	0.0	-58.5	58.5	57.4	1.13	51.969		
400.0	400.0	401.0	401.0	0.8	0.8	-90.00	0.0	-58.5	58.5	56.9	1.58	37.142		
500.0	500.0	501.0	501.0	1.0	1.0	-90.00	0.0	-58.5	58.5	56.5	2.03	28.897		
600.0	600.0	601.0	601.0	1.2	1.2	-90.00	0.0	-58.5	58.5	56.0	2.47	23.648		
700.0	700.0	701.0	701.0	1.5	1.5	-90.00	0.0	-58.5	58.5	55.6	2.92	20.013		
800.0	800.0	801.0	801.0	1.7	1.7	-90.00	0.0	-58.5	58.5	55.1	3.37	17.346		
900.0	900.0	901.0	901.0	1.9	1.9	-90.00	0.0	-58.5	58.5	54.7	3.82	15.307		
966.3	966.3	967.3	967.3	2.1	2.1	-90.00	0.0	-58.5	58.5	54.4	4.12	14.199 CC		
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.00	0.0	-58.5	58.5	54.2	4.27	13.696 ES		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-88.45	1.6	-59.2	59.2	54.5	4.72	12.550		
1,200.0	1,200.0	1,199.1	1,198.9	2.6	2.6	-84.06	6.4	-61.2	61.6	56.4	5.17	11.914		
1,300.0	1,300.0	1,297.6	1,297.0	2.8	2.8	-77.56	14.2	-64.5	66.2	60.6	5.62	11.774		
1,400.0	1,400.0	1,395.6	1,394.3	3.0	3.1	-70.03	25.1	-69.1	73.8	67.7	6.09	12.126		
1,500.0	1,500.0	1,494.7	1,492.6	3.3	3.3	-63.35	37.2	-74.1	83.4	76.8	6.57	12.695		
1,600.0	1,600.0	1,593.8	1,590.8	3.5	3.6	-58.10	49.3	-79.2	93.9	86.8	7.06	13.290		
1,700.0	1,700.0	1,692.9	1,689.1	3.7	3.9	-53.93	61.4	-84.3	105.0	97.4	7.57	13.874		
1,800.0	1,800.0	1,792.1	1,787.3	3.9	4.1	-50.57	73.5	-89.4	116.5	108.5	8.08	14.429		
1,900.0	1,900.0	1,891.2	1,885.6	4.2	4.4	-47.82	85.6	-94.5	128.4	119.8	8.59	14.949		
2,000.0	2,000.0	1,990.3	1,983.8	4.4	4.7	-45.53	97.7	-99.6	140.6	131.5	9.11	15.431		
2,100.0	2,100.0	2,089.4	2,082.1	4.6	5.0	-43.62	109.8	-104.6	152.9	143.2	9.63	15.877		
2,200.0	2,200.0	2,188.5	2,180.3	4.8	5.3	-41.98	121.9	-109.7	165.3	155.2	10.15	16.289		
2,300.0	2,300.0	2,287.7	2,278.5	5.1	5.7	-40.58	134.0	-114.8	177.9	167.2	10.67	16.668		
2,400.0	2,400.0	2,386.8	2,376.8	5.3	6.0	-39.37	146.1	-119.9	190.6	179.4	11.20	17.019		
2,500.0	2,500.0	2,485.9	2,475.0	5.5	6.3	-38.30	158.2	-125.0	203.3	191.6	11.72	17.343		
2,600.0	2,600.0	2,585.0	2,573.2	5.7	6.6	82.32	170.3	-130.1	215.9	204.3	11.55	18.691		
2,700.0	2,699.8	2,683.9	2,671.3	5.9	6.9	84.19	182.4	-135.1	228.2	216.2	11.96	19.073		
2,800.0	2,799.5	2,782.5	2,769.0	6.1	7.2	86.66	194.5	-140.2	240.6	228.2	12.38	19.428		
2,900.0	2,898.7	2,880.7	2,866.4	6.3	7.5	89.67	206.5	-145.2	253.4	240.6	12.81	19.781		
3,000.0	2,997.9	2,978.8	2,963.6	6.5	7.8	92.66	218.4	-150.3	267.0	253.7	13.25	20.143		
3,100.0	3,097.2	3,077.0	3,060.9	6.7	8.2	95.36	230.4	-155.3	281.2	267.5	13.71	20.509		
3,200.0	3,196.4	3,175.1	3,158.2	7.0	8.5	97.80	242.4	-160.3	296.0	281.8	14.18	20.873		
3,300.0	3,295.6	3,273.2	3,255.5	7.2	8.8	100.01	254.4	-165.4	311.3	296.6	14.66	21.230		
3,400.0	3,394.8	3,371.4	3,352.7	7.5	9.1	102.01	266.4	-170.4	326.9	311.8	15.15	21.578		
3,500.0	3,494.0	3,469.5	3,450.0	7.7	9.4	103.83	278.4	-175.4	343.0	327.3	15.65	21.916		
3,600.0	3,593.2	3,567.7	3,547.3	8.0	9.7	105.49	290.3	-180.5	359.3	343.2	16.16	22.243		
3,700.0	3,692.4	3,665.8	3,644.6	8.3	10.1	107.00	302.3	-185.5	376.0	359.3	16.67	22.558		
3,800.0	3,791.6	3,763.9	3,741.8	8.5	10.4	108.38	314.3	-190.5	392.8	375.6	17.18	22.861		
3,900.0	3,890.8	3,862.1	3,839.1	8.8	10.7	109.65	326.3	-195.5	409.9	392.2	17.70	23.152		
4,000.0	3,990.0	3,960.2	3,936.4	9.1	11.0	110.82	338.3	-200.6	427.1	408.9	18.23	23.431		
4,100.0	4,089.2	4,058.4	4,033.7	9.4	11.3	111.90	350.3	-205.6	444.5	425.8	18.76	23.699		
4,200.0	4,188.4	4,156.5	4,130.9	9.6	11.7	112.90	362.2	-210.6	462.1	442.8	19.29	23.957		
4,300.0	4,287.6	4,254.6	4,228.2	9.9	12.0	113.83	374.2	-215.7	479.8	459.9	19.82	24.203		
4,400.0	4,386.8	4,352.8	4,325.5	10.2	12.3	114.69	386.2	-220.7	497.5	477.2	20.36	24.440		
4,500.0	4,486.1	4,450.9	4,422.8	10.5	12.6	115.49	398.2	-225.7	515.4	494.5	20.90	24.667		
4,600.0	4,585.3	4,549.1	4,520.0	10.8	13.0	116.23	410.2	-230.8	533.4	512.0	21.44	24.884		
4,700.0	4,684.5	4,647.2	4,617.3	11.1	13.3	116.93	422.2	-235.8	551.5	529.5	21.98	25.093		
4,800.0	4,783.7	4,745.3	4,714.6	11.4	13.6	117.58	434.1	-240.8	569.6	547.1	22.52	25.293		
4,900.0	4,882.9	4,843.5	4,811.9	11.7	13.9	118.20	446.1	-245.9	587.8	564.7	23.06	25.486		

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-1)										Offset Site Error:		0.0 ft
