

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: O Investment Properties 6Y-241

Surface Location: O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

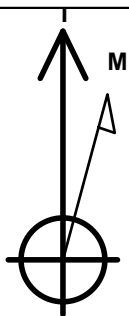
Ground Elevation: 4777.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1430039.54	3223049.07	40.511090	-104.697810	

RKB - 15' WELL @ 4792.0ft (RKB - 15')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
BHL 500'FNL, 480'FEL	7002.0	4309.9	-214.1	Point



Azimuths to True North
Magnetic North: 8.62°

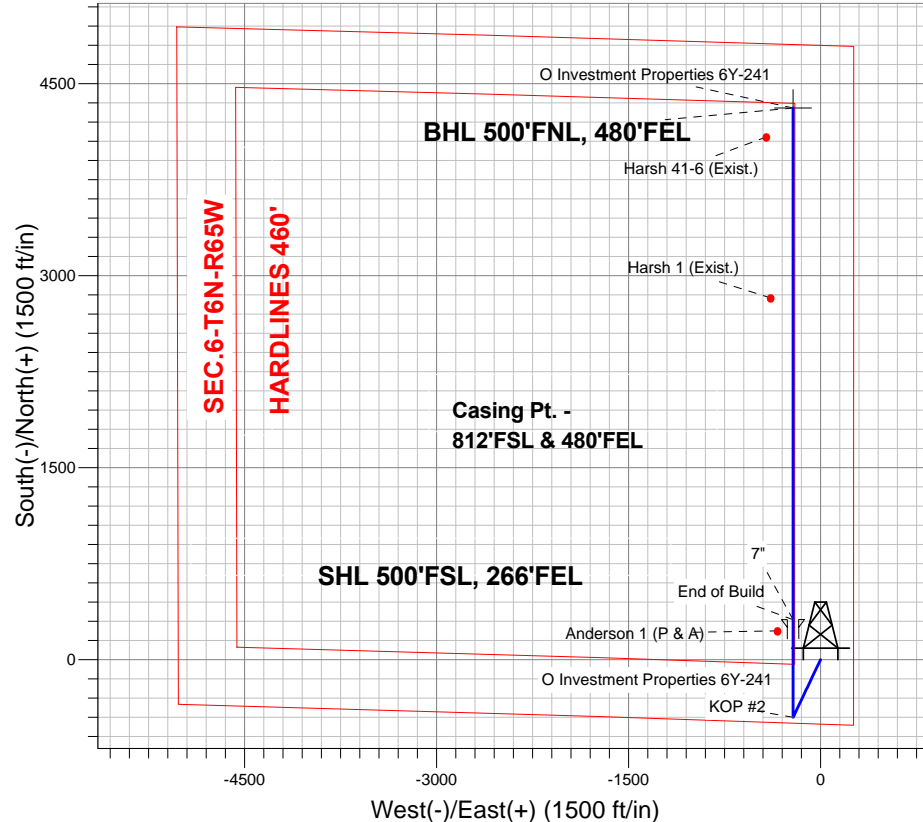
Magnetic Field
Strength: 53023.1nT
Dip Angle: 67.09°
Date: 2/7/2013
Model: IGRF2010

ANNOTATIONS

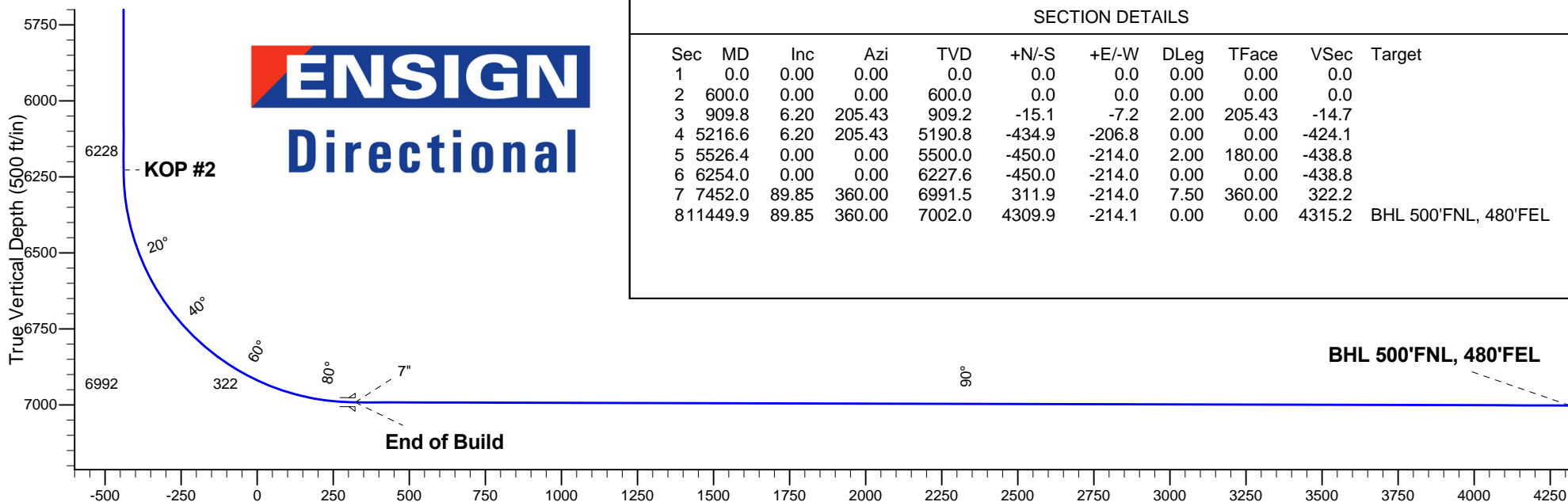
TVD	MD	Annotation
600.0	600.0	KOP #1
6227.6	6254.0	KOP #2
6991.5	7452.0	End of Build

O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W
O Investment Properties 6Y-241
Plan #1 (2-07-13)

South(-)/North(+) (1500 ft/in)



ENSIGN
Directional



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	909.8	6.20	205.43	909.2	-15.1	-7.2	2.00	205.43	-14.7	
4	5216.6	6.20	205.43	5190.8	-434.9	-206.8	0.00	0.00	-424.1	
5	5526.4	0.00	0.00	5500.0	-450.0	-214.0	2.00	180.00	-438.8	
6	6254.0	0.00	0.00	6227.6	-450.0	-214.0	0.00	0.00	-438.8	
7	7452.0	89.85	360.00	6991.5	311.9	-214.0	7.50	360.00	322.2	
8	11449.9	89.85	360.00	7002.0	4309.9	-214.1	0.00	0.00	4315.2	BHL 500'FNL, 480'FEL

Vertical Section at 357.16° (500 ft/in)



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.6-T6N-R65W

O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W

O Investment Properties 6Y-241

Wellbore #1

Plan: Plan #1 (2-07-13)

Standard Planning Report

22 February, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

Project	SEC.6-T6N-R65W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site						O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W											
Site Position:						Northing:			1,430,039.28 ft			Latitude:			40.511090		
From:			Lat/Long			Easting:			3,223,018.48 ft			Longitude:			-104.697920		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.52 °		

Well	O Investment Properties 6Y-241					
Well Position	+N/-S	0.0 ft	Northing:	1,430,039.54 ft	Latitude:	40.511090
	+E/-W	30.6 ft	Easting:	3,223,049.07 ft	Longitude:	-104.697810
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,777.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/7/2013	8.62	67.09	53,023

Design	Plan #1 (2-07-13)			
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	357.16

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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
909.8	6.20	205.43	909.2	-15.1	-7.2	2.00	2.00	0.00	205.43	
5,216.6	6.20	205.43	5,190.8	-434.9	-206.8	0.00	0.00	0.00	0.00	
5,526.4	0.00	0.00	5,500.0	-450.0	-214.0	2.00	-2.00	0.00	180.00	
6,254.0	0.00	0.00	6,227.6	-450.0	-214.0	0.00	0.00	0.00	0.00	
7,452.0	89.85	360.00	6,991.5	311.9	-214.0	7.50	7.50	0.00	360.00	
11,449.9	89.85	360.00	7,002.0	4,309.9	-214.1	0.00	0.00	0.00	0.00	BHL 500'FNL, 480'F

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Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	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
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	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
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	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
KOP #1									
640.0	0.80	205.43	640.0	-0.3	-0.1	-0.2	2.00	2.00	0.00
680.0	1.60	205.43	680.0	-1.0	-0.5	-1.0	2.00	2.00	0.00
720.0	2.40	205.43	720.0	-2.3	-1.1	-2.2	2.00	2.00	0.00
760.0	3.20	205.43	759.9	-4.0	-1.9	-3.9	2.00	2.00	0.00
800.0	4.00	205.43	799.8	-6.3	-3.0	-6.1	2.00	2.00	0.00
840.0	4.80	205.43	839.7	-9.1	-4.3	-8.8	2.00	2.00	0.00
880.0	5.60	205.43	879.6	-12.3	-5.9	-12.0	2.00	2.00	0.00
909.8	6.20	205.43	909.2	-15.1	-7.2	-14.7	2.00	2.00	0.00
920.0	6.20	205.43	919.3	-16.1	-7.7	-15.7	0.00	0.00	0.00
960.0	6.20	205.43	959.1	-20.0	-9.5	-19.5	0.00	0.00	0.00
1,000.0	6.20	205.43	998.9	-23.9	-11.4	-23.3	0.00	0.00	0.00
1,040.0	6.20	205.43	1,038.6	-27.8	-13.2	-27.1	0.00	0.00	0.00
1,080.0	6.20	205.43	1,078.4	-31.7	-15.1	-30.9	0.00	0.00	0.00
1,120.0	6.20	205.43	1,118.2	-35.6	-16.9	-34.7	0.00	0.00	0.00
1,160.0	6.20	205.43	1,157.9	-39.5	-18.8	-38.5	0.00	0.00	0.00
1,200.0	6.20	205.43	1,197.7	-43.4	-20.6	-42.3	0.00	0.00	0.00
1,240.0	6.20	205.43	1,237.5	-47.3	-22.5	-46.1	0.00	0.00	0.00
1,280.0	6.20	205.43	1,277.2	-51.2	-24.3	-49.9	0.00	0.00	0.00
1,320.0	6.20	205.43	1,317.0	-55.1	-26.2	-53.7	0.00	0.00	0.00
1,360.0	6.20	205.43	1,356.8	-59.0	-28.1	-57.5	0.00	0.00	0.00
1,400.0	6.20	205.43	1,396.5	-62.9	-29.9	-61.3	0.00	0.00	0.00
1,440.0	6.20	205.43	1,436.3	-66.8	-31.8	-65.1	0.00	0.00	0.00
1,480.0	6.20	205.43	1,476.1	-70.7	-33.6	-68.9	0.00	0.00	0.00
1,520.0	6.20	205.43	1,515.8	-74.6	-35.5	-72.7	0.00	0.00	0.00
1,560.0	6.20	205.43	1,555.6	-78.5	-37.3	-76.5	0.00	0.00	0.00
1,600.0	6.20	205.43	1,595.4	-82.4	-39.2	-80.3	0.00	0.00	0.00
1,640.0	6.20	205.43	1,635.1	-86.3	-41.0	-84.1	0.00	0.00	0.00
1,680.0	6.20	205.43	1,674.9	-90.2	-42.9	-87.9	0.00	0.00	0.00
1,720.0	6.20	205.43	1,714.7	-94.1	-44.7	-91.7	0.00	0.00	0.00
1,760.0	6.20	205.43	1,754.4	-98.0	-46.6	-95.5	0.00	0.00	0.00
1,800.0	6.20	205.43	1,794.2	-101.9	-48.4	-99.4	0.00	0.00	0.00
1,840.0	6.20	205.43	1,834.0	-105.8	-50.3	-103.2	0.00	0.00	0.00
1,880.0	6.20	205.43	1,873.7	-109.7	-52.2	-107.0	0.00	0.00	0.00
1,920.0	6.20	205.43	1,913.5	-113.6	-54.0	-110.8	0.00	0.00	0.00
1,960.0	6.20	205.43	1,953.3	-117.5	-55.9	-114.6	0.00	0.00	0.00

