

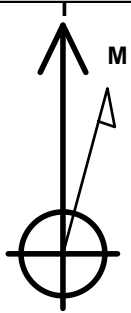
# PETROLEUM DEVELOPMENT CORP Weld County CO

## Well Name: Maxey 24P-332

Surface Location: Maxey 24Q-HZ Pad Sec.24-T5N-R65W  
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone  
 Ground Elevation: 4635.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 1381915.62 3247745.85 40.378350 -104.610730  
 RKB - 15' WELL @ 4650.0ft (RKB - 15')

### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 340'FSL, 2453'FEL, SEC.24	1.0	0.0	0.0	Point
BHL 738'FSL & 1800'FEL, SEC.19	6770.0	365.0	5859.1	Point

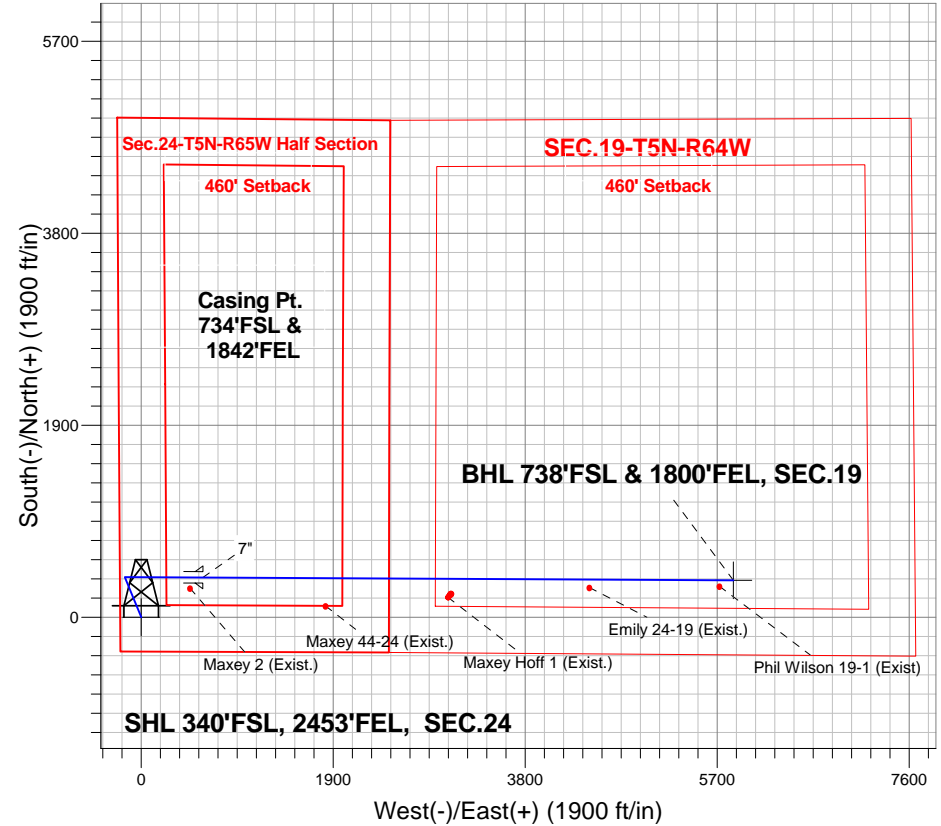


Azimuths to True North  
 Magnetic North: 8.43°  
 Magnetic Field  
 Strength: 52863.1nT  
 Dip Angle: 66.97°  
 Date: 1/22/2014  
 Model: IGRF2010

### ANNOTATIONS

TVD	MD	Annotation
1000.0	1000.0	KOP #1
6069.3	6090.7	KOP #2
6833.2	7299.9	End of Build