Survey Program:		0-MWD										Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.0	4,982.1	4,941.7	4,909.2	12.0	14.2	118.88	458.1	-250.9	605.9	582.3	23.61	25.659		
5,100.0	5,081.7	5,040.2	5,006.8	12.2	14.6	119.46	470.2	-256.0	622.7	598.6	24.13	25.802		
5,200.0	5,181.5	5,139.0	5,104.8	12.5	14.9	119.72	482.2	-261.0	637.8	613.1	24.63	25.898		
5,300.0	5,281.5	5,260.1	5,225.0	12.6	15.2	119.65	495.2	-266.5	649.7	624.6	25.09	25.899		
5,400.0	5,381.5	5,386.4	5,350.9	12.8	15.5	-0.11	503.9	-270.1	656.6	629.8	26.84	24.465		
5,500.0	5,481.5	5,513.2	5,477.7	13.0	15.7	-0.23	507.4	-271.6	659.4	632.1	27.26	24.190		
5,600.0	5,581.5	5,618.0	5,582.5	13.2	15.8	-0.24	507.4	-271.6	659.4	631.8	27.63	23.868		
5,700.0	5,681.5	5,718.0	5,682.5	13.4	16.0	-0.24	507.4	-271.6	659.4	631.4	28.01	23.544		
5,800.0	5,781.5	5,818.0	5,782.5	13.6	16.2	-0.24	507.4	-271.6	659.4	631.0	28.39	23.228		
5,900.0	5,881.5	5,918.0	5,882.5	13.8	16.4	-0.24	507.4	-271.6	659.4	630.6	28.77	22.919		
6,000.0	5,981.5	6,018.0	5,982.5	14.0	16.5	-0.24	507.4	-271.6	659.4	630.3	29.16	22.616		
6,100.0	6,081.4	6,118.1	6,082.6	14.2	16.7	-90.23	507.4	-270.2	659.4	631.1	28.28	23.314		
6,200.0	6,180.6	6,218.5	6,182.1	14.3	16.8	-90.22	507.4	-257.5	659.4	630.9	28.54	23.104		
6,300.0	6,277.3	6,318.8	6,279.0	14.4	16.9	-90.20	507.4	-231.8	659.4	630.7	28.72	22.959		
6,400.0	6,369.8	6,419.1	6,371.7	14.4	16.9	-90.17	507.4	-193.7	659.4	630.5	28.89	22.828		
6,500.0	6,456.6	6,519.3	6,458.5	14.5	16.9	-90.15	507.4	-143.9	659.4	630.3	29.13	22.635		
6,600.0	6,536.2	6,619.5	6,538.1	14.6	17.0	-90.12	507.4	-83.1	659.4	629.8	29.59	22.281		
6,700.0	6,607.3	6,719.7	6,609.0	14.9	17.0	-90.09	507.4	-12.5	659.4	629.0	30.43	21.668		
6,800.0	6,668.5	6,819.8	6,670.1	15.6	17.2	-90.06	507.4	66.8	659.4	627.6	31.79	20.740		
6,900.0	6,719.0	6,919.8	6,720.2	16.5	17.7	-90.03	507.4	153.3	659.4	625.6	33.79	19.517		
6,978.0	6,750.2	6,997.8	6,751.2	17.6	18.7	-90.00	507.4	224.8	659.4	623.6	35.82	18.411		
7,000.0	6,757.7	7,019.8	6,758.6	17.8	19.0	-89.99	507.4	245.6	659.4	623.0	36.43	18.099		
7,100.0	6,784.1	7,119.8	6,784.6	19.5	20.6	-89.96	507.4	342.0	659.4	619.7	39.68	16.620		
7,200.0	6,797.7	7,219.7	6,797.8	21.3	22.4	-89.93	507.4	441.0	659.4	616.0	43.39	15.196		
7,300.0	6,799.3	7,319.6	6,799.2	23.4	24.4	-89.91	507.4	540.9	659.4	612.0	47.45	13.898		
7,400.0	6,798.5	7,419.6	6,798.5	25.5	26.6	-89.91	507.4	640.9	659.4	607.6	51.78	12.736		
7,500.0	6,797.8	7,519.6	6,797.7	27.8	28.8	-89.91	507.4	740.9	659.4	603.1	56.33	11.706		
7,600.0	6,797.0	7,619.6	6,797.0	30.2	31.2	-89.91	507.4	840.8	659.4	598.3	61.07	10.798		
7,700.0	6,796.3	7,719.6	6,796.2	32.6	33.6	-89.91	507.4	940.8	659.4	593.5	65.94	10.000		
7,800.0	6,795.5	7,819.6	6,795.5	35.1	36.1	-89.91	507.4	1,040.8	659.4	588.5	70.92	9.298		
7,900.0	6,794.8	7,919.6	6,794.7	37.7	38.6	-89.91	507.4	1,140.8	659.4	583.4	75.99	8.677		
8,000.0	6,794.0	8,019.6	6,794.0	40.3	41.1	-89.91	507.4	1,240.8	659.4	578.3	81.14	8.127		
8,100.0	6,793.3	8,119.6	6,793.2	42.9	43.7	-89.91	507.4	1,340.8	659.4	573.1	86.34	7.637		
8,200.0	6,792.5	8,219.6	6,792.5	45.5	46.3	-89.91	507.4	1,440.8	659.4	567.8	91.59	7.199		
8,300.0	6,791.8	8,319.6	6,791.7	48.1	49.0	-89.91	507.4	1,540.8	659.4	562.5	96.89	6.806		
8,400.0	6,791.0	8,419.6	6,791.0	50.8	51.6	-89.91	507.4	1,640.8	659.4	557.2	102.22	6.451		
8,500.0	6,790.3	8,519.6	6,790.2	53.5	54.3	-89.91	507.4	1,740.8	659.4	551.8	107.57	6.130		
8,600.0	6,789.5	8,619.6	6,789.5	56.2	57.0	-89.91	507.4	1,840.8	659.4	546.5	112.96	5.838		
8,700.0	6,788.8	8,719.6	6,788.7	58.9	59.7	-89.91	507.4	1,940.8	659.4	541.1	118.36	5.571		
8,800.0	6,788.0	8,819.6	6,788.0	61.6	62.4	-89.91	507.4	2,040.8	659.4	535.6	123.78	5.327		
8,900.0	6,787.3	8,919.6	6,787.2	64.3	65.1	-89.91	507.4	2,140.8	659.4	530.2	129.22	5.103		
9,000.0	6,786.5	9,019.6	6,786.5	67.1	67.8	-89.91	507.4	2,240.8	659.4	524.7	134.68	4.896		
9,100.0	6,785.8	9,119.6	6,785.7	69.8	70.5	-89.91	507.4	2,340.8	659.4	519.3	140.15	4.705		
9,200.0	6,785.0	9,219.6	6,785.0	72.5	73.3	-89.91	507.4	2,440.8	659.4	513.8	145.63	4.528		
9,300.0	6,784.3	9,319.6	6,784.2	75.3	76.0	-89.91	507.4	2,540.8	659.4	508.3	151.12	4.364		
9,400.0	6,783.5	9,419.6	6,783.5	78.0	78.7	-89.91	507.4	2,640.8	659.4	502.8	156.61	4.210		