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Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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)
2,000.0	6.20	205.43	1,993.0	-121.4	-57.7	-118.4	0.00	0.00	0.00
2,040.0	6.20	205.43	2,032.8	-125.3	-59.6	-122.2	0.00	0.00	0.00
2,080.0	6.20	205.43	2,072.6	-129.2	-61.4	-126.0	0.00	0.00	0.00
2,120.0	6.20	205.43	2,112.3	-133.1	-63.3	-129.8	0.00	0.00	0.00
2,160.0	6.20	205.43	2,152.1	-137.0	-65.1	-133.6	0.00	0.00	0.00
2,200.0	6.20	205.43	2,191.9	-140.9	-67.0	-137.4	0.00	0.00	0.00
2,240.0	6.20	205.43	2,231.6	-144.8	-68.8	-141.2	0.00	0.00	0.00
2,280.0	6.20	205.43	2,271.4	-148.7	-70.7	-145.0	0.00	0.00	0.00
2,320.0	6.20	205.43	2,311.2	-152.6	-72.6	-148.8	0.00	0.00	0.00
2,360.0	6.20	205.43	2,350.9	-156.5	-74.4	-152.6	0.00	0.00	0.00
2,400.0	6.20	205.43	2,390.7	-160.4	-76.3	-156.4	0.00	0.00	0.00
2,440.0	6.20	205.43	2,430.5	-164.3	-78.1	-160.2	0.00	0.00	0.00
2,480.0	6.20	205.43	2,470.2	-168.2	-80.0	-164.0	0.00	0.00	0.00
2,520.0	6.20	205.43	2,510.0	-172.1	-81.8	-167.8	0.00	0.00	0.00
2,560.0	6.20	205.43	2,549.8	-176.0	-83.7	-171.6	0.00	0.00	0.00
2,600.0	6.20	205.43	2,589.5	-179.9	-85.5	-175.4	0.00	0.00	0.00
2,640.0	6.20	205.43	2,629.3	-183.8	-87.4	-179.2	0.00	0.00	0.00
2,680.0	6.20	205.43	2,669.1	-187.7	-89.2	-183.0	0.00	0.00	0.00
2,720.0	6.20	205.43	2,708.8	-191.6	-91.1	-186.8	0.00	0.00	0.00
2,760.0	6.20	205.43	2,748.6	-195.4	-92.9	-190.6	0.00	0.00	0.00
2,800.0	6.20	205.43	2,788.4	-199.3	-94.8	-194.4	0.00	0.00	0.00
2,840.0	6.20	205.43	2,828.1	-203.2	-96.7	-198.2	0.00	0.00	0.00
2,880.0	6.20	205.43	2,867.9	-207.1	-98.5	-202.0	0.00	0.00	0.00
2,920.0	6.20	205.43	2,907.7	-211.0	-100.4	-205.8	0.00	0.00	0.00
2,960.0	6.20	205.43	2,947.4	-214.9	-102.2	-209.6	0.00	0.00	0.00
3,000.0	6.20	205.43	2,987.2	-218.8	-104.1	-213.4	0.00	0.00	0.00
3,040.0	6.20	205.43	3,027.0	-222.7	-105.9	-217.2	0.00	0.00	0.00
3,080.0	6.20	205.43	3,066.7	-226.6	-107.8	-221.0	0.00	0.00	0.00
3,120.0	6.20	205.43	3,106.5	-230.5	-109.6	-224.8	0.00	0.00	0.00
3,160.0	6.20	205.43	3,146.3	-234.4	-111.5	-228.6	0.00	0.00	0.00
3,200.0	6.20	205.43	3,186.0	-238.3	-113.3	-232.4	0.00	0.00	0.00
3,240.0	6.20	205.43	3,225.8	-242.2	-115.2	-236.2	0.00	0.00	0.00
3,280.0	6.20	205.43	3,265.6	-246.1	-117.0	-240.0	0.00	0.00	0.00
3,320.0	6.20	205.43	3,305.3	-250.0	-118.9	-243.8	0.00	0.00	0.00
3,360.0	6.20	205.43	3,345.1	-253.9	-120.8	-247.6	0.00	0.00	0.00
3,400.0	6.20	205.43	3,384.9	-257.8	-122.6	-251.4	0.00	0.00	0.00
3,440.0	6.20	205.43	3,424.6	-261.7	-124.5	-255.2	0.00	0.00	0.00
3,480.0	6.20	205.43	3,464.4	-265.6	-126.3	-259.0	0.00	0.00	0.00
3,520.0	6.20	205.43	3,504.1	-269.5	-128.2	-262.8	0.00	0.00	0.00
3,560.0	6.20	205.43	3,543.9	-273.4	-130.0	-266.6	0.00	0.00	0.00
3,600.0	6.20	205.43	3,583.7	-277.3	-131.9	-270.4	0.00	0.00	0.00
3,640.0	6.20	205.43	3,623.4	-281.2	-133.7	-274.2	0.00	0.00	0.00
3,680.0	6.20	205.43	3,663.2	-285.1	-135.6	-278.0	0.00	0.00	0.00
3,720.0	6.20	205.43	3,703.0	-289.0	-137.4	-281.8	0.00	0.00	0.00
3,760.0	6.20	205.43	3,742.7	-292.9	-139.3	-285.6	0.00	0.00	0.00
3,800.0	6.20	205.43	3,782.5	-296.8	-141.2	-289.4	0.00	0.00	0.00
3,840.0	6.20	205.43	3,822.3	-300.7	-143.0	-293.3	0.00	0.00	0.00
3,880.0	6.20	205.43	3,862.0	-304.6	-144.9	-297.1	0.00	0.00	0.00
3,920.0	6.20	205.43	3,901.8	-308.5	-146.7	-300.9	0.00	0.00	0.00
3,960.0	6.20	205.43	3,941.6	-312.4	-148.6	-304.7	0.00	0.00	0.00
4,000.0	6.20	205.43	3,981.3	-316.3	-150.4	-308.5	0.00	0.00	0.00
4,040.0	6.20	205.43	4,021.1	-320.2	-152.3	-312.3	0.00	0.00	0.00