9,500.0	6,782.8	9,519.6	6,782.7	80.8	81.5	-89.91	507.4	2,740.8	659.4	497.3	162.12	4.067		
9,600.0	6,782.0	9,619.6	6,782.0	83.5	84.2	-89.91	507.4	2,840.8	659.4	491.8	167.64	3.934		
9,700.0	6,781.3	9,719.6	6,781.2	86.3	87.0	-89.91	507.4	2,940.8	659.4	486.3	173.16	3.808		
9,800.0	6,780.5	9,819.6	6,780.5	89.1	89.7	-89.91	507.4	3,040.8	659.4	480.7	178.68	3.690		

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26H-432 - Wellbore #1 - Plan #1 (8-13-1										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
9,900.0	6,779.8	9,919.6	6,779.7	91.8	92.5	-89.91	507.4	3,140.8	659.4	475.2	184.22	3.580			
10,000.0	6,779.0	10,019.6	6,779.0	94.6	95.3	-89.91	507.4	3,240.8	659.4	469.7	189.75	3.475			
10,100.0	6,778.3	10,119.6	6,778.2	97.4	98.0	-89.91	507.4	3,340.8	659.4	464.1	195.30	3.376			
10,200.0	6,777.5	10,219.6	6,777.5	100.2	100.8	-89.91	507.4	3,440.8	659.4	458.6	200.84	3.283			
10,300.0	6,776.8	10,319.6	6,776.7	102.9	103.6	-89.91	507.4	3,540.8	659.4	453.0	206.39	3.195			
10,400.0	6,776.0	10,419.6	6,776.0	105.7	106.4	-89.91	507.4	3,640.8	659.4	447.5	211.95	3.111			
10,500.0	6,775.3	10,519.6	6,775.2	108.5	109.1	-89.91	507.4	3,740.8	659.4	441.9	217.50	3.032			
10,600.0	6,774.5	10,619.6	6,774.5	111.3	111.9	-89.91	507.4	3,840.8	659.4	436.4	223.06	2.956			
10,700.0	6,773.8	10,719.6	6,773.7	114.1	114.7	-89.91	507.4	3,940.8	659.4	430.8	228.63	2.884			
10,800.0	6,773.0	10,819.6	6,773.0	116.8	117.5	-89.91	507.4	4,040.8	659.4	425.2	234.19	2.816			
10,900.0	6,772.3	10,919.6	6,772.2	119.6	120.2	-89.91	507.4	4,140.8	659.4	419.7	239.76	2.750			
11,000.0	6,771.5	11,019.6	6,771.5	122.4	123.0	-89.91	507.4	4,240.8	659.4	414.1	245.33	2.688			
11,100.0	6,770.8	11,119.6	6,770.7	125.2	125.8	-89.91	507.4	4,340.7	659.4	408.5	250.90	2.628			
11,200.0	6,770.0	11,219.6	6,770.0	128.0	128.6	-89.91	507.4	4,440.7	659.4	402.9	256.48	2.571			
11,300.0	6,769.3	11,319.6	6,769.2	130.8	131.4	-89.91	507.4	4,540.7	659.4	397.4	262.05	2.516			
11,400.0	6,768.5	11,419.6	6,768.5	133.6	134.2	-89.91	507.4	4,640.7	659.4	391.8	267.63	2.464			
11,500.0	6,767.8	11,519.6	6,767.7	136.3	137.0	-89.91	507.4	4,740.7	659.4	386.2	273.21	2.414			
11,600.0	6,767.0	11,619.6	6,767.0	139.1	139.7	-89.91	507.4	4,840.7	659.4	380.6	278.79	2.365			
11,700.0	6,766.3	11,719.6	6,766.2	141.9	142.5	-89.91	507.4	4,940.7	659.4	375.0	284.37	2.319			
11,800.0	6,765.5	11,819.6	6,765.5	144.7	145.3	-89.91	507.4	5,040.7	659.4	369.5	289.96	2.274			
11,900.0	6,764.8	11,919.6	6,764.7	147.5	148.1	-89.91	507.4	5,140.7	659.4	363.9	295.54	2.231			
12,000.0	6,764.0	12,019.6	6,764.0	150.3	150.9	-89.91	507.4	5,240.7	659.4	358.3	301.13	2.190			
12,100.0	6,763.2	12,119.6	6,763.2	153.1	153.7	-89.91	507.4	5,340.7	659.4	352.7	306.72	2.150			
12,200.0	6,762.5	12,219.6	6,762.5	155.9	156.5	-89.91	507.4	5,440.7	659.4	347.1	312.31	2.111			
12,300.0	6,761.7	12,319.6	6,761.7	158.7	159.3	-89.91	507.4	5,540.7	659.4	341.5	317.90	2.074			
12,400.0	6,761.0	12,419.6	6,761.0	161.5	162.1	-89.91	507.4	5,640.7	659.4	335.9	323.49	2.038			
12,500.0	6,760.2	12,519.6	6,760.2	164.3	164.9	-89.91	507.4	5,740.7	659.4	330.3	329.08	2.004			
12,600.0	6,759.5	12,619.6	6,759.5	167.1	167.7	-89.91	507.4	5,840.7	659.4	324.7	334.67	1.970			
12,700.0	6,758.7	12,719.6	6,758.7	169.9	170.5	-89.91	507.4	5,940.7	659.4	319.1	340.26	1.938			
12,800.0	6,758.0	12,819.6	6,758.0	172.7	173.3	-89.91	507.4	6,040.7	659.4	313.6	345.86	1.907			
12,900.0	6,757.2	12,919.6	6,757.2	175.5	176.1	-89.91	507.4	6,140.7	659.4	308.0	351.45	1.876			
13,000.0	6,756.5	13,019.6	6,756.5	178.3	178.8	-89.91	507.4	6,240.7	659.4	302.4	357.05	1.847			
13,100.0	6,755.7	13,119.6	6,755.7	181.1	181.6	-89.91	507.4	6,340.7	659.4	296.8	362.65	1.818			
13,200.0	6,755.0	13,219.6	6,755.0	183.9	184.4	-89.91	507.4	6,440.7	659.4	291.2	368.24	1.791			
13,300.0	6,754.2	13,319.6	6,754.2	186.7	187.2	-89.91	507.4	6,540.7	659.4	285.6	373.84	1.764			
13,400.0	6,753.5	13,419.6	6,753.5	189.5	190.0	-89.91	507.4	6,640.7	659.4	280.0	379.44	1.738			
13,500.0	6,752.7	13,519.6	6,752.7	192.3	192.8	-89.91	507.4	6,740.7	659.4	274.4	385.04	1.713			
13,600.0	6,752.0	13,619.6	6,751.9	195.1	195.6	-89.91	507.4	6,840.7	659.4	268.8	390.64	1.688			
13,700.0	6,751.2	13,719.6	6,751.2	197.9	198.4	-89.91	507.4	6,940.7	659.4	263.2	396.24	1.664			