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Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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)
4,080.0	6.20	205.43	4,060.9	-324.1	-154.1	-316.1	0.00	0.00	0.00
4,120.0	6.20	205.43	4,100.6	-328.0	-156.0	-319.9	0.00	0.00	0.00
4,160.0	6.20	205.43	4,140.4	-331.9	-157.8	-323.7	0.00	0.00	0.00
4,200.0	6.20	205.43	4,180.2	-335.8	-159.7	-327.5	0.00	0.00	0.00
4,240.0	6.20	205.43	4,219.9	-339.7	-161.5	-331.3	0.00	0.00	0.00
4,280.0	6.20	205.43	4,259.7	-343.6	-163.4	-335.1	0.00	0.00	0.00
4,320.0	6.20	205.43	4,299.5	-347.5	-165.3	-338.9	0.00	0.00	0.00
4,360.0	6.20	205.43	4,339.2	-351.4	-167.1	-342.7	0.00	0.00	0.00
4,400.0	6.20	205.43	4,379.0	-355.3	-169.0	-346.5	0.00	0.00	0.00
4,440.0	6.20	205.43	4,418.8	-359.2	-170.8	-350.3	0.00	0.00	0.00
4,480.0	6.20	205.43	4,458.5	-363.1	-172.7	-354.1	0.00	0.00	0.00
4,520.0	6.20	205.43	4,498.3	-367.0	-174.5	-357.9	0.00	0.00	0.00
4,560.0	6.20	205.43	4,538.1	-370.9	-176.4	-361.7	0.00	0.00	0.00
4,600.0	6.20	205.43	4,577.8	-374.8	-178.2	-365.5	0.00	0.00	0.00
4,640.0	6.20	205.43	4,617.6	-378.7	-180.1	-369.3	0.00	0.00	0.00
4,680.0	6.20	205.43	4,657.4	-382.6	-181.9	-373.1	0.00	0.00	0.00
4,720.0	6.20	205.43	4,697.1	-386.5	-183.8	-376.9	0.00	0.00	0.00
4,760.0	6.20	205.43	4,736.9	-390.4	-185.7	-380.7	0.00	0.00	0.00
4,800.0	6.20	205.43	4,776.7	-394.3	-187.5	-384.5	0.00	0.00	0.00
4,840.0	6.20	205.43	4,816.4	-398.2	-189.4	-388.3	0.00	0.00	0.00
4,880.0	6.20	205.43	4,856.2	-402.1	-191.2	-392.1	0.00	0.00	0.00
4,920.0	6.20	205.43	4,896.0	-406.0	-193.1	-395.9	0.00	0.00	0.00
4,960.0	6.20	205.43	4,935.7	-409.9	-194.9	-399.7	0.00	0.00	0.00
5,000.0	6.20	205.43	4,975.5	-413.8	-196.8	-403.5	0.00	0.00	0.00
5,040.0	6.20	205.43	5,015.3	-417.7	-198.6	-407.3	0.00	0.00	0.00
5,080.0	6.20	205.43	5,055.0	-421.6	-200.5	-411.1	0.00	0.00	0.00
5,120.0	6.20	205.43	5,094.8	-425.5	-202.3	-414.9	0.00	0.00	0.00
5,160.0	6.20	205.43	5,134.6	-429.4	-204.2	-418.7	0.00	0.00	0.00
5,200.0	6.20	205.43	5,174.3	-433.3	-206.0	-422.5	0.00	0.00	0.00
5,216.6	6.20	205.43	5,190.8	-434.9	-206.8	-424.1	0.00	0.00	0.00
5,240.0	5.73	205.43	5,214.1	-437.1	-207.9	-426.2	2.00	-2.00	0.00
5,280.0	4.93	205.43	5,253.9	-440.4	-209.5	-429.5	2.00	-2.00	0.00
5,320.0	4.13	205.43	5,293.8	-443.3	-210.8	-432.3	2.00	-2.00	0.00
5,360.0	3.33	205.43	5,333.7	-445.6	-211.9	-434.6	2.00	-2.00	0.00
5,400.0	2.53	205.43	5,373.7	-447.5	-212.8	-436.4	2.00	-2.00	0.00
5,440.0	1.73	205.43	5,413.6	-448.8	-213.4	-437.7	2.00	-2.00	0.00
5,480.0	0.93	205.43	5,453.6	-449.7	-213.8	-438.5	2.00	-2.00	0.00
5,520.0	0.13	205.43	5,493.6	-450.0	-214.0	-438.8	2.00	-2.00	0.00
5,526.4	0.00	0.00	5,500.0	-450.0	-214.0	-438.8	2.00	-2.00	0.00
5,560.0	0.00	0.00	5,533.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,600.0	0.00	0.00	5,573.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,640.0	0.00	0.00	5,613.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,680.0	0.00	0.00	5,653.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,720.0	0.00	0.00	5,693.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,760.0	0.00	0.00	5,733.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,800.0	0.00	0.00	5,773.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,840.0	0.00	0.00	5,813.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,880.0	0.00	0.00	5,853.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,920.0	0.00	0.00	5,893.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
5,960.0	0.00	0.00	5,933.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,000.0	0.00	0.00	5,973.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,040.0	0.00	0.00	6,013.6	-450.0	-214.0	-438.8	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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)
6,080.0	0.00	0.00	6,053.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,120.0	0.00	0.00	6,093.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,160.0	0.00	0.00	6,133.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,200.0	0.00	0.00	6,173.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,240.0	0.00	0.00	6,213.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
6,254.0	0.00	0.00	6,227.6	-450.0	-214.0	-438.8	0.00	0.00	0.00
KOP #2									
6,280.0	1.95	360.00	6,253.6	-449.6	-214.0	-438.4	7.51	7.51	0.00
6,320.0	4.95	360.00	6,293.6	-447.1	-214.0	-436.0	7.50	7.50	0.00
6,360.0	7.95	360.00	6,333.3	-442.7	-214.0	-431.5	7.50	7.50	0.00
6,400.0	10.95	360.00	6,372.7	-436.1	-214.0	-424.9	7.50	7.50	0.00
6,440.0	13.95	360.00	6,411.8	-427.5	-214.0	-416.3	7.50	7.50	0.00
6,480.0	16.95	360.00	6,450.4	-416.8	-214.0	-405.7	7.50	7.50	0.00
6,520.0	19.95	360.00	6,488.3	-404.1	-214.0	-393.0	7.50	7.50	0.00
6,560.0	22.95	360.00	6,525.5	-389.5	-214.0	-378.4	7.50	7.50	0.00
6,600.0	25.95	360.00	6,561.9	-373.0	-214.0	-361.9	7.50	7.50	0.00
6,640.0	28.95	360.00	6,597.4	-354.5	-214.0	-343.5	7.50	7.50	0.00
6,680.0	31.95	360.00	6,631.9	-334.2	-214.0	-323.2	7.50	7.50	0.00
6,720.0	34.95	360.00	6,665.3	-312.2	-214.0	-301.2	7.50	7.50	0.00
6,760.0	37.95	360.00	6,697.4	-288.4	-214.0	-277.5	7.50	7.50	0.00
6,800.0	40.95	360.00	6,728.3	-263.0	-214.0	-252.1	7.50	7.50	0.00
6,840.0	43.95	360.00	6,757.8	-236.0	-214.0	-225.1	7.50	7.50	0.00
6,880.0	46.95	360.00	6,785.9	-207.5	-214.0	-196.6	7.50	7.50	0.00
6,920.0	49.95	360.00	6,812.4	-177.6	-214.0	-166.8	7.50	7.50	0.00
6,960.0	52.95	360.00	6,837.3	-146.3	-214.0	-135.5	7.50	7.50	0.00
7,000.0	55.95	360.00	6,860.6	-113.8	-214.0	-103.0	7.50	7.50	0.00
7,040.0	58.95	360.00	6,882.1	-80.0	-214.0	-69.3	7.50	7.50	0.00
7,080.0	61.95	360.00	6,901.8	-45.3	-214.0	-34.6	7.50	7.50	0.00
7,120.0	64.95	360.00	6,919.7	-9.5	-214.0	1.2	7.50	7.50	0.00
7,160.0	67.95	360.00	6,935.7	27.2	-214.0	37.8	7.50	7.50	0.00
7,200.0	70.95	360.00	6,949.7	64.6	-214.0	75.2	7.50	7.50	0.00
7,240.0	73.95	360.00	6,961.8	102.8	-214.0	113.3	7.50	7.50	0.00
7,280.0	76.95	360.00	6,971.8	141.5	-214.0	151.9	7.50	7.50	0.00
7,320.0	79.95	360.00	6,979.8	180.7	-214.0	191.1	7.50	7.50	0.00
7,360.0	82.95	360.00	6,985.8	220.2	-214.0	230.6	7.50	7.50	0.00
7,400.0	85.95	360.00	6,989.6	260.0	-214.0	270.3	7.50	7.50	0.00
7,440.0	88.95	360.00	6,991.4	300.0	-214.0	310.2	7.50	7.50	0.00
7,452.0	89.85	360.00	6,991.5	312.0	-214.0	322.2	7.47	7.47	0.00
End of Build - 7"									
7,480.0	89.85	360.00	6,991.6	340.0	-214.0	350.2	0.00	0.00	0.00
7,520.0	89.85	360.00	6,991.7	380.0	-214.0	390.1	0.00	0.00	0.00
7,560.0	89.85	360.00	6,991.8	420.0	-214.0	430.1	0.00	0.00	0.00
7,600.0	89.85	360.00	6,991.9	460.0	-214.0	470.0	0.00	0.00	0.00
7,640.0	89.85	360.00	6,992.0	500.0	-214.0	510.0	0.00	0.00	0.00
7,680.0	89.85	360.00	6,992.1	540.0	-214.0	549.9	0.00	0.00	0.00
7,720.0	89.85	360.00	6,992.2	580.0	-214.0	589.9	0.00	0.00	0.00
7,760.0	89.85	360.00	6,992.3	620.0	-214.0	629.8	0.00	0.00	0.00
7,800.0	89.85	360.00	6,992.4	660.0	-214.0	669.8	0.00	0.00	0.00
7,840.0	89.85	360.00	6,992.5	700.0	-214.0	709.7	0.00	0.00	0.00
7,880.0	89.85	360.00	6,992.7	740.0	-214.0	749.7	0.00	0.00	0.00
7,920.0	89.85	360.00	6,992.8	780.0	-214.0	789.6	0.00	0.00	0.00
7,960.0	89.85	360.00	6,992.9	820.0	-214.0	829.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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)
8,000.0	89.85	360.00	6,993.0	860.0	-214.0	869.5	0.00	0.00	0.00
8,040.0	89.85	360.00	6,993.1	900.0	-214.0	909.5	0.00	0.00	0.00
8,080.0	89.85	360.00	6,993.2	940.0	-214.0	949.4	0.00	0.00	0.00
8,120.0	89.85	360.00	6,993.3	980.0	-214.0	989.4	0.00	0.00	0.00
8,160.0	89.85	360.00	6,993.4	1,020.0	-214.0	1,029.3	0.00	0.00	0.00
8,200.0	89.85	360.00	6,993.5	1,060.0	-214.0	1,069.3	0.00	0.00	0.00
8,240.0	89.85	360.00	6,993.6	1,100.0	-214.0	1,109.2	0.00	0.00	0.00
8,280.0	89.85	360.00	6,993.7	1,140.0	-214.0	1,149.2	0.00	0.00	0.00
8,320.0	89.85	360.00	6,993.8	1,180.0	-214.0	1,189.1	0.00	0.00	0.00
8,360.0	89.85	360.00	6,993.9	1,220.0	-214.0	1,229.1	0.00	0.00	0.00
8,400.0	89.85	360.00	6,994.0	1,260.0	-214.0	1,269.1	0.00	0.00	0.00
8,440.0	89.85	360.00	6,994.1	1,300.0	-214.0	1,309.0	0.00	0.00	0.00
8,480.0	89.85	360.00	6,994.2	1,340.0	-214.0	1,349.0	0.00	0.00	0.00
8,520.0	89.85	360.00	6,994.3	1,380.0	-214.0	1,388.9	0.00	0.00	0.00
8,560.0	89.85	360.00	6,994.4	1,420.0	-214.0	1,428.9	0.00	0.00	0.00
8,600.0	89.85	360.00	6,994.5	1,460.0	-214.0	1,468.8	0.00	0.00	0.00
8,640.0	89.85	360.00	6,994.6	1,500.0	-214.0	1,508.8	0.00	0.00	0.00
8,680.0	89.85	360.00	6,994.7	1,540.0	-214.0	1,548.7	0.00	0.00	0.00
8,720.0	89.85	360.00	6,994.9	1,580.0	-214.0	1,588.7	0.00	0.00	0.00
8,760.0	89.85	360.00	6,995.0	1,620.0	-214.0	1,628.6	0.00	0.00	0.00
8,800.0	89.85	360.00	6,995.1	1,660.0	-214.0	1,668.6	0.00	0.00	0.00
8,840.0	89.85	360.00	6,995.2	1,700.0	-214.0	1,708.5	0.00	0.00	0.00
8,880.0	89.85	360.00	6,995.3	1,740.0	-214.0	1,748.5	0.00	0.00	0.00
8,920.0	89.85	360.00	6,995.4	1,780.0	-214.0	1,788.4	0.00	0.00	0.00
8,960.0	89.85	360.00	6,995.5	1,820.0	-214.0	1,828.4	0.00	0.00	0.00
9,000.0	89.85	360.00	6,995.6	1,860.0	-214.0	1,868.3	0.00	0.00	0.00
9,040.0	89.85	360.00	6,995.7	1,900.0	-214.0	1,908.3	0.00	0.00	0.00
9,080.0	89.85	360.00	6,995.8	1,940.0	-214.0	1,948.2	0.00	0.00	0.00
9,120.0	89.85	360.00	6,995.9	1,980.0	-214.0	1,988.2	0.00	0.00	0.00
9,160.0	89.85	360.00	6,996.0	2,020.0	-214.0	2,028.1	0.00	0.00	0.00
9,200.0	89.85	360.00	6,996.1	2,060.0	-214.0	2,068.1	0.00	0.00	0.00
9,240.0	89.85	360.00	6,996.2	2,100.0	-214.0	2,108.0	0.00	0.00	0.00
9,280.0	89.85	360.00	6,996.3	2,140.0	-214.0	2,148.0	0.00	0.00	0.00
9,320.0	89.85	360.00	6,996.4	2,180.0	-214.0	2,187.9	0.00	0.00	0.00
9,360.0	89.85	360.00	6,996.5	2,220.0	-214.0	2,227.9	0.00	0.00	0.00
9,400.0	89.85	360.00	6,996.6	2,260.0	-214.0	2,267.8	0.00	0.00	0.00
9,440.0	89.85	360.00	6,996.7	2,300.0	-214.0	2,307.8	0.00	0.00	0.00
9,480.0	89.85	360.00	6,996.8	2,340.0	-214.0	2,347.7	0.00	0.00	0.00
9,520.0	89.85	360.00	6,996.9	2,380.0	-214.0	2,387.7	0.00	0.00	0.00
9,560.0	89.85	360.00	6,997.1	2,420.0	-214.0	2,427.6	0.00	0.00	0.00
9,600.0	89.85	360.00	6,997.2	2,460.0	-214.0	2,467.6	0.00	0.00	0.00
9,640.0	89.85	360.00	6,997.3	2,500.0	-214.0	2,507.5	0.00	0.00	0.00
9,680.0	89.85	360.00	6,997.4	2,540.0	-214.0	2,547.5	0.00	0.00	0.00
9,720.0	89.85	360.00	6,997.5	2,580.0	-214.0	2,587.4	0.00	0.00	0.00
9,760.0	89.85	360.00	6,997.6	2,620.0	-214.0	2,627.4	0.00	0.00	0.00
9,800.0	89.85	360.00	6,997.7	2,660.0	-214.0	2,667.3	0.00	0.00	0.00
9,840.0	89.85	360.00	6,997.8	2,700.0	-214.0	2,707.3	0.00	0.00	0.00
9,880.0	89.85	360.00	6,997.9	2,740.0	-214.0	2,747.2	0.00	0.00	0.00
9,920.0	89.85	360.00	6,998.0	2,780.0	-214.0	2,787.2	0.00	0.00	0.00
9,960.0	89.85	360.00	6,998.1	2,820.0	-214.0	2,827.1	0.00	0.00	0.00
10,000.0	89.85	360.00	6,998.2	2,860.0	-214.0	2,867.1	0.00	0.00	0.00
10,040.0	89.85	360.00	6,998.3	2,900.0	-214.1	2,907.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

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)
10,080.0	89.85	360.00	6,998.4	2,940.0	-214.1	2,947.0	0.00	0.00	0.00
10,120.0	89.85	360.00	6,998.5	2,980.0	-214.1	2,986.9	0.00	0.00	0.00
10,160.0	89.85	360.00	6,998.6	3,020.0	-214.1	3,026.9	0.00	0.00	0.00
10,200.0	89.85	360.00	6,998.7	3,060.0	-214.1	3,066.8	0.00	0.00	0.00
10,240.0	89.85	360.00	6,998.8	3,100.0	-214.1	3,106.8	0.00	0.00	0.00
10,280.0	89.85	360.00	6,998.9	3,140.0	-214.1	3,146.7	0.00	0.00	0.00
10,320.0	89.85	360.00	6,999.0	3,180.0	-214.1	3,186.7	0.00	0.00	0.00
10,360.0	89.85	360.00	6,999.1	3,220.0	-214.1	3,226.6	0.00	0.00	0.00
10,400.0	89.85	360.00	6,999.3	3,260.0	-214.1	3,266.6	0.00	0.00	0.00
10,440.0	89.85	360.00	6,999.4	3,300.0	-214.1	3,306.5	0.00	0.00	0.00
10,480.0	89.85	360.00	6,999.5	3,340.0	-214.1	3,346.5	0.00	0.00	0.00
10,520.0	89.85	360.00	6,999.6	3,380.0	-214.1	3,386.4	0.00	0.00	0.00
10,560.0	89.85	360.00	6,999.7	3,420.0	-214.1	3,426.4	0.00	0.00	0.00
10,600.0	89.85	360.00	6,999.8	3,460.0	-214.1	3,466.3	0.00	0.00	0.00
10,640.0	89.85	360.00	6,999.9	3,500.0	-214.1	3,506.3	0.00	0.00	0.00
10,680.0	89.85	360.00	7,000.0	3,540.0	-214.1	3,546.2	0.00	0.00	0.00
10,720.0	89.85	360.00	7,000.1	3,580.0	-214.1	3,586.2	0.00	0.00	0.00
10,760.0	89.85	360.00	7,000.2	3,620.0	-214.1	3,626.1	0.00	0.00	0.00
10,800.0	89.85	360.00	7,000.3	3,660.0	-214.1	3,666.1	0.00	0.00	0.00
10,840.0	89.85	360.00	7,000.4	3,700.0	-214.1	3,706.0	0.00	0.00	0.00
10,880.0	89.85	360.00	7,000.5	3,740.0	-214.1	3,746.0	0.00	0.00	0.00
10,920.0	89.85	360.00	7,000.6	3,780.0	-214.1	3,785.9	0.00	0.00	0.00
10,960.0	89.85	360.00	7,000.7	3,820.0	-214.1	3,825.9	0.00	0.00	0.00
11,000.0	89.85	360.00	7,000.8	3,860.0	-214.1	3,865.8	0.00	0.00	0.00
11,040.0	89.85	360.00	7,000.9	3,900.0	-214.1	3,905.8	0.00	0.00	0.00
11,080.0	89.85	360.00	7,001.0	3,940.0	-214.1	3,945.7	0.00	0.00	0.00
11,120.0	89.85	360.00	7,001.1	3,980.0	-214.1	3,985.7	0.00	0.00	0.00
11,160.0	89.85	360.00	7,001.2	4,020.0	-214.1	4,025.6	0.00	0.00	0.00
11,200.0	89.85	360.00	7,001.3	4,060.0	-214.1	4,065.6	0.00	0.00	0.00
11,240.0	89.85	360.00	7,001.5	4,100.0	-214.1	4,105.5	0.00	0.00	0.00
11,280.0	89.85	360.00	7,001.6	4,140.0	-214.1	4,145.5	0.00	0.00	0.00
11,320.0	89.85	360.00	7,001.7	4,180.0	-214.1	4,185.4	0.00	0.00	0.00
11,360.0	89.85	360.00	7,001.8	4,220.0	-214.1	4,225.4	0.00	0.00	0.00
11,400.0	89.85	360.00	7,001.9	4,260.0	-214.1	4,265.3	0.00	0.00	0.00
11,440.0	89.85	360.00	7,002.0	4,300.0	-214.1	4,305.3	0.00	0.00	0.00
11,449.9	89.85	360.00	7,002.0	4,309.9	-214.1	4,315.2	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,452.0	6,991.5	7"	7	8-3/4