13,800.0	6,750.5	13,819.6	6,750.4	200.7	201.2	-89.91	507.4	7,040.7	659.4	257.6	401.84	1.641			
13,836.0	6,750.2	13,855.6	6,750.2	201.3	202.2	-89.91	507.4	7,076.7	659.4	255.9	403.50	1.634			
13,865.5	6,750.0	13,879.4	6,750.0	201.9	202.9	-89.91	507.4	7,100.4	659.4	254.7	404.69	1.629 SF			

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
0.0	0.0		1.0		0.0	0.0	-90.00	0.0	-27.9	27.9	27.9	0.00	N/A		
100.0	100.0	101.0	101.0		0.1	0.1	-90.00	0.0	-27.9	27.9	27.6	0.23	122.755		
200.0	200.0	201.0	201.0		0.3	0.3	-90.00	0.0	-27.9	27.9	27.2	0.68	41.190		
300.0	300.0	301.0	301.0		0.6	0.6	-90.00	0.0	-27.9	27.9	26.7	1.13	24.747		
400.0	400.0	401.0	401.0		0.8	0.8	-90.00	0.0	-27.9	27.9	26.3	1.58	17.687		
500.0	500.0	501.0	501.0		1.0	1.0	-90.00	0.0	-27.9	27.9	25.8	2.03	13.761		
600.0	600.0	601.0	601.0		1.2	1.2	-90.00	0.0	-27.9	27.9	25.4	2.47	11.261		
700.0	700.0	701.0	701.0		1.5	1.5	-90.00	0.0	-27.9	27.9	24.9	2.92	9.530		
800.0	800.0	801.0	801.0		1.7	1.7	-90.00	0.0	-27.9	27.9	24.5	3.37	8.260		
900.0	900.0	901.0	901.0		1.9	1.9	-90.00	0.0	-27.9	27.9	24.0	3.82	7.289		
1,000.0	1,000.0	1,001.0	1,001.0		2.1	2.1	-90.00	0.0	-27.9	27.9	23.6	4.27	6.522		
1,100.0	1,100.0	1,101.0	1,101.0		2.4	2.4	-90.00	0.0	-27.9	27.9	23.1	4.72	5.901		
1,200.0	1,200.0	1,201.0	1,201.0		2.6	2.6	-90.00	0.0	-27.9	27.9	22.7	5.17	5.388		
1,300.0	1,300.0	1,301.0	1,301.0		2.8	2.8	-90.00	0.0	-27.9	27.9	22.2	5.62	4.957		
1,400.0	1,400.0	1,401.0	1,401.0		3.0	3.0	-90.00	0.0	-27.9	27.9	21.8	6.07	4.590		
1,500.0	1,500.0	1,501.0	1,501.0		3.3	3.3	-90.00	0.0	-27.9	27.9	21.3	6.52	4.274		
1,600.0	1,600.0	1,601.0	1,601.0		3.5	3.5	-90.00	0.0	-27.9	27.9	20.9	6.97	3.998		
1,700.0	1,700.0	1,701.0	1,701.0		3.7	3.7	-90.00	0.0	-27.9	27.9	20.4	7.42	3.756		
1,766.3	1,766.3	1,767.3	1,767.3		3.9	3.9	-90.00	0.0	-27.9	27.9	20.1	7.72	3.611 CC		
1,800.0	1,800.0	1,801.0	1,801.0		3.9	3.9	-90.00	0.0	-27.9	27.9	20.0	7.87	3.541 ES		
1,900.0	1,900.0	1,900.0	1,900.0		4.2	4.2	-87.96	1.0	-29.3	29.3	21.0	8.31	3.526		
2,000.0	2,000.0	1,999.1	1,999.0		4.4	4.4	-82.95	4.1	-33.4	33.7	25.0	8.75	3.855		
2,100.0	2,100.0	2,097.6	2,097.1		4.6	4.6	-77.09	9.2	-40.3	41.5	32.3	9.19	4.512		
2,200.0	2,200.0	2,195.9	2,194.6		4.8	4.8	-71.90	16.2	-49.7	52.6	43.0	9.65	5.455		
2,300.0	2,300.0	2,295.0	2,293.0		5.1	5.1	-68.30	23.8	-59.8	64.9	54.8	10.11	6.416		
2,400.0	2,400.0	2,394.2	2,391.4		5.3	5.3	-65.85	31.4	-70.0	77.3	66.7	10.58	7.304		
2,500.0	2,500.0	2,493.4	2,489.7		5.5	5.6	-64.08	38.9	-80.1	89.8	78.8	11.06	8.122		
2,600.0	2,600.0	2,592.7	2,588.2		5.7	5.8	57.36	46.5	-90.3	101.5	90.1	11.38	8.918		
2,700.0	2,699.8	2,692.0	2,686.7		5.9	6.1	60.45	54.1	-100.5	111.5	99.7	11.78	9.462		
2,800.0	2,799.5	2,791.2	2,785.1		6.1	6.4	64.48	61.7	-110.7	120.3	108.1	12.20	9.860		
2,900.0	2,898.7	2,890.3	2,883.4		6.3	6.7	69.32	69.2	-120.8	128.4	115.8	12.63	10.167		
3,000.0	2,997.9	2,989.3	2,981.6		6.5	7.0	73.89	76.8	-131.0	137.3	124.2	13.09	10.486		
3,100.0	3,097.2	3,088.4	3,079.8		6.7	7.3	77.89	84.4	-141.1	146.9	133.3	13.56	10.827		
3,200.0	3,196.4	3,187.4	3,178.1		7.0	7.5	81.39	91.9	-151.3	157.1	143.0	14.05	11.178		
3,300.0	3,295.6	3,286.5	3,276.3		7.2	7.8	84.45	99.5	-161.4	167.8	153.3	14.56	11.530		
3,400.0	3,394.8	3,385.5	3,374.5		7.5	8.1	87.14	107.1	-171.6	179.0	163.9	15.07	11.878		
3,500.0	3,494.0	3,484.6	3,472.7		7.7	8.4	89.52	114.6	-181.7	190.5	174.9	15.59	12.218		
3,600.0	3,593.2	3,583.6	3,571.0		8.0	8.7	91.62	122.2	-191.9	202.3	186.2	16.12	12.547		
3,700.0	3,692.4	3,682.6	3,669.2		8.3	9.0	93.49	129.7	-202.0	214.3	197.7	16.66	12.865		
3,800.0	3,791.6	3,781.7	3,767.4		8.5	9.3	95.16	137.3	-212.2	226.6	209.4	17.20	13.169		
3,900.0	3,890.8	3,880.7	3,865.7		8.8	9.7	96.66	144.9	-222.3	239.0	221.2	17.75	13.460		
4,000.0	3,990.0	3,979.8	3,963.9		9.1	10.0	98.01	152.4	-232.5	251.5	233.2	18.31	13.738		
4,100.0	4,089.2	4,078.8	4,062.1		9.4	10.3	99.23	160.0	-242.6	264.2	245.3	18.87	14.004		
4,200.0	4,188.4	4,180.2	4,162.7		9.6	10.6	100.38	167.6	-252.9	276.9	257.5	19.42	14.254		
4,300.0	4,287.6	4,288.0	4,270.0		9.9	10.8	101.84	174.0	-261.5	287.4	267.5	19.95	14.410		
4,400.0	4,386.8	4,396.1	4,377.9		10.2	11.0	103.67	178.0	-266.8	295.2	274.7	20.46	14.426		
4,500.0	4,486.1	4,504.2	4,485.9		10.5	11.2	105.89	179.5	-268.8	300.3	279.3	20.97	14.320		
4,600.0	4,585.3	4,604.5	4,586.3		10.8	11.4	108.18	179.5	-268.9	304.0	282.5	21.47	14.160		
4,700.0	4,684.5	4,703.7	4,685.5		11.1	11.6	110.38	179.5	-268.9	308.2	286.2	21.98	14.018		
4,800.0	4,783.7	4,803.0	4,784.7		11.4	11.8	112.52	179.5	-268.9	312.8	290.3	22.49	13.906		
4,900.0	4,882.9	4,902.2	4,883.9		11.7	12.0	114.60	179.5	-268.9	317.9	294.9	23.00	13.822		

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 261-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W261 Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 261-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD												Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
							+N/-S (ft)	+E/-W (ft)							
5,000.0	4,982.1	5,001.4	4,983.1	12.0	12.2	116.61	179.5	-268.9	323.2	299.7	23.49	13.758			
5,100.0	5,081.7	5,101.0	5,082.7	12.2	12.4	118.14	179.5	-268.9	327.5	303.6	23.94	13.680			
5,200.0	5,181.5	5,200.8	5,182.5	12.5	12.6	119.09	179.5	-268.9	330.3	306.0	24.37	13.556			
5,300.0	5,281.5	5,300.7	5,282.5	12.6	12.8	119.47	179.5	-268.9	331.5	306.7	24.77	13.382			
5,400.0	5,381.5	5,400.7	5,382.5	12.8	13.0	0.01	179.5	-268.9	331.5	307.5	24.03	13.799			
5,500.0	5,481.5	5,500.7	5,482.5	13.0	13.2	0.01	179.5	-268.9	331.5	307.1	24.44	13.564			
5,600.0	5,581.5	5,600.7	5,582.5	13.2	13.4	0.01	179.5	-268.9	331.5	306.7	24.86	13.337			
5,700.0	5,681.5	5,700.7	5,682.5	13.4	13.6	0.01	179.5	-268.9	331.5	306.3	25.28	13.116			
5,800.0	5,781.5	5,800.7	5,782.5	13.6	13.8	0.01	179.5	-268.9	331.5	305.8	25.70	12.902			
5,900.0	5,881.5	5,900.7	5,882.5	13.8	14.0	0.01	179.5	-268.9	331.5	305.4	26.12	12.694			
5,938.0	5,919.5	5,938.7	5,920.4	13.9	14.1	0.05	179.5	-268.6	331.5	305.3	26.27	12.618			
6,000.0	5,981.5	6,000.4	5,982.0	14.0	14.1	0.74	179.5	-264.6	331.6	305.0	26.52	12.504			
6,100.0	6,081.4	6,097.7	6,077.9	14.2	14.3	-86.62	179.5	-248.2	332.1	304.3	27.87	11.918			
6,200.0	6,180.6	6,192.8	6,168.7	14.3	14.3	-83.76	179.5	-220.6	333.6	305.5	28.06	11.889			
6,300.0	6,277.3	6,286.0	6,253.8	14.4	14.4	-81.04	179.5	-182.7	335.7	307.6	28.18	11.913			
6,400.0	6,369.8	6,377.6	6,332.3	14.4	14.5	-78.51	179.5	-135.7	338.5	310.2	28.30	11.958			
6,500.0	6,456.6	6,467.7	6,403.6	14.5	14.6	-76.21	179.5	-80.6	341.6	313.0	28.51	11.981			
6,600.0	6,536.2	6,556.6	6,467.0	14.6	14.9	-74.16	179.5	-18.4	344.8	315.9	28.90	11.932			
6,700.0	6,607.3	6,644.4	6,522.2	14.9	15.5	-72.38	179.5	49.9	348.0	318.4	29.61	11.755			
6,800.0	6,668.5	6,731.4	6,568.7	15.6	16.3	-70.88	179.5	123.3	351.0	320.3	30.75	11.416			
6,900.0	6,719.0	6,817.6	6,606.4	16.5	17.3	-69.68	179.5	200.8	353.6	321.2	32.40	10.916			
7,000.0	6,757.7	6,900.0	6,634.0	17.8	18.5	-68.79	179.5	278.4	355.7	321.2	34.53	10.302			
7,100.0	6,784.1	6,988.5	6,654.1	19.5	20.1	-68.16	179.5	364.6	357.2	319.9	37.28	9.580			
7,200.0	6,797.7	7,073.6	6,663.9	21.3	21.7	-67.85	179.5	449.0	358.0	317.5	40.43	8.854			
7,300.0	6,799.3	7,163.2	6,664.7	23.4	23.6	-67.76	179.5	538.6	358.2	314.2	43.99	8.142			
7,400.0	6,798.5	7,263.2	6,663.1	25.5	25.7	-67.63	179.5	638.6	358.5	310.5	47.99	7.471			
7,500.0	6,797.8	7,363.2	6,661.4	27.8	28.0	-67.50	179.5	738.6	358.9	306.7	52.18	6.877			
7,600.0	6,797.0	7,463.2	6,659.8	30.2	30.4	-67.36	179.5	838.6	359.2	302.7	56.54	6.353			
7,700.0	6,796.3	7,563.2	6,658.1	32.6	32.8	-67.23	179.5	938.6	359.5	298.5	61.01	5.893			
7,800.0	6,795.5	7,663.2	6,656.5	35.1	35.3	-67.10	179.5	1,038.6	359.9	294.3	65.58	5.488			
7,900.0	6,794.8	7,763.2	6,654.9	37.7	37.9	-66.97	179.5	1,138.5	360.2	290.0	70.23	5.130			
8,000.0	6,794.0	7,863.2	6,653.2	40.3	40.5	-66.84	179.5	1,238.5	360.6	285.7	74.93	4.812			
8,100.0	6,793.3	7,963.2	6,651.6	42.9	43.1	-66.71	179.5	1,338.5	360.9	281.3	79.68	4.530			
8,200.0	6,792.5	8,063.2	6,649.9	45.5	45.7	-66.58	179.5	1,438.5	361.3	276.8	84.46	4.278			
8,300.0	6,791.8	8,163.2	6,648.3	48.1	48.3	-66.45	179.5	1,538.5	361.6	272.4	89.27	4.051			
8,400.0	6,791.0	8,263.2	6,646.7	50.8	51.0	-66.32	179.5	1,638.4	362.0	267.9	94.11	3.847			
8,500.0	6,790.3	8,363.2	6,645.0	53.5	53.7	-66.19	179.5	1,738.4	362.4	263.4	98.96	3.661			
8,600.0	6,789.5	8,463.2	6,643.4	56.2	56.4	-66.07	179.5	1,838.4	362.7	258.9	103.83	3.493			