Database:	Landmark	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Project:	SEC.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	North Reference:	True
Well:	O Investment Properties 6Y-241	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (2-07-13)		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
600.0	600.0	0.0	0.0	KOP #1
6,254.0	6,227.6	-450.0	-214.0	KOP #2
7,452.0	6,991.5	312.0	-214.0	End of Build



Directional

PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.6-T6N-R65W

O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W

O Investment Properties 6Y-241

Wellbore #1

Plan #1 (2-07-13)

Anticollision Report

22 February, 2013



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #1 (2-07-13)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 2/22/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	11,449.9	Plan #1 (2-07-13) (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						
Diana 6T-HZ Pad Sec.6-T6N-R65W						
Anderson 1 (P & A) - Wellbore #1 - Wellbore #1	7,365.7	6,992.4	122.4	-34.8	0.779	Level 1, CC, ES, SF
Harsh 1 (Exist.) - Wellbore #1 - Wellbore #1	9,967.1	7,029.1	175.2	-24.4	0.878	Level 1, CC, ES, SF
Harsh 41-6 (Exist.) - Wellbore #1 - Wellbore #1	11,224.1	7,046.4	208.5	-15.0	0.933	Level 1, CC, ES, SF
O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W						
O Investment 6T-421 - Wellbore #1 - Plan #1 (2-07-13)	200.0	200.0	30.6	29.9	45.361	CC, ES
O Investment 6T-421 - Wellbore #1 - Plan #1 (2-07-13)	11,449.9	11,616.2	393.8	237.2	2.514	SF
O Investment Properties 6Y-401 - Wellbore #1 - Plan #1	600.0	600.0	30.6	28.1	12.371	CC, ES
O Investment Properties 6Y-401 - Wellbore #1 - Plan #1	11,449.9	11,587.2	376.8	220.6	2.412	SF

Offset Design		Diana 6T-HZ Pad Sec.6-T6N-R65W - Anderson 1 (P & A) - Wellbore #1 - Wellbore #1										Offset Site Error:		0.0 ft			
Survey Program: 7300-UNKNOWN														Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
0.0	0.0	6.0	6.0	0.0	0.1	-56.12	225.9	-336.5	405.2	405.1	0.12	3,371.461					
100.0	100.0	106.0	106.0	0.1	2.1	-56.12	225.9	-336.5	405.2	403.0	2.23	181.516					
200.0	200.0	206.0	206.0	0.3	4.1	-56.12	225.9	-336.5	405.2	400.8	4.46	90.917					
300.0	300.0	306.0	306.0	0.6	6.1	-56.12	225.9	-336.5	405.2	398.6	6.68	60.647					
400.0	400.0	406.0	406.0	0.8	8.1	-56.12	225.9	-336.5	405.2	396.3	8.91	45.498					
500.0	500.0	506.0	506.0	1.0	10.1	-56.12	225.9	-336.5	405.2	394.1	11.13	36.405					
600.0	600.0	606.0	606.0	1.2	12.1	-56.12	225.9	-336.5	405.2	391.9	13.36	30.341					
700.0	700.0	706.0	706.0	1.4	14.1	98.68	225.9	-336.5	405.5	390.0	15.55	26.071					
800.0	799.8	805.8	805.8	1.6	16.1	99.39	225.9	-336.5	406.3	388.6	17.74	22.910					
900.0	899.5	905.5	905.5	1.8	18.1	100.57	225.9	-336.5	407.8	387.9	19.94	20.458					
1,000.0	998.9	1,004.9	1,004.9	2.1	20.1	102.04	225.9	-336.5	410.0	387.8	22.16	18.504					
1,100.0	1,098.3	1,104.3	1,104.3	2.3	22.1	103.49	225.9	-336.5	412.4	388.0	24.39	16.905					
1,200.0	1,197.7	1,203.7	1,203.7	2.6	24.1	104.94	225.9	-336.5	415.0	388.4	26.64	15.580					
1,300.0	1,297.1	1,303.1	1,303.1	2.9	26.1	106.36	225.9	-336.5	418.0	389.1	28.89	14.466					
1,400.0	1,396.5	1,402.5	1,402.5	3.1	28.1	107.76	225.9	-336.5	421.1	390.0	31.15	13.520					
1,500.0	1,495.9	1,501.9	1,501.9	3.4	30.0	109.14	225.9	-336.5	424.6	391.2	33.41	12.708					
1,600.0	1,595.4	1,601.4	1,601.4	3.7	32.0	110.50	225.9	-336.5	428.3	392.6	35.67	12.005					

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 O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design		Diana 6T-HZ Pad Sec.6-T6N-R65W - Anderson 1 (P & A) - Wellbore #1 - Wellbore #1										Offset Site Error:		0.0 ft			
Survey Program: 7300-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					
1,700.0	1,694.8	1,700.8	1,700.8	4.0	34.0	111.83	225.9	-336.5	432.2	394.2	37.93	11.393					
1,800.0	1,794.2	1,800.2	1,800.2	4.3	36.0	113.14	225.9	-336.5	436.3	396.1	40.19	10.855					
1,900.0	1,893.6	1,899.6	1,899.6	4.6	38.0	114.42	225.9	-336.5	440.7	398.2	42.45	10.380					
2,000.0	1,993.0	1,999.0	1,999.0	4.9	40.0	115.68	225.9	-336.5	445.3	400.6	44.71	9.959					
2,100.0	2,092.4	2,098.4	2,098.4	5.2	42.0	116.91	225.9	-336.5	450.1	403.1	46.97	9.583					
2,200.0	2,191.9	2,197.9	2,197.9	5.5	44.0	118.12	225.9	-336.5	455.1	405.9	49.23	9.245					
2,300.0	2,291.3	2,297.3	2,297.3	5.8	45.9	119.30	225.9	-336.5	460.3	408.8	51.48	8.942					
2,400.0	2,390.7	2,396.7	2,396.7	6.1	47.9	120.45	225.9	-336.5	465.7	412.0	53.73	8.668					
2,500.0	2,490.1	2,496.1	2,496.1	6.4	49.9	121.58	225.9	-336.5	471.3	415.3	55.98	8.419					
2,600.0	2,589.5	2,595.5	2,595.5	6.7	51.9	122.68	225.9	-336.5	477.1	418.8	58.23	8.193					
2,700.0	2,688.9	2,694.9	2,694.9	7.0	53.9	123.75	225.9	-336.5	483.0	422.5	60.47	7.987					
2,800.0	2,788.4	2,794.4	2,794.4	7.3	55.9	124.80	225.9	-336.5	489.1	426.4	62.71	7.799					
2,900.0	2,887.8	2,893.8	2,893.8	7.6	57.9	125.82	225.9	-336.5	495.4	430.4	64.95	7.626					
3,000.0	2,987.2	2,993.2	2,993.2	7.9	59.9	126.82	225.9	-336.5	501.8	434.6	67.19	7.468					
3,100.0	3,086.6	3,092.6	3,092.6	8.2	61.9	127.79	225.9	-336.5	508.3	438.9	69.43	7.322					
3,200.0	3,186.0	3,192.0	3,192.0	8.5	63.8	128.73	225.9	-336.5	515.1	443.4	71.66	7.187					
3,300.0	3,285.4	3,291.4	3,291.4	8.8	65.8	129.65	225.9	-336.5	521.9	448.0	73.90	7.062					
3,400.0	3,384.9	3,390.9	3,390.9	9.1	67.8	130.55	225.9	-336.5	528.9	452.7	76.13	6.947					
3,500.0	3,484.3	3,490.3	3,490.3	9.4	69.8	131.42	225.9	-336.5	536.0	457.6	78.36	6.840					
3,600.0	3,583.7	3,589.7	3,589.7	9.8	71.8	132.28	225.9	-336.5	543.2	462.6	80.59	6.741					
3,700.0	3,683.1	3,689.1	3,689.1	10.1	73.8	133.10	225.9	-336.5	550.5	467.7	82.81	6.648					
3,800.0	3,782.5	3,788.5	3,788.5	10.4	75.8	133.91	225.9	-336.5	558.0	473.0	85.04	6.562					
3,900.0	3,881.9	3,887.9	3,887.9	10.7	77.8	134.70	225.9	-336.5	565.6	478.3	87.26	6.481					
4,000.0	3,981.3	3,987.3	3,987.3	11.0	79.7	135.46	225.9	-336.5	573.2	483.7	89.48	6.406					
4,100.0	4,080.8	4,086.8	4,086.8	11.3	81.7	136.21	225.9	-336.5	581.0	489.3	91.70	6.335					
4,200.0	4,180.2	4,186.2	4,186.2	11.6	83.7	136.93	225.9	-336.5	588.8	494.9	93.92	6.269					
4,300.0	4,279.6	4,285.6	4,285.6	11.9	85.7	137.64	225.9	-336.5	596.8	500.7	96.14	6.207					
4,400.0	4,379.0	4,385.0	4,385.0	12.2	87.7	138.32	225.9	-336.5	604.8	506.5	98.36	6.149					
4,500.0	4,478.4	4,484.4	4,484.4	12.5	89.7	138.99	225.9	-336.5	613.0	512.4	100.58	6.094					
4,600.0	4,577.8	4,583.8	4,583.8	12.8	91.7	139.64	225.9	-336.5	621.2	518.4	102.79	6.043					
4,700.0	4,677.3	4,683.3	4,683.3	13.1	93.7	140.28	225.9	-336.5	629.5	524.4	105.01	5.994					
4,800.0	4,776.7	4,782.7	4,782.7	13.4	95.7	140.90	225.9	-336.5	637.8	530.6	107.22	5.948					
4,900.0	4,876.1	4,882.1	4,882.1	13.7	97.6	141.50	225.9	-336.5	646.2	536.8	109.44	5.905					
5,000.0	4,975.5	4,981.5	4,981.5	14.0	99.6	142.09	225.9	-336.5	654.7	543.1	111.65	5.864					
5,100.0	5,074.9	5,080.9	5,080.9	14.4	101.6	142.66	225.9	-336.5	663.3	549.4	113.86	5.826					
5,200.0	5,174.3	5,180.3	5,180.3	14.7	103.6	143.21	225.9	-336.5	671.9	555.9	116.07	5.789					
5,300.0	5,273.9	5,279.9	5,279.9	14.9	105.6	143.77	225.9	-336.5	679.7	561.2	118.44	5.738					
5,400.0	5,373.7	5,379.7	5,379.7	15.1	107.6	144.13	225.9	-336.5	684.6	563.9	120.74	5.670					
5,500.0	5,473.6	5,479.6	5,479.6	15.3	109.6	144.29	225.9	-336.5	686.8	563.8	122.95	5.586					
5,600.0	5,573.6	5,579.6	5,579.6	15.4	111.6	-10.27	225.9	-336.5	686.9	561.8	125.13	5.489					
5,700.0	5,673.6	5,679.6	5,679.6	15.6	113.6	-10.27	225.9	-336.5	686.9	559.6	127.29	5.396					
5,800.0	5,773.6	5,779.6	5,779.6	15.7	115.6	-10.27	225.9	-336.5	686.9	557.4	129.46	5.306					
5,900.0	5,873.6	5,879.6	5,879.6	15.8	117.6	-10.27	225.9	-336.5	686.9	555.3	131.62	5.219					
6,000.0	5,973.6	5,979.6	5,979.6	16.0	119.6	-10.27	225.9	-336.5	686.9	553.1	133.79	5.134					
6,100.0	6,073.6	6,079.6	6,079.6	16.1	121.6	-10.27	225.9	-336.5	686.9	550.9	135.96	5.052					
6,200.0	6,173.6	6,179.6	6,179.6	16.3	123.6	-10.27	225.9	-336.5	686.9	548.8	138.13	4.973					
6,300.0	6,273.6	6,279.6	6,279.6	16.4	125.6	-10.31	225.9	-336.5	685.5	545.5	140.02	4.896					
6,400.0	6,372.7	6,378.7	6,378.7	16.5	127.6	-10.67	225.9	-336.5	673.2	533.3	139.87	4.813					
6,500.0	6,469.4	6,475.4	6,475.4	16.5	129.5	-11.46	225.9	-336.5	648.3	510.9	137.36	4.720					
6,600.0	6,561.9	6,567.9	6,567.9	16.4	131.4	-12.81	225.9	-336.5	611.2	478.7	132.58	4.610					
6,700.0	6,648.7	6,654.7	6,654.7	16.3	133.1	-14.96	225.9	-336.5	562.8	436.9	125.87	4.472					