8,700.0	6,788.8	8,563.2	6,641.7	58.9	59.1	-65.94	179.5	1,938.4	363.1	254.4	108.71	3.340			
8,800.0	6,788.0	8,663.2	6,640.1	61.6	61.8	-65.81	179.5	2,038.4	363.4	249.8	113.60	3.199			
8,900.0	6,787.3	8,763.2	6,638.5	64.3	64.5	-65.68	179.5	2,138.4	363.8	245.3	118.49	3.070			
9,000.0	6,786.5	8,863.2	6,636.8	67.1	67.3	-65.55	179.5	2,238.3	364.2	240.8	123.39	2.951			
9,100.0	6,785.8	8,963.1	6,635.2	69.8	70.0	-65.43	179.5	2,338.3	364.5	236.3	128.29	2.842			
9,200.0	6,785.0	9,063.1	6,633.5	72.5	72.7	-65.30	179.5	2,438.3	364.9	231.7	133.19	2.740			
9,300.0	6,784.3	9,163.1	6,631.9	75.3	75.5	-65.17	179.5	2,538.3	365.3	227.2	138.09	2.645			
9,400.0	6,783.5	9,263.1	6,630.3	78.0	78.2	-65.05	179.5	2,638.3	365.7	222.7	142.99	2.557			
9,500.0	6,782.8	9,363.1	6,628.6	80.8	81.0	-64.92	179.5	2,738.3	366.0	218.2	147.88	2.475			
9,600.0	6,782.0	9,463.1	6,627.0	83.5	83.7	-64.79	179.5	2,838.2	366.4	213.6	152.77	2.398			
9,700.0	6,781.3	9,563.1	6,625.3	86.3	86.5	-64.67	179.5	2,938.2	366.8	209.1	157.66	2.326			
9,800.0	6,780.5	9,663.1	6,623.7	89.1	89.3	-64.54	179.5	3,038.2	367.2	204.6	162.55	2.259			

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design		Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W - Loloff Farms 26I-212 - Wellbore #1 - Plan #1 (8-13-14)										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
9,900.0	6,779.8	9,763.1	6,622.1	91.8	92.0	-64.42	179.5	3,138.2	367.6	200.1	167.43	2.195		
10,000.0	6,779.0	9,863.1	6,620.4	94.6	94.8	-64.29	179.5	3,238.2	368.0	195.7	172.30	2.136		
10,100.0	6,778.3	9,963.1	6,618.8	97.4	97.6	-64.17	179.5	3,338.2	368.3	191.2	177.17	2.079		
10,200.0	6,777.5	10,063.1	6,617.1	100.2	100.3	-64.04	179.5	3,438.1	368.7	186.7	182.03	2.026		
10,300.0	6,776.8	10,163.1	6,615.5	102.9	103.1	-63.92	179.5	3,538.1	369.1	182.2	186.89	1.975		
10,400.0	6,776.0	10,263.1	6,613.9	105.7	105.9	-63.80	179.5	3,638.1	369.5	177.8	191.73	1.927		
10,500.0	6,775.3	10,363.1	6,612.2	108.5	108.7	-63.67	179.5	3,738.1	369.9	173.3	196.58	1.882		
10,600.0	6,774.5	10,463.1	6,610.6	111.3	111.5	-63.55	179.5	3,838.1	370.3	168.9	201.41	1.839		
10,700.0	6,773.8	10,563.1	6,608.9	114.1	114.2	-63.42	179.5	3,938.0	370.7	164.5	206.23	1.797		
10,800.0	6,773.0	10,663.1	6,607.3	116.8	117.0	-63.30	179.5	4,038.0	371.1	160.0	211.05	1.758		
10,900.0	6,772.3	10,763.1	6,605.7	119.6	119.8	-63.18	179.5	4,138.0	371.5	155.6	215.86	1.721		
11,000.0	6,771.5	10,863.1	6,604.0	122.4	122.6	-63.06	179.5	4,238.0	371.9	151.2	220.66	1.685		
11,100.0	6,770.8	10,963.1	6,602.4	125.2	125.4	-62.93	179.5	4,338.0	372.3	146.8	225.46	1.651		
11,200.0	6,770.0	11,063.1	6,600.7	128.0	128.2	-62.81	179.5	4,438.0	372.7	142.5	230.24	1.619		
11,300.0	6,769.3	11,163.1	6,599.1	130.8	131.0	-62.69	179.5	4,537.9	373.1	138.1	235.02	1.588		
11,400.0	6,768.5	11,263.1	6,597.5	133.6	133.7	-62.57	179.5	4,637.9	373.5	133.7	239.79	1.558		
11,500.0	6,767.8	11,363.1	6,595.8	136.3	136.5	-62.45	179.5	4,737.9	373.9	129.4	244.54	1.529		
11,600.0	6,767.0	11,463.1	6,594.2	139.1	139.3	-62.33	179.5	4,837.9	374.3	125.1	249.29	1.502		
11,700.0	6,766.3	11,563.0	6,592.5	141.9	142.1	-62.21	179.5	4,937.9	374.8	120.7	254.03	1.475	Level 3	
11,800.0	6,765.5	11,663.0	6,590.9	144.7	144.9	-62.09	179.5	5,037.9	375.2	116.4	258.76	1.450	Level 3	
11,900.0	6,764.8	11,763.0	6,589.2	147.5	147.7	-61.97	179.5	5,137.8	375.6	112.1	263.48	1.426	Level 3	
12,000.0	6,764.0	11,863.0	6,587.6	150.3	150.5	-61.85	179.5	5,237.8	376.0	107.8	268.20	1.402	Level 3	
12,100.0	6,763.2	11,963.0	6,586.0	153.1	153.3	-61.73	179.5	5,337.8	376.4	103.5	272.90	1.379	Level 3	
12,200.0	6,762.5	12,063.0	6,584.3	155.9	156.1	-61.61	179.5	5,437.8	376.9	99.3	277.59	1.358	Level 3	
12,300.0	6,761.7	12,163.0	6,582.7	158.7	158.9	-61.49	179.5	5,537.8	377.3	95.0	282.27	1.337	Level 3	
12,400.0	6,761.0	12,263.0	6,581.0	161.5	161.7	-61.37	179.5	5,637.8	377.7	90.8	286.95	1.316	Level 3	
12,500.0	6,760.2	12,363.0	6,579.4	164.3	164.5	-61.25	179.5	5,737.7	378.1	86.5	291.61	1.297	Level 3	
12,600.0	6,759.5	12,463.0	6,577.8	167.1	167.3	-61.13	179.5	5,837.7	378.6	82.3	296.26	1.278	Level 3	
12,700.0	6,758.7	12,563.0	6,576.1	169.9	170.1	-61.02	179.5	5,937.7	379.0	78.1	300.91	1.260	Level 3	
12,800.0	6,758.0	12,663.0	6,574.5	172.7	172.8	-60.90	179.5	6,037.7	379.4	73.9	305.54	1.242	Level 2	
12,900.0	6,757.2	12,763.0	6,572.8	175.5	175.6	-60.78	179.5	6,137.7	379.9	69.7	310.17	1.225	Level 2	
13,000.0	6,756.5	12,863.0	6,571.2	178.3	178.4	-60.67	179.5	6,237.6	380.3	65.5	314.78	1.208	Level 2	
13,100.0	6,755.7	12,963.0	6,569.6	181.1	181.2	-60.55	179.5	6,337.6	380.7	61.4	319.38	1.192	Level 2	
13,200.0	6,755.0	13,063.0	6,567.9	183.9	184.0	-60.43	179.5	6,437.6	381.2	57.2	323.98	1.177	Level 2	
13,300.0	6,754.2	13,163.0	6,566.3	186.7	186.8	-60.32	179.5	6,537.6	381.6	53.1	328.56	1.161	Level 2	
13,400.0	6,753.5	13,263.0	6,564.6	189.5	189.6	-60.20	179.5	6,637.6	382.1	48.9	333.13	1.147	Level 2	
13,500.0	6,752.7	13,363.0	6,563.0	192.3	192.4	-60.08	179.5	6,737.6	382.5	44.8	337.70	1.133	Level 2	
13,600.0	6,752.0	13,463.0	6,561.4	195.1	195.2	-59.97	179.5	6,837.5	382.9	40.7	342.25	1.119	Level 2	
13,700.0	6,751.2	13,563.0	6,559.7	197.9	198.0	-59.85	179.5	6,937.5	383.4	36.6	346.79	1.106	Level 2	
13,800.0	6,750.5	13,663.0	6,558.1	200.7	200.8	-59.74	179.5	7,037.5	383.8	32.5	351.32	1.093	Level 2	
13,865.5	6,750.0	13,728.4	6,557.0	201.9	202.7	-59.66	179.5	7,103.0	384.1	30.4	353.71	1.086	Level 2, SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 261-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W261 Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 261-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design														Offset Site Error:	0.0 ft
Suden (Existing) Pad Sec.34-T5N-R64W - Loloff B 35-29 (Exist) - Wellbore #1 - Wellbore #1														Offset Well Error:	0.0 ft
Survey Program: 6973-MWDD															
Reference		Offset		Semi Major Axis			Distance								
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	111.85	-335.2	836.0	901.2						
100.0	100.0	70.0	70.0	0.1	0.1	111.85	-335.2	836.0	900.7	900.5	0.19	4,709.583			
200.0	200.0	170.0	170.0	0.3	0.2	111.85	-335.2	836.0	900.7	900.2	0.53	1,704.602			
300.0	300.0	270.0	270.0	0.6	0.3	111.85	-335.2	836.0	900.7	899.8	0.87	1,040.624			
400.0	400.0	370.0	370.0	0.8	0.4	111.85	-335.2	836.0	900.7	899.5	1.20	748.909			
500.0	500.0	470.0	470.0	1.0	0.5	111.85	-335.2	836.0	900.7	899.2	1.54	584.936			
600.0	600.0	570.0	570.0	1.2	0.6	111.85	-335.2	836.0	900.7	898.8	1.88	479.868			
700.0	700.0	670.0	670.0	1.5	0.8	111.85	-335.2	836.0	900.7	898.5	2.21	406.799			
800.0	800.0	770.0	770.0	1.7	0.9	111.85	-335.2	836.0	900.7	898.2	2.55	353.041			
900.0	900.0	870.0	870.0	1.9	1.0	111.85	-335.2	836.0	900.7	897.8	2.89	311.833			
1,000.0	1,000.0	970.0	970.0	2.1	1.1	111.85	-335.2	836.0	900.7	897.5	3.23	279.239			
1,100.0	1,100.0	1,070.0	1,070.0	2.4	1.2	111.85	-335.2	836.0	900.7	897.1	3.56	252.814			
1,200.0	1,200.0	1,170.0	1,170.0	2.6	1.3	111.85	-335.2	836.0	900.7	896.8	3.90	230.958			
1,300.0	1,300.0	1,270.0	1,270.0	2.8	1.4	111.85	-335.2	836.0	900.7	896.5	4.24	212.580			
1,400.0	1,400.0	1,370.0	1,370.0	3.0	1.5	111.85	-335.2	836.0	900.7	896.1	4.57	196.912			
1,500.0	1,500.0	1,470.0	1,470.0	3.3	1.7	111.85	-335.2	836.0	900.7	895.8	4.91	183.394			
1,600.0	1,600.0	1,570.0	1,570.0	3.5	1.8	111.85	-335.2	836.0	900.7	895.5	5.25	171.614			
1,700.0	1,700.0	1,670.0	1,670.0	3.7	1.9	111.85	-335.2	836.0	900.7	895.1	5.59	161.255			
1,800.0	1,800.0	1,770.0	1,770.0	3.9	2.0	111.85	-335.2	836.0	900.7	894.8	5.92	152.076			
1,900.0	1,900.0	1,870.0	1,870.0	4.2	2.1	111.85	-335.2	836.0	900.7	894.4	6.26	143.885			
2,000.0	2,000.0	1,970.0	1,970.0	4.4	2.2	111.85	-335.2	836.0	900.7	894.1	6.60	136.532			
2,100.0	2,100.0	2,070.0	2,070.0	4.6	2.3	111.85	-335.2	836.0	900.7	893.8	6.93	129.893			
2,200.0	2,200.0	2,170.0	2,170.0	4.8	2.4	111.85	-335.2	836.0	900.7	893.4	7.27	123.871			
2,300.0	2,300.0	2,270.0	2,270.0	5.1	2.6	111.85	-335.2	836.0	900.7	893.1	7.61	118.382			
2,400.0	2,400.0	2,370.0	2,370.0	5.3	2.7	111.85	-335.2	836.0	900.7	892.8	7.95	113.359			
2,500.0	2,500.0	2,470.0	2,470.0	5.5	2.8	111.85	-335.2	836.0	900.7	892.4	8.28	108.744			
2,600.0	2,600.0	2,570.0	2,570.0	5.7	2.9	-128.75	-335.2	836.0	901.8	893.2	8.60	104.899			
2,700.0	2,699.8	2,669.8	2,669.8	5.9	3.0	-128.96	-335.2	836.0	905.1	896.2	8.89	101.819			
2,800.0	2,799.5	2,769.5	2,769.5	6.1	3.1	-129.30	-335.2	836.0	910.6	901.4	9.18	99.156			
2,900.0	2,898.7	2,868.7	2,868.7	6.3	3.2	-129.80	-335.2	836.0	918.2	908.7	9.49	96.795			