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 O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		0.0 ft
Diana 6T-HZ Pad Sec.6-T6N-R65W - Anderson 1 (P & A) - Wellbore #1 - Wellbore #1													Offset Well Error:		0.0 ft
Survey Program: 7300-UNKNOWN															
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			
6,800.0	6,728.3	6,734.3	6,734.3	16.2	134.7	-18.35	225.9	-336.5	504.0	385.9	118.11	4.267			
6,900.0	6,799.3	6,805.3	6,805.3	16.1	136.1	-23.80	225.9	-336.5	436.2	324.7	111.49	3.912			
7,000.0	6,860.6	6,866.6	6,866.6	16.0	137.3	-32.78	225.9	-336.5	361.1	250.0	111.04	3.252			
7,100.0	6,911.0	6,917.0	6,917.0	16.1	138.3	-47.24	225.9	-336.5	281.4	157.7	123.67	2.276			
7,200.0	6,949.7	6,955.7	6,955.7	16.4	139.1	-66.74	225.9	-336.5	202.5	57.7	144.74	1.399	Level 3		
7,300.0	6,976.1	6,982.1	6,982.1	16.9	139.6	-83.95	225.9	-336.5	138.6	-17.2	155.79	0.889	Level 1		
7,365.7	6,986.4	6,992.4	6,992.4	17.4	139.8	-90.00	225.9	-336.5	122.4	-34.8	157.23	0.779	Level 1, CC, ES, SF		
7,400.0	6,989.6	6,995.6	6,995.6	17.6	139.9	-91.13	225.9	-336.5	127.1	-30.4	157.50	0.807	Level 1		
7,500.0	6,991.7	6,997.7	6,997.7	18.5	140.0	-90.16	225.9	-336.5	181.6	23.1	158.48	1.146	Level 2		
7,600.0	6,991.9	6,997.9	6,997.9	19.6	140.0	-90.29	225.9	-336.5	264.2	104.7	159.53	1.656			
7,700.0	6,992.2	6,998.2	6,998.2	20.8	140.0	-90.41	225.9	-336.5	355.8	195.1	160.70	2.214			
7,800.0	6,992.4	6,998.4	6,998.4	22.1	140.0	-90.53	225.9	-336.5	451.0	289.1	161.98	2.785			
7,900.0	6,992.7	6,998.7	6,998.7	23.4	140.0	-90.65	225.9	-336.5	548.0	384.6	163.34	3.355			
8,000.0	6,993.0	6,999.0	6,999.0	24.9	140.0	-90.78	225.9	-336.5	645.8	481.0	164.78	3.919			
8,100.0	6,993.2	6,999.2	6,999.2	26.4	140.0	-90.90	225.9	-336.5	744.2	578.0	166.28	4.476			
8,200.0	6,993.5	6,999.5	6,999.5	28.0	140.0	-91.02	225.9	-336.5	843.0	675.2	167.84	5.023			
8,300.0	6,993.8	6,999.8	6,999.8	29.6	140.0	-91.14	225.9	-336.5	942.1	772.7	169.43	5.560			

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Diana 6T-HZ Pad Sec.6-T6N-R65W - Harsh 1 (Exist.) - Wellbore #1 - Wellbore #1													Offset Well Error:	0.0 ft
Survey Program: 7300-UNKNOWN														
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	
9,000.0	6,995.6	7,026.6	7,026.6	41.5	140.5	-89.17	2,827.1	-389.2	982.9	800.9	181.97	5.401		
9,100.0	6,995.8	7,026.8	7,026.8	43.3	140.5	-89.26	2,827.1	-389.2	884.7	700.9	183.76	4.814		
9,200.0	6,996.1	7,027.1	7,027.1	45.1	140.5	-89.34	2,827.1	-389.2	786.9	601.3	185.56	4.241		
9,300.0	6,996.4	7,027.4	7,027.4	46.9	140.5	-89.43	2,827.1	-389.2	689.8	502.4	187.37	3.681		
9,400.0	6,996.6	7,027.6	7,027.6	48.7	140.6	-89.51	2,827.1	-389.2	593.6	404.4	189.19	3.138		
9,500.0	6,996.9	7,027.9	7,027.9	50.5	140.6	-89.60	2,827.1	-389.2	498.9	307.9	191.02	2.612		
9,600.0	6,997.2	7,028.2	7,028.2	52.3	140.6	-89.69	2,827.1	-389.2	406.8	214.0	192.85	2.109		
9,700.0	6,997.4	7,028.4	7,028.4	54.2	140.6	-89.77	2,827.1	-389.2	319.5	124.8	194.69	1.641		
9,800.0	6,997.7	7,028.7	7,028.7	56.0	140.6	-89.86	2,827.1	-389.2	242.1	45.6	196.54	1.232 Level 2		
9,900.0	6,997.9	7,028.9	7,028.9	57.9	140.6	-89.94	2,827.1	-389.2	187.6	-10.8	198.39	0.946 Level 1		
9,967.1	6,998.1	7,029.1	7,029.1	59.1	140.6	-90.00	2,827.1	-389.2	175.2	-24.4	199.63	0.878 Level 1, CC, ES, SF		
10,000.0	6,998.2	7,029.2	7,029.2	59.7	140.6	-90.03	2,827.1	-389.2	178.2	-22.0	200.24	0.890 Level 1		
10,100.0	6,998.5	7,029.5	7,029.5	61.6	140.6	-90.11	2,827.1	-389.2	219.9	17.8	202.10	1.088 Level 2		
10,200.0	6,998.7	7,029.7	7,029.7	63.4	140.6	-90.20	2,827.1	-389.2	291.4	87.4	203.97	1.429 Level 3		
10,300.0	6,999.0	7,030.0	7,030.0	65.3	140.6	-90.28	2,827.1	-389.2	376.1	170.3	205.83	1.827		
10,400.0	6,999.3	7,030.3	7,030.3	67.2	140.6	-90.37	2,827.1	-389.2	467.0	259.3	207.70	2.248		
10,500.0	6,999.5	7,030.5	7,030.5	69.0	140.6	-90.46	2,827.1	-389.2	560.9	351.3	209.57	2.676		
10,600.0	6,999.8	7,030.8	7,030.8	70.9	140.6	-90.54	2,827.1	-389.2	656.7	445.2	211.45	3.105		
10,700.0	7,000.0	7,031.0	7,031.0	72.8	140.6	-90.63	2,827.1	-389.2	753.5	540.2	213.32	3.532		
10,800.0	7,000.3	7,031.3	7,031.3	74.6	140.6	-90.71	2,827.1	-389.2	851.1	635.9	215.20	3.955		
10,900.0	7,000.6	7,031.6	7,031.6	76.5	140.6	-90.80	2,827.1	-389.2	949.2	732.1	217.08	4.372		

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design Diana 6T-HZ Pad Sec.6-T6N-R65W - Harsh 41-6 (Exist.) - Wellbore #1 - Wellbore #1											Offset Site Error:		0.0 ft
Survey Program: 7300-UNKNOWN											Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
10,300.0	6,999.0	7,044.0	7,044.0	65.3	140.9	-89.34	4,084.0	-422.6	947.3	741.2	206.11	4.596	
10,400.0	6,999.3	7,044.3	7,044.3	67.2	140.9	-89.41	4,084.0	-422.6	850.0	642.0	207.99	4.087	
10,500.0	6,999.5	7,044.5	7,044.5	69.0	140.9	-89.48	4,084.0	-422.6	753.5	543.6	209.86	3.590	
10,600.0	6,999.8	7,044.8	7,044.8	70.9	140.9	-89.55	4,084.0	-422.6	658.0	446.2	211.74	3.107	
10,700.0	7,000.0	7,045.0	7,045.0	72.8	140.9	-89.62	4,084.0	-422.6	564.0	350.4	213.62	2.640	
10,800.0	7,000.3	7,045.3	7,045.3	74.6	140.9	-89.69	4,084.0	-422.6	472.6	257.0	215.51	2.193	
10,900.0	7,000.6	7,045.6	7,045.6	76.5	140.9	-89.77	4,084.0	-422.6	385.4	168.0	217.39	1.773	
11,000.0	7,000.8	7,045.8	7,045.8	78.4	140.9	-89.84	4,084.0	-422.6	306.1	86.8	219.28	1.396	Level 3
11,100.0	7,001.1	7,046.1	7,046.1	80.3	140.9	-89.91	4,084.0	-422.6	242.6	21.5	221.17	1.097	Level 2
11,200.0	7,001.3	7,046.3	7,046.3	82.2	140.9	-89.98	4,084.0	-422.6	209.9	-13.2	223.06	0.941	Level 1
11,224.1	7,001.4	7,046.4	7,046.4	82.6	140.9	-90.00	4,084.0	-422.6	208.5	-15.0	223.52	0.933 Level 1, CC, ES, SF	
11,300.0	7,001.6	7,046.6	7,046.6	84.1	140.9	-90.05	4,084.0	-422.6	221.9	-3.0	224.95	0.986	Level 1
11,400.0	7,001.9	7,046.9	7,046.9	85.9	140.9	-90.13	4,084.0	-422.6	272.8	46.0	226.85	1.203	Level 2
11,449.9	7,002.0	7,047.0	7,047.0	86.9	140.9	-90.16	4,084.0	-422.6	307.4	79.6	227.79	1.350	Level 3