3,000.0	2,997.9	2,967.9	2,967.9	6.5	3.3	-130.40	-335.2	836.0	926.3	916.5	9.80	94.508			
3,100.0	3,097.2	3,067.2	3,067.2	6.7	3.4	-130.98	-335.2	836.0	934.6	924.5	10.12	92.312			
3,200.0	3,196.4	3,166.4	3,166.4	7.0	3.6	-131.55	-335.2	836.0	942.9	932.4	10.45	90.210			
3,300.0	3,295.6	3,265.6	3,265.6	7.2	3.7	-132.12	-335.2	836.0	951.3	940.5	10.79	88.203			
3,400.0	3,394.8	3,364.8	3,364.8	7.5	3.8	-132.67	-335.2	836.0	959.8	948.7	11.12	86.289			
3,500.0	3,494.0	3,464.0	3,464.0	7.7	3.9	-133.22	-335.2	836.0	968.4	957.0	11.47	84.466			
3,600.0	3,593.2	3,563.2	3,563.2	8.0	4.0	-133.75	-335.2	836.0	977.1	965.3	11.81	82.733			
3,700.0	3,692.4	3,662.4	3,662.4	8.3	4.1	-134.28	-335.2	836.0	985.9	973.7	12.16	81.085			
3,800.0	3,791.6	3,761.6	3,761.6	8.5	4.2	-134.79	-335.2	836.0	994.7	982.2	12.51	79.519			
6,500.0	6,456.6	6,426.6	6,426.6	14.5	7.2	12.64	-335.2	836.0	995.5	976.1	19.39	51.327			
6,600.0	6,536.2	6,506.2	6,506.2	14.6	7.3	14.79	-335.2	836.0	936.2	917.3	18.89	49.562			
6,700.0	6,607.3	6,577.3	6,577.3	14.9	7.4	18.04	-335.2	836.0	867.4	848.9	18.45	47.023			
6,800.0	6,668.5	6,638.5	6,638.5	15.6	7.5	23.04	-335.2	836.0	790.4	772.1	18.33	43.126			
6,900.0	6,719.0	6,689.0	6,689.0	16.5	7.5	30.97	-335.2	836.0	706.8	687.7	19.05	37.094			
7,000.0	6,757.7	6,727.7	6,727.7	17.8	7.6	43.52	-335.2	836.0	618.3	596.9	21.35	28.960			
7,100.0	6,784.1	6,754.1	6,754.1	19.5	7.6	61.60	-335.2	836.0	527.0	501.8	25.21	20.905			
7,200.0	6,797.7	6,767.7	6,767.7	21.3	7.6	81.31	-335.2	836.0	435.5	406.8	28.76	15.143			
7,300.0	6,799.3	6,769.3	6,769.3	23.4	7.6	90.69	-335.2	836.0	347.4	316.4	30.96	11.220			
7,400.0	6,798.5	6,768.5	6,768.5	25.5	7.6	90.46	-335.2	836.0	267.7	234.5	33.13	8.079			
7,500.0	6,797.8	6,767.8	6,767.8	27.8	7.6	90.22	-335.2	836.0	206.4	171.0	35.42	5.828			
7,595.2	6,797.1	6,767.1	6,767.1	30.1	7.6	90.00	-335.2	836.0	183.2	145.5	37.68	4.862 CC			

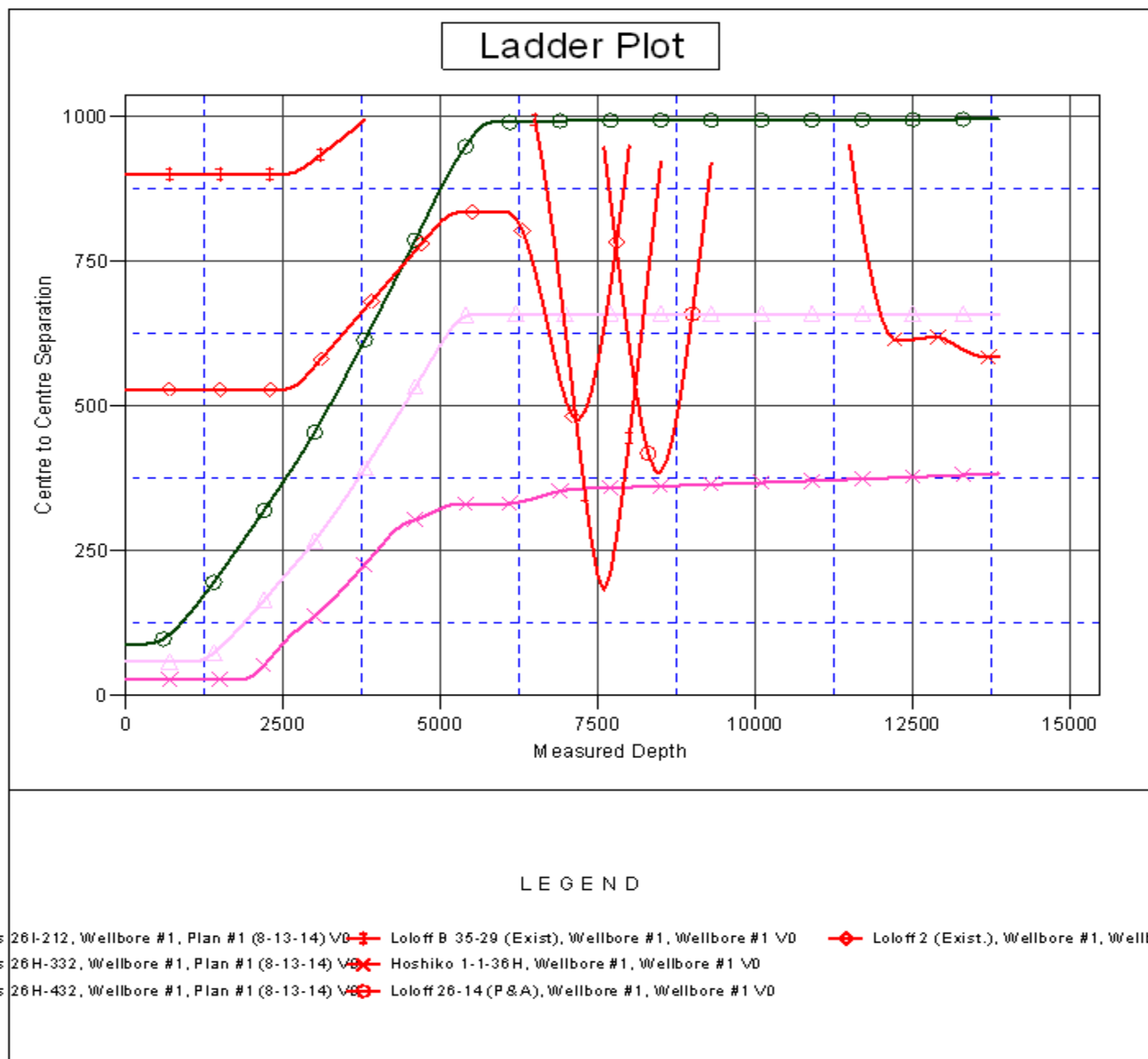
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Suden (Existing) Pad Sec.34-T5N-R64W - Loloff B 35-29 (Exist) - Wellbore #1 - Wellbore #1													Offset Well Error:	0.0 ft
Survey Program: 6973-MWD														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
7,600.0	6,797.0	6,767.0	6,767.0	30.2	7.6	89.99	-335.2	836.0	183.2	145.4	37.79	4.849	ES, SF	
7,700.0	6,796.3	6,766.3	6,766.3	32.6	7.6	89.75	-335.2	836.0	211.0	170.8	40.23	5.245		
7,800.0	6,795.5	6,765.5	6,765.5	35.1	7.6	89.52	-335.2	836.0	274.8	232.1	42.73	6.431		
7,900.0	6,794.8	6,764.8	6,764.8	37.7	7.6	89.28	-335.2	836.0	355.6	310.4	45.27	7.855		
8,000.0	6,794.0	6,764.0	6,764.0	40.3	7.6	89.05	-335.2	836.0	444.3	396.5	47.85	9.287		
8,100.0	6,793.3	6,763.3	6,763.3	42.9	7.6	88.82	-335.2	836.0	537.0	486.6	50.45	10.645		
8,200.0	6,792.5	6,762.5	6,762.5	45.5	7.6	88.58	-335.2	836.0	631.9	578.9	53.08	11.907		
8,300.0	6,791.8	6,761.8	6,761.8	48.1	7.6	88.35	-335.2	836.0	728.2	672.5	55.72	13.069		
8,400.0	6,791.0	6,761.0	6,761.0	50.8	7.6	88.11	-335.2	836.0	825.4	767.0	58.38	14.138		
8,500.0	6,790.3	6,760.3	6,760.3	53.5	7.6	87.88	-335.2	836.0	923.2	862.1	61.05	15.120		

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Loloff Farms 26I-402	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #1 (8-13-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4692.0ft (Original Well Elev) Coordinates are relative to: Loloff Farms 26I-402
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.63°



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Loloff Farms 26I-402
Project:	SEC.26-T5N-R64W	TVD Reference:	WELL @ 4692.0ft (Original Well Elev)
Reference Site:	Loloff Farms 5N64W26I Pad Sec.26-T5N-R64W	MD Reference:	WELL @ 4692.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
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Reference Wellbore	Wellbore #1	Database:	Landmark
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Reference Depths are relative to WELL @ 4692.0ft (Original Well Elev) Coordinates are relative to: Loloff Farms 26I-402

Offset Depths are relative to Offset Datum

Coordinate System is US State Plane 1983, Colorado Northern Zone

Central Meridian is -105.500000 °

Grid Convergence at Surface is: 0.63°