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-30.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	0.0	-30.6	30.6	30.4	0.22	136.084		
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	0.0	-30.6	30.6	29.9	0.67	45.361 CC, ES		
300.0	300.0	299.2	299.1	0.6	0.5	-91.97	-1.1	-31.9	31.9	30.8	1.10	28.897		
400.0	400.0	398.1	397.9	0.8	0.8	-97.00	-4.4	-35.8	36.2	34.6	1.54	23.445		
500.0	500.0	496.5	496.0	1.0	1.0	-103.12	-9.9	-42.3	43.6	41.6	1.99	21.904		
600.0	600.0	594.7	593.5	1.2	1.3	-108.73	-17.4	-51.3	54.5	52.1	2.45	22.227		
700.0	700.0	694.1	692.1	1.4	1.6	42.71	-25.5	-61.0	65.3	62.4	2.88	22.663		
800.0	799.8	793.8	790.9	1.6	1.9	42.25	-33.7	-70.7	73.6	70.3	3.30	22.323		
900.0	899.5	893.6	889.9	1.8	2.2	43.58	-41.9	-80.4	79.3	75.6	3.74	21.194		
1,000.0	998.9	993.4	988.9	2.1	2.6	45.80	-50.1	-90.2	83.7	79.5	4.22	19.815		
1,100.0	1,098.3	1,093.3	1,088.0	2.3	2.9	47.81	-58.3	-100.0	88.1	83.4	4.73	18.646		
1,200.0	1,197.7	1,193.1	1,187.0	2.6	3.2	49.62	-66.5	-109.7	92.6	87.4	5.25	17.661		
1,300.0	1,297.1	1,293.0	1,286.1	2.9	3.5	51.26	-74.7	-119.5	97.3	91.5	5.78	16.828		
1,400.0	1,396.5	1,392.8	1,385.1	3.1	3.9	52.75	-82.9	-129.2	102.0	95.6	6.33	16.115		
1,500.0	1,495.9	1,492.7	1,484.1	3.4	4.2	54.11	-91.2	-139.0	106.7	99.8	6.88	15.503		
1,600.0	1,595.4	1,592.6	1,583.2	3.7	4.5	55.36	-99.4	-148.7	111.5	104.1	7.45	14.974		
1,700.0	1,694.8	1,692.4	1,682.2	4.0	4.9	56.50	-107.6	-158.5	116.4	108.4	8.02	14.512		
1,800.0	1,794.2	1,792.3	1,781.3	4.3	5.2	57.54	-115.8	-168.2	121.3	112.7	8.60	14.108		
1,900.0	1,893.6	1,892.1	1,880.3	4.6	5.5	58.51	-124.0	-178.0	126.2	117.0	9.18	13.751		
2,000.0	1,993.0	1,992.0	1,979.3	4.9	5.9	59.41	-132.2	-187.7	131.2	121.4	9.76	13.434		
2,100.0	2,092.4	2,091.8	2,078.4	5.2	6.2	60.23	-140.4	-197.5	136.2	125.8	10.35	13.151		
2,200.0	2,191.9	2,191.7	2,177.4	5.5	6.5	61.00	-148.6	-207.2	141.2	130.3	10.95	12.898		
2,300.0	2,291.3	2,291.6	2,276.5	5.8	6.9	61.72	-156.8	-217.0	146.2	134.7	11.54	12.670		
2,400.0	2,390.7	2,391.4	2,375.5	6.1	7.2	62.39	-165.0	-226.7	151.3	139.2	12.14	12.463		
2,500.0	2,490.1	2,491.3	2,474.5	6.4	7.5	63.02	-173.2	-236.5	156.4	143.7	12.74	12.276		
2,600.0	2,589.5	2,591.1	2,573.6	6.7	7.9	63.60	-181.4	-246.2	161.5	148.2	13.34	12.105		
2,700.0	2,688.9	2,691.0	2,672.6	7.0	8.2	64.15	-189.6	-256.0	166.6	152.7	13.95	11.948		
2,800.0	2,788.4	2,790.8	2,771.6	7.3	8.6	64.67	-197.8	-265.8	171.8	157.2	14.55	11.804		
2,900.0	2,887.8	2,890.7	2,870.7	7.6	8.9	65.16	-206.0	-275.5	176.9	161.8	15.16	11.672		
3,000.0	2,987.2	2,990.6	2,969.7	7.9	9.2	65.61	-214.2	-285.3	182.1	166.3	15.77	11.550		
3,100.0	3,086.6	3,090.4	3,068.8	8.2	9.6	66.05	-222.4	-295.0	187.3	170.9	16.37	11.437		
3,200.0	3,186.0	3,190.3	3,167.8	8.5	9.9	66.46	-230.6	-304.8	192.4	175.5	16.98	11.332		
3,300.0	3,285.4	3,290.1	3,266.8	8.8	10.2	66.85	-238.8	-314.5	197.6	180.0	17.59	11.234		
3,400.0	3,384.9	3,390.0	3,365.9	9.1	10.6	67.22	-247.0	-324.3	202.8	184.6	18.20	11.143		
3,500.0	3,484.3	3,489.8	3,464.9	9.4	10.9	67.57	-255.2	-334.0	208.0	189.2	18.81	11.058		
3,600.0	3,583.7	3,589.7	3,564.0	9.8	11.2	67.90	-263.4	-343.8	213.3	193.8	19.43	10.978		
3,700.0	3,683.1	3,689.5	3,663.0	10.1	11.6	68.22	-271.6	-353.5	218.5	198.4	20.04	10.903		
3,800.0	3,782.5	3,789.4	3,762.0	10.4	11.9	68.52	-279.8	-363.3	223.7	203.1	20.65	10.833		
3,900.0	3,881.9	3,889.3	3,861.1	10.7	12.2	68.81	-288.0	-373.0	229.0	207.7	21.26	10.767		
4,000.0	3,981.3	3,989.1	3,960.1	11.0	12.6	69.09	-296.2	-382.8	234.2	212.3	21.88	10.704		
4,100.0	4,080.8	4,089.0	4,059.2	11.3	12.9	69.35	-304.4	-392.5	239.4	216.9	22.49	10.645		
4,200.0	4,180.2	4,188.8	4,158.2	11.6	13.2	69.60	-312.6	-402.3	244.7	221.6	23.11	10.589		
4,300.0	4,279.6	4,288.7	4,257.2	11.9	13.6	69.85	-320.8	-412.0	249.9	226.2	23.72	10.537		
4,400.0	4,379.0	4,388.5	4,356.3	12.2	13.9	70.08	-329.0	-421.8	255.2	230.9	24.34	10.486		
4,500.0	4,478.4	4,488.4	4,455.3	12.5	14.3	70.30	-337.3	-431.6	260.5	235.5	24.95	10.439		
4,600.0	4,577.8	4,588.3	4,554.4	12.8	14.6	70.52	-345.5	-441.3	265.7	240.2	25.57	10.394		
4,700.0	4,677.3	4,688.1	4,653.4	13.1	14.9	70.72	-353.7	-451.1	271.0	244.8	26.18	10.350		
4,800.0	4,776.7	4,788.0	4,752.4	13.4	15.3	70.92	-361.9	-460.8	276.3	249.5	26.80	10.309		
4,900.0	4,876.1	4,887.8	4,851.5	13.7	15.6	71.11	-370.1	-470.6	281.6	254.1	27.42	10.270		
5,000.0	4,975.5	4,987.7	4,950.5	14.0	15.9	71.29	-378.3	-480.3	286.8	258.8	28.03	10.233		

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 O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0ft
Survey Program: 0-MWD													Offset Well Error:	0.0ft
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		
5,100.0	5,074.9	5,087.5	5,049.6	14.4	16.3	71.47	-386.5	-490.1	292.1	263.5	28.65	10.197		
5,200.0	5,174.3	5,187.4	5,148.6	14.7	16.6	71.64	-394.7	-499.8	297.4	268.2	29.27	10.163		
5,300.0	5,273.9	5,287.2	5,247.6	14.9	16.9	71.68	-402.9	-509.6	303.1	273.3	29.82	10.165		
5,400.0	5,373.7	5,386.9	5,346.5	15.1	17.3	71.15	-411.1	-519.3	309.9	279.6	30.23	10.250		
5,500.0	5,473.6	5,486.4	5,445.1	15.3	17.6	70.08	-419.2	-529.0	317.8	287.3	30.56	10.402		
5,600.0	5,573.6	5,585.6	5,543.5	15.4	17.9	-86.02	-427.4	-538.7	326.9	296.1	30.83	10.602		
5,700.0	5,673.6	5,685.5	5,642.6	15.6	18.3	-87.53	-435.6	-548.5	336.2	305.1	31.09	10.815		
5,800.0	5,773.6	5,794.6	5,751.1	15.7	18.5	-88.84	-443.0	-557.3	344.1	312.8	31.29	10.996		
5,900.0	5,873.6	5,904.4	5,860.7	15.8	18.7	-89.64	-447.8	-563.0	349.2	317.7	31.53	11.076		
6,000.0	5,973.6	6,014.7	5,970.9	16.0	18.9	-89.98	-449.9	-565.5	351.5	319.7	31.81	11.050		
6,100.0	6,073.6	6,117.4	6,073.6	16.1	19.0	-90.00	-450.0	-565.6	351.6	319.5	32.12	10.946		
6,200.0	6,173.6	6,217.4	6,173.6	16.3	19.1	-90.00	-450.0	-565.6	351.6	319.2	32.42	10.845		
6,251.3	6,224.9	6,268.7	6,224.9	16.4	19.2	-90.13	-450.0	-565.6	351.6	319.0	32.55	10.800		
6,300.0	6,273.6	6,317.4	6,273.6	16.4	19.3	-90.22	-450.0	-565.6	351.6	318.9	32.68	10.757		
6,400.0	6,372.7	6,416.5	6,372.7	16.5	19.4	-92.22	-450.0	-565.6	351.9	319.2	32.66	10.774		
6,500.0	6,469.4	6,517.7	6,473.6	16.5	19.5	-95.33	-443.9	-565.6	353.2	320.8	32.38	10.908		
6,600.0	6,561.9	6,621.7	6,575.6	16.4	19.5	-98.36	-423.8	-565.6	355.5	323.5	31.97	11.121		
6,700.0	6,648.7	6,728.7	6,676.6	16.3	19.5	-101.26	-388.9	-565.6	358.7	327.2	31.48	11.396		
6,800.0	6,728.3	6,838.7	6,774.4	16.2	19.3	-103.94	-338.6	-565.6	362.5	331.6	30.97	11.707		
6,900.0	6,799.3	6,951.7	6,866.2	16.1	19.2	-106.37	-273.0	-565.6	366.7	336.2	30.53	12.014		
7,000.0	6,860.6	7,067.7	6,949.4	16.0	18.9	-108.48	-192.3	-565.5	371.0	340.7	30.25	12.264		
7,100.0	6,911.0	7,186.3	7,020.8	16.1	18.7	-110.23	-97.6	-565.5	374.9	344.7	30.24	12.398		
7,200.0	6,949.7	7,307.3	7,077.6	16.4	18.5	-111.59	9.0	-565.5	378.2	347.6	30.60	12.360		
7,300.0	6,976.1	7,430.1	7,117.4	16.9	18.3	-112.51	125.0	-565.5	380.5	349.1	31.40	12.117		
7,400.0	6,989.6	7,551.5	7,138.1	17.6	18.5	-113.00	244.5	-565.5	381.8	349.2	32.66	11.691		
7,500.0	6,991.7	7,656.7	7,148.3	18.5	19.4	-114.03	349.2	-565.4	384.9	350.9	34.02	11.314		
7,600.0	6,991.9	7,766.4	7,151.4	19.6	20.6	-114.41	458.8	-565.4	385.9	350.0	35.87	10.759		
7,700.0	6,992.2	7,866.4	7,152.2	20.8	21.7	-114.48	558.8	-565.4	386.1	348.1	37.95	10.173		
7,800.0	6,992.4	7,966.3	7,152.9	22.1	23.0	-114.55	658.8	-565.4	386.3	346.0	40.23	9.601		
7,900.0	6,992.7	8,066.3	7,153.7	23.4	24.3	-114.63	758.8	-565.3	386.5	343.8	42.68	9.054		
8,000.0	6,993.0	8,166.3	7,154.5	24.9	25.7	-114.70	858.8	-565.3	386.7	341.4	45.28	8.540		
8,100.0	6,993.2	8,266.3	7,155.3	26.4	27.2	-114.77	958.8	-565.3	386.9	338.9	47.99	8.062		
8,200.0	6,993.5	8,366.3	7,156.1	28.0	28.7	-114.85	1,058.8	-565.3	387.1	336.3	50.79	7.620		
8,300.0	6,993.8	8,466.3	7,156.9	29.6	30.2	-114.92	1,158.8	-565.2	387.3	333.6	53.68	7.214		
8,400.0	6,994.0	8,566.3	7,157.7	31.2	31.8	-114.99	1,258.8	-565.2	387.5	330.8	56.64	6.840		
8,500.0	6,994.3	8,666.3	7,158.5	32.9	33.5	-115.06	1,358.8	-565.2	387.7	328.0	59.66	6.498		
8,600.0	6,994.5	8,766.3	7,159.3	34.5	35.1	-115.14	1,458.8	-565.1	387.9	325.1	62.72	6.184		
8,700.0	6,994.8	8,866.3	7,160.1	36.3	36.8	-115.21	1,558.8	-565.1	388.1	322.2	65.83	5.895		
8,800.0	6,995.1	8,966.3	7,160.9	38.0	38.5	-115.28	1,658.8	-565.1	388.3	319.3	68.97	5.629		
8,900.0	6,995.3	9,066.3	7,161.7	39.7	40.2	-115.36	1,758.8	-565.1	388.5	316.3	72.15	5.384		
9,000.0	6,995.6	9,166.3	7,162.5	41.5	42.0	-115.43	1,858.8	-565.0	388.7	313.3	75.35	5.158		
9,100.0	6,995.8	9,266.3	7,163.3	43.3	43.7	-115.50	1,958.7	-565.0	388.9	310.3	78.57	4.950		
9,200.0	6,996.1	9,366.3	7,164.1	45.1	45.5	-115.57	2,058.7	-565.0	389.1	307.3	81.81	4.756		
9,300.0	6,996.4	9,466.3	7,164.8	46.9	47.3	-115.65	2,158.7	-565.0	389.3	304.2	85.06	4.576		
9,400.0	6,996.6	9,566.3	7,165.6	48.7	49.0	-115.72	2,258.7	-564.9	389.5	301.1	88.33	4.409		
9,500.0	6,996.9	9,666.3	7,166.4	50.5	50.8	-115.79	2,358.7	-564.9	389.7	298.1	91.62	4.253		
9,600.0	6,997.2	9,766.3	7,167.2	52.3	52.7	-115.86	2,458.7	-564.9	389.9	295.0	94.91	4.108		
9,700.0	6,997.4	9,866.3	7,168.0	54.2	54.5	-115.93	2,558.7	-564.9	390.1	291.9	98.21	3.972		
9,800.0	6,997.7	9,966.3	7,168.8	56.0	56.3	-116.01	2,658.7	-564.8	390.3	288.8	101.52	3.844		
9,900.0	6,997.9	10,066.3	7,169.6	57.9	58.1	-116.08	2,758.7	-564.8	390.5	285.7	104.84	3.725		

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 O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference														
Offset														
Semi Major Axis														
Distance														
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,000.0	6,998.2	10,166.3	7,170.4	59.7	59.9	-116.15	2,858.7	-564.8	390.7	282.5	108.17	3.612		
10,100.0	6,998.5	10,266.3	7,171.2	61.6	61.8	-116.22	2,958.7	-564.7	390.9	279.4	111.49	3.506		
10,200.0	6,998.7	10,366.3	7,172.0	63.4	63.6	-116.29	3,058.7	-564.7	391.1	276.3	114.83	3.406		
10,300.0	6,999.0	10,466.3	7,172.8	65.3	65.5	-116.37	3,158.7	-564.7	391.3	273.2	118.16	3.312		
10,400.0	6,999.3	10,566.3	7,173.6	67.2	67.3	-116.44	3,258.7	-564.7	391.6	270.1	121.50	3.223		
10,500.0	6,999.5	10,666.3	7,174.4	69.0	69.2	-116.51	3,358.7	-564.6	391.8	266.9	124.84	3.138		
10,600.0	6,999.8	10,766.3	7,175.2	70.9	71.0	-116.58	3,458.7	-564.6	392.0	263.8	128.19	3.058		
10,700.0	7,000.0	10,866.3	7,176.0	72.8	72.9	-116.65	3,558.7	-564.6	392.2	260.7	131.53	2.982		
10,800.0	7,000.3	10,966.3	7,176.7	74.6	74.8	-116.72	3,658.7	-564.6	392.4	257.5	134.88	2.909		
10,900.0	7,000.6	11,066.3	7,177.5	76.5	76.6	-116.79	3,758.7	-564.5	392.6	254.4	138.22	2.840		
11,000.0	7,000.8	11,166.3	7,178.3	78.4	78.5	-116.86	3,858.7	-564.5	392.8	251.3	141.57	2.775		
11,100.0	7,001.1	11,266.3	7,179.1	80.3	80.4	-116.94	3,958.7	-564.5	393.0	248.1	144.92	2.712		
11,200.0	7,001.3	11,366.3	7,179.9	82.2	82.3	-117.01	4,058.7	-564.4	393.3	245.0	148.26	2.652		
11,300.0	7,001.6	11,466.3	7,180.7	84.1	84.1	-117.08	4,158.6	-564.4	393.5	241.9	151.61	2.595		
11,400.0	7,001.9	11,566.3	7,181.5	85.9	86.0	-117.15	4,258.6	-564.4	393.7	238.7	154.96	2.541		
11,449.9	7,002.0	11,616.2	7,181.9	86.9	87.0	-117.18	4,308.6	-564.4	393.8	237.2	156.63	2.514 SF		

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design		O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W - O Investment Properties 6Y-401 - Wellbore #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	0.0	0.0	0.0	0.0	89.98	0.0	30.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	30.6	30.6	30.4	0.22	136.084		
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	30.6	30.6	29.9	0.67	45.361		
300.0	300.0	300.0	300.0	0.6	0.6	89.98	0.0	30.6	30.6	29.5	1.12	27.217		
400.0	400.0	400.0	400.0	0.8	0.8	89.98	0.0	30.6	30.6	29.0	1.57	19.441		
500.0	500.0	500.0	500.0	1.0	1.0	89.98	0.0	30.6	30.6	28.6	2.02	15.120		
600.0	600.0	600.0	600.0	1.2	1.2	89.98	0.0	30.6	30.6	28.1	2.47	12.371	CC, ES	
700.0	700.0	700.0	700.0	1.4	1.5	-118.31	0.0	30.6	31.4	28.5	2.90	10.837		
800.0	799.8	799.8	799.8	1.6	1.7	-126.01	0.0	30.6	34.2	30.9	3.30	10.341		
900.0	899.5	899.5	899.5	1.8	1.9	-136.08	0.0	30.6	39.9	36.2	3.73	10.707		
1,000.0	998.9	998.9	998.9	2.1	2.1	-144.96	0.0	30.6	48.3	44.1	4.16	11.608		
1,100.0	1,098.3	1,098.3	1,098.3	2.3	2.4	-151.14	0.0	30.6	57.5	52.9	4.60	12.504		
1,200.0	1,197.7	1,197.7	1,197.7	2.6	2.6	-155.58	0.0	30.6	67.1	62.1	5.04	13.332		
1,300.0	1,297.1	1,297.1	1,297.1	2.9	2.8	-158.90	0.0	30.6	77.1	71.6	5.48	14.076		
1,400.0	1,396.5	1,396.5	1,396.5	3.1	3.0	-161.45	0.0	30.6	87.3	81.3	5.92	14.737		
1,500.0	1,495.9	1,495.9	1,495.9	3.4	3.3	-163.46	0.0	30.6	97.6	91.2	6.37	15.322		
1,600.0	1,595.4	1,597.6	1,597.6	3.7	3.5	-164.43	-1.6	30.9	106.9	100.2	6.79	15.743		
1,700.0	1,694.8	1,699.8	1,699.6	4.0	3.6	-163.83	-6.8	31.9	114.2	107.0	7.20	15.848		
1,800.0	1,794.2	1,802.1	1,801.5	4.3	3.8	-161.89	-15.6	33.6	119.3	111.6	7.63	15.624		
1,900.0	1,893.6	1,902.1	1,901.0	4.6	4.0	-159.35	-26.3	35.6	123.3	115.2	8.08	15.255		
2,000.0	1,993.0	2,001.9	2,000.1	4.9	4.2	-156.97	-36.9	37.6	127.6	119.0	8.55	14.920		
2,100.0	2,092.4	2,101.7	2,099.3	5.2	4.4	-154.74	-47.6	39.7	132.0	123.0	9.03	14.616		
2,200.0	2,191.9	2,201.4	2,198.5	5.5	4.7	-152.66	-58.3	41.7	136.7	127.2	9.53	14.341		
2,300.0	2,291.3	2,301.2	2,297.7	5.8	4.9	-150.73	-68.9	43.8	141.5	131.5	10.04	14.091		
2,400.0	2,390.7	2,401.0	2,396.9	6.1	5.2	-148.92	-79.6	45.8	146.5	135.9	10.57	13.864		
2,500.0	2,490.1	2,500.7	2,496.0	6.4	5.4	-147.23	-90.2	47.8	151.6	140.5	11.10	13.658		
2,600.0	2,589.5	2,600.5	2,595.2	6.7	5.7	-145.65	-100.9	49.9	156.8	145.2	11.64	13.470		
2,700.0	2,688.9	2,700.3	2,694.4	7.0	6.0	-144.18	-111.6	51.9	162.2	150.0	12.19	13.300		
2,800.0	2,788.4	2,800.1	2,793.6	7.3	6.2	-142.80	-122.2	53.9	167.6	154.9	12.75	13.145		
2,900.0	2,887.8	2,899.8	2,892.8	7.6	6.5	-141.51	-132.9	56.0	173.2	159.9	13.32	13.004		
3,000.0	2,987.2	2,999.6	2,992.0	7.9	6.8	-140.30	-143.5	58.0	178.8	164.9	13.89	12.876		
3,100.0	3,086.6	3,099.4	3,091.1	8.2	7.0	-139.16	-154.2	60.1	184.5	170.0	14.46	12.758		
3,200.0	3,186.0	3,199.2	3,190.3	8.5	7.3	-138.09	-164.8	62.1	190.3	175.2	15.04	12.651		
3,300.0	3,285.4	3,298.9	3,289.5	8.8	7.6	-137.08	-175.5	64.1	196.1	180.5	15.62	12.553		
3,400.0	3,384.9	3,398.7	3,388.7	9.1	7.9	-136.14	-186.2	66.2	202.0	185.8	16.20	12.463		
3,500.0	3,484.3	3,498.5	3,487.9	9.4	8.2	-135.24	-196.8	68.2	207.9	191.1	16.79	12.381		
3,600.0	3,583.7	3,598.2	3,587.0	9.8	8.5	-134.40	-207.5	70.2	213.9	196.5	17.38	12.305		
3,700.0	3,683.1	3,698.0	3,686.2	10.1	8.8	-133.60	-218.1	72.3	219.9	201.9	17.97	12.236		
3,800.0	3,782.5	3,797.8	3,785.4	10.4	9.1	-132.84	-228.8	74.3	226.0	207.4	18.57	12.171		
3,900.0	3,881.9	3,897.6	3,884.6	10.7	9.3	-132.13	-239.5	76.4	232.1	212.9	19.16	12.112		
4,000.0	3,981.3	3,997.3	3,983.8	11.0	9.6	-131.45	-250.1	78.4	238.2	218.4	19.76	12.057		
4,100.0	4,080.8	4,097.1	4,082.9	11.3	9.9	-130.81	-260.8	80.4	244.4	224.0	20.35	12.006		
4,200.0	4,180.2	4,196.9	4,182.1	11.6	10.2	-130.19	-271.4	82.5	250.6	229.6	20.95	11.959		
4,300.0	4,279.6	4,296.7	4,281.3	11.9	10.5	-129.61	-282.1	84.5	256.8	235.2	21.55	11.915		
4,400.0	4,379.0	4,396.4	4,380.5	12.2	10.8	-129.05	-292.7	86.5	263.0	240.9	22.15	11.874		
4,500.0	4,478.4	4,496.2	4,479.7	12.5	11.1	-128.52	-303.4	88.6	269.3	246.6	22.75	11.837		
4,600.0	4,577.8	4,596.0	4,578.8	12.8	11.4	-128.02	-314.1	90.6	275.6	252.3	23.36	11.801		
4,700.0	4,677.3	4,695.7	4,678.0	13.1	11.7	-127.53	-324.7	92.6	281.9	258.0	23.96	11.768		
4,800.0	4,776.7	4,795.5	4,777.2	13.4	12.0	-127.07	-335.4	94.7	288.3	263.7	24.56	11.737		
4,900.0	4,876.1	4,895.3	4,876.4	13.7	12.3	-126.63	-346.0	96.7	294.6	269.5	25.16	11.708		
5,000.0	4,975.5	4,995.1	4,975.6	14.0	12.6	-126.21	-356.7	98.8	301.0	275.2	25.77	11.681		

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 O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design										O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W - O Investment Properties 6Y-401 - Wellbore #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				
5,100.0	5,074.9	5,094.8	5,074.8	14.4	12.9	-125.80	-367.4	100.8	307.4	281.0	26.37	11.656				
5,200.0	5,174.3	5,194.6	5,173.9	14.7	13.2	-125.41	-378.0	102.8	313.8	286.8	26.98	11.632				
5,300.0	5,273.9	5,294.4	5,273.1	14.9	13.5	-124.94	-388.7	104.9	319.5	291.9	27.55	11.595				
5,400.0	5,373.7	5,394.2	5,372.3	15.1	13.8	-123.96	-399.3	106.9	323.3	295.2	28.08	11.512				
5,500.0	5,473.6	5,493.8	5,471.3	15.3	14.1	-122.48	-410.0	108.9	325.4	296.7	28.60	11.374				
5,600.0	5,573.6	5,593.2	5,570.1	15.4	14.4	84.83	-420.6	111.0	326.3	297.2	29.14	11.198				
5,700.0	5,673.6	5,692.6	5,668.9	15.6	14.7	86.71	-431.2	113.0	327.6	297.9	29.65	11.049				
5,800.0	5,773.6	5,793.5	5,769.4	15.7	15.0	88.41	-440.9	114.8	329.0	298.9	30.11	10.927				
5,900.0	5,873.6	5,895.3	5,871.0	15.8	15.2	89.50	-447.1	116.0	330.1	299.6	30.49	10.826				
6,000.0	5,973.6	5,997.4	5,973.1	16.0	15.4	89.98	-449.9	116.6	330.6	299.7	30.83	10.723				
6,100.0	6,073.6	6,098.0	6,073.6	16.1	15.5	90.00	-450.0	116.6	330.6	299.4	31.15	10.612				
6,200.0	6,173.6	6,198.0	6,173.6	16.3	15.7	90.00	-450.0	116.6	330.6	299.1	31.46	10.507				
6,251.2	6,224.8	6,249.2	6,224.8	16.4	15.8	90.14	-450.0	116.6	330.6	299.0	31.62	10.455				
6,300.0	6,273.6	6,298.0	6,273.6	16.4	15.9	90.24	-450.0	116.6	330.6	298.8	31.77	10.405				
6,400.0	6,372.7	6,397.1	6,372.7	16.5	16.0	92.37	-450.0	116.6	330.9	298.8	32.03	10.329				
6,500.0	6,469.4	6,498.2	6,473.6	16.5	16.1	95.67	-443.9	116.6	332.3	300.1	32.16	10.333				
6,600.0	6,561.9	6,602.3	6,575.6	16.4	16.2	98.89	-423.8	116.6	334.8	302.7	32.07	10.437				
6,700.0	6,648.7	6,709.2	6,676.6	16.3	16.1	101.95	-388.9	116.6	338.2	306.4	31.80	10.633				
6,800.0	6,728.3	6,819.2	6,774.3	16.2	16.0	104.79	-338.7	116.6	342.2	310.8	31.41	10.896				
6,900.0	6,799.3	6,932.2	6,866.2	16.1	15.9	107.35	-273.0	116.6	346.7	315.7	30.99	11.189				
7,000.0	6,860.6	7,048.2	6,949.3	16.0	15.9	109.57	-192.3	116.6	351.2	320.5	30.66	11.454				
7,100.0	6,911.0	7,166.9	7,020.8	16.1	15.9	111.41	-97.7	116.6	355.4	324.8	30.59	11.617				
7,200.0	6,949.7	7,287.8	7,077.6	16.4	16.2	112.82	8.9	116.6	358.8	327.9	30.91	11.608				
7,300.0	6,976.1	7,410.6	7,117.4	16.9	16.8	113.79	124.9	116.6	361.4	329.6	31.74	11.384				
7,400.0	6,989.6	7,532.0	7,138.1	17.6	17.7	114.29	244.4	116.6	362.7	329.6	33.10	10.957				
7,500.0	6,991.7	7,637.3	7,148.3	18.5	18.6	115.36	349.3	116.6	366.0	331.4	34.62	10.573				
7,600.0	6,991.9	7,746.8	7,151.3	19.6	19.7	115.74	458.7	116.6	367.0	330.5	36.54	10.044				
7,700.0	6,992.2	7,846.8	7,152.1	20.8	20.9	115.81	558.7	116.6	367.3	328.6	38.67	9.498				
7,800.0	6,992.4	7,946.8	7,152.9	22.1	22.2	115.89	658.7	116.6	367.5	326.5	40.98	8.968				
7,900.0	6,992.7	8,046.8	7,153.7	23.4	23.5	115.96	758.7	116.6	367.7	324.3	43.45	8.464				
8,000.0	6,993.0	8,146.8	7,154.5	24.9	25.0	116.04	858.7	116.6	368.0	321.9	46.05	7.991				
8,100.0	6,993.2	8,246.8	7,155.3	26.4	26.5	116.11	958.7	116.6	368.2	319.5	48.76	7.551				
8,200.0	6,993.5	8,346.8	7,156.1	28.0	28.0	116.19	1,058.7	116.6	368.5	316.9	51.57	7.145				
8,300.0	6,993.8	8,446.8	7,156.9	29.6	29.6	116.26	1,158.7	116.6	368.7	314.3	54.45	6.772				
8,400.0	6,994.0	8,546.8	7,157.7	31.2	31.2	116.34	1,258.7	116.6	368.9	311.6	57.39	6.429				
8,500.0	6,994.3	8,646.8	7,158.5	32.9	32.9	116.41	1,358.7	116.6	369.2	308.8	60.39	6.113				
8,600.0	6,994.5	8,746.8	7,159.3	34.5	34.6	116.48	1,458.7	116.6	369.4	306.0	63.43	5.824				
8,700.0	6,994.8	8,846.8	7,160.1	36.3	36.3	116.56	1,558.6	116.6	369.7	303.2	66.52	5.558				
8,800.0	6,995.1	8,946.8	7,160.9	38.0	38.0	116.63	1,658.6	116.6	369.9	300.3	69.64	5.312				
8,900.0	6,995.3	9,046.8	7,161.7	39.7	39.8	116.71	1,758.6	116.7	370.2	297.4	72.78	5.086				
9,000.0	6,995.6	9,146.8	7,162.5	41.5	41.5	116.78	1,858.6	116.7	370.4	294.5	75.95	4.877				
9,100.0	6,995.8	9,246.8	7,163.3	43.3	43.3	116.85	1,958.6	116.7	370.7	291.5	79.14	4.684				
9,200.0	6,996.1	9,346.8	7,164.1	45.1	45.1	116.93	2,058.6	116.7	370.9	288.6	82.35	4.504				
9,300.0	6,996.4	9,446.8	7,164.9	46.9	46.9	117.00	2,158.6	116.7	371.2	285.6	85.58	4.337				
9,400.0	6,996.6	9,546.8	7,165.7	48.7	48.7	117.07	2,258.6	116.7	371.4	282.6	88.82	4.182				
9,500.0	6,996.9	9,646.8	7,166.5	50.5	50.5	117.15	2,358.6	116.7	371.7	279.6	92.07	4.037				
9,600.0	6,997.2	9,746.8	7,167.3	52.3	52.4	117.22	2,458.6	116.7	371.9	276.6	95.33	3.902				
9,700.0	6,997.4	9,846.8	7,168.1	54.2	54.2	117.29	2,558.6	116.7	372.2	273.6	98.60	3.775				
9,800.0	6,997.7	9,946.8	7,168.9	56.0	56.0	117.37	2,658.6	116.7	372.4	270.6	101.87	3.656				
9,900.0	6,997.9	10,046.8	7,169.7	57.9	57.9	117.44	2,758.6	116.7	372.7	267.5	105.15	3.544				

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

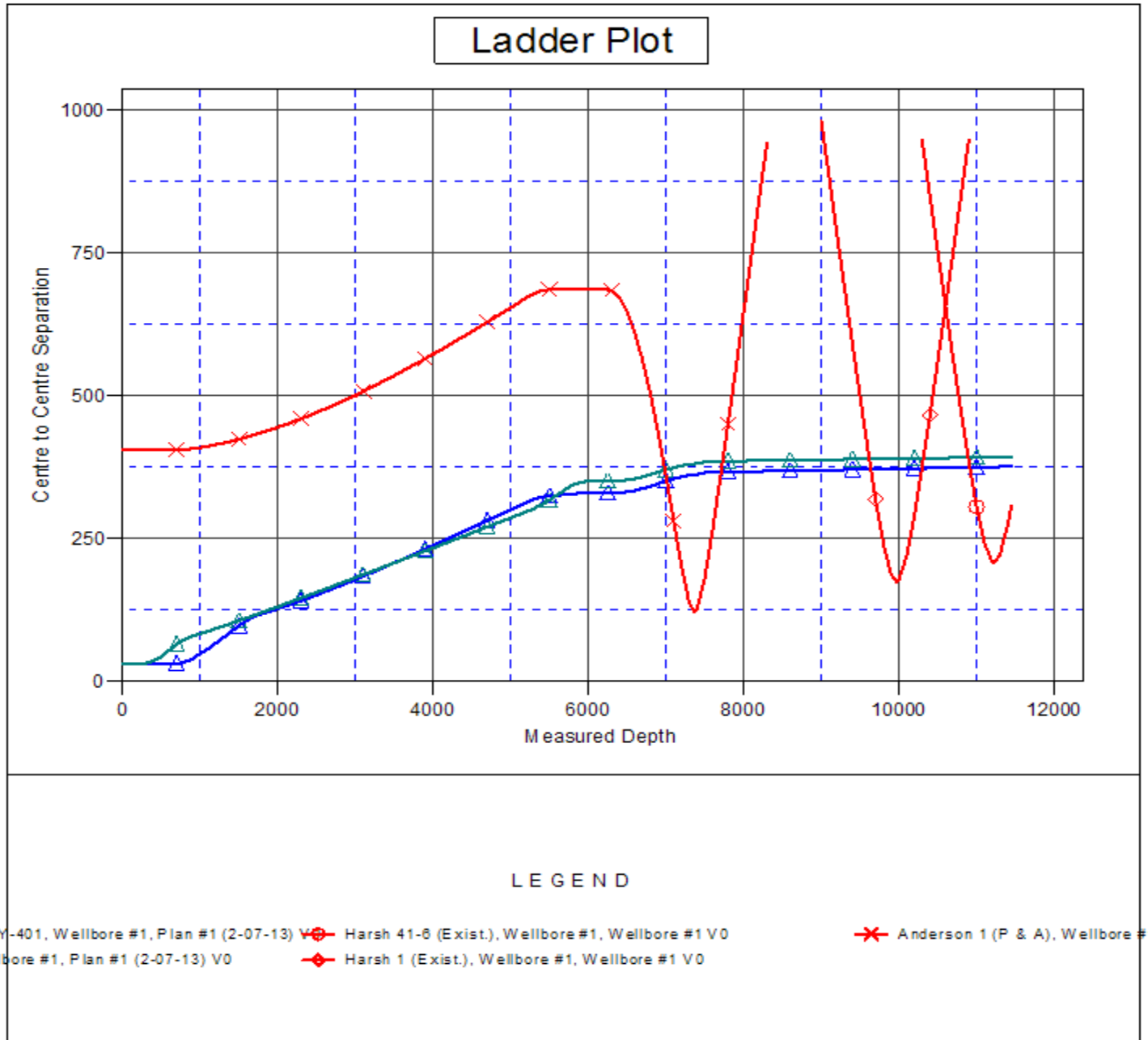
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Offset Design													
O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W - O Investment Properties 6Y-401 - Wellbore #1													
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	6,998.2	10,146.8	7,170.5	59.7	59.7	117.51	2,858.6	116.7	372.9	264.5	108.44	3.439	
10,100.0	6,998.5	10,246.8	7,171.3	61.6	61.6	117.59	2,958.6	116.7	373.2	261.5	111.73	3.340	
10,200.0	6,998.7	10,346.8	7,172.1	63.4	63.4	117.66	3,058.6	116.7	373.4	258.4	115.03	3.247	
10,300.0	6,999.0	10,446.8	7,172.9	65.3	65.3	117.73	3,158.6	116.7	373.7	255.4	118.33	3.158	
10,400.0	6,999.3	10,546.8	7,173.7	67.2	67.2	117.80	3,258.6	116.7	374.0	252.3	121.63	3.075	
10,500.0	6,999.5	10,646.8	7,174.5	69.0	69.0	117.88	3,358.6	116.7	374.2	249.3	124.93	2.995	
10,600.0	6,999.8	10,746.8	7,175.3	70.9	70.9	117.95	3,458.6	116.7	374.5	246.2	128.24	2.920	
10,700.0	7,000.0	10,846.8	7,176.1	72.8	72.8	118.02	3,558.6	116.7	374.7	243.2	131.54	2.849	
10,800.0	7,000.3	10,946.8	7,176.9	74.6	74.7	118.09	3,658.5	116.7	375.0	240.1	134.85	2.781	
10,900.0	7,000.6	11,046.8	7,177.7	76.5	76.5	118.17	3,758.5	116.7	375.2	237.1	138.16	2.716	
11,000.0	7,000.8	11,146.8	7,178.5	78.4	78.4	118.24	3,858.5	116.8	375.5	234.0	141.47	2.654	
11,100.0	7,001.1	11,246.8	7,179.3	80.3	80.3	118.31	3,958.5	116.8	375.8	231.0	144.77	2.596	
11,200.0	7,001.3	11,346.8	7,180.1	82.2	82.2	118.38	4,058.5	116.8	376.0	227.9	148.08	2.539	
11,300.0	7,001.6	11,446.8	7,180.9	84.1	84.1	118.45	4,158.5	116.8	376.3	224.9	151.39	2.486	
11,400.0	7,001.9	11,546.8	7,181.7	85.9	86.0	118.52	4,258.5	116.8	376.5	221.9	154.69	2.434	
11,419.6	7,001.9	11,566.4	7,181.8	86.3	86.3	118.54	4,278.1	116.8	376.6	221.3	155.34	2.424	
11,449.9	7,002.0	11,587.2	7,182.0	86.9	86.7	118.55	4,299.0	116.8	376.8	220.6	156.19	2.412 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4792.0ft (RKB - 15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: O Investment Properties 6Y-241
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.52°



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well O Investment Properties 6Y-241
Project:	SEC.6-T6N-R65W	TVD Reference:	WELL @ 4792.0ft (RKB - 15')
Reference Site:	O Investment Properties 6Y-HZ Pad Sec.6-T6N-R65W	MD Reference:	WELL @ 4792.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	O Investment Properties 6Y-241	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 (2-07-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4792.0ft (RKB - 15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: O Investment Properties 6Y-241
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.52°