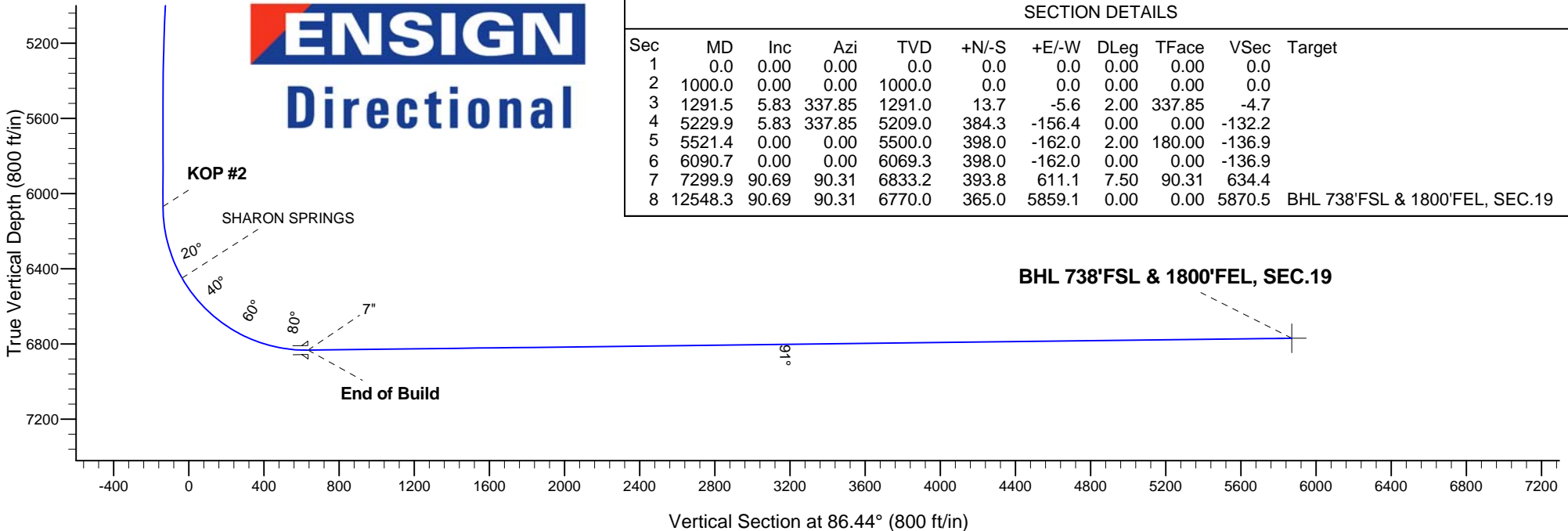
Maxey 24Q-HZ Pad Sec.24-T5N-R65W  
 Maxey 24P-332  
 Plan #3 (1-22-14)  
 10:52, January 23 2014



### 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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1291.5	5.83	337.85	1291.0	13.7	-5.6	2.00	337.85	-4.7	
4	5229.9	5.83	337.85	5209.0	384.3	-156.4	0.00	0.00	-132.2	
5	5521.4	0.00	0.00	5500.0	398.0	-162.0	2.00	180.00	-136.9	
6	6090.7	0.00	0.00	6069.3	398.0	-162.0	0.00	0.00	-136.9	
7	7299.9	90.69	90.31	6833.2	393.8	611.1	7.50	90.31	634.4	
8	12548.3	90.69	90.31	6770.0	365.0	5859.1	0.00	0.00	5870.5	BHL 738'FSL & 1800'FEL, SEC.19

### BHL 738'FSL & 1800'FEL, SEC.19





# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

**Maxey 24Q-HZ Pad Sec.24-T5N-R65W**

**Maxey 24P-332**

**Wellbore #1**

**Plan: Plan #3 (1-22-14)**

## **Standard Planning Report**

**23 January, 2014**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

<b>Project</b>	SEC.24-T5N-R65W, Weld County, Colorado		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		Using Well Reference Point
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

Site						Maxey 24Q-HZ Pad Sec.24-T5N-R65W											
Site Position:						Northing:			1,381,915.64 ft			Latitude:			40.378350		
From:			Lat/Long			Easting:			3,247,745.85 ft			Longitude:			-104.610730		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.57 °		

Well	Maxey 24P-332					
Well Position	+N-S	0.0 ft	Northing:	1,381,915.62 ft	Latitude:	40.378350
	+E-W	0.0 ft	Easting:	3,247,745.85 ft	Longitude:	-104.610730
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,635.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	1/22/2014	8.43	66.97	52,863

<b>Design</b>	Plan #3 (1-22-14)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	86.44

<b>Plan Sections</b>										
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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,291.5	5.83	337.85	1,291.0	13.7	-5.6	2.00	2.00	0.00	337.85	
5,229.9	5.83	337.85	5,209.0	384.3	-156.4	0.00	0.00	0.00	0.00	
5,521.4	0.00	0.00	5,500.0	398.0	-162.0	2.00	-2.00	0.00	180.00	
6,090.7	0.00	0.00	6,069.3	398.0	-162.0	0.00	0.00	0.00	0.00	
7,299.9	90.69	90.31	6,833.2	393.8	611.1	7.50	7.50	0.00	90.31	
12,548.3	90.69	90.31	6,770.0	365.0	5,859.1	0.00	0.00	0.00	0.00	BHL 738'FSL & 18C

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

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
<b>SHL 340'FSL, 2453'FEL, SEC.24</b>									
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
<b>KOP #1</b>									
1,100.0	2.00	337.85	1,100.0	1.6	-0.7	-0.6	2.00	2.00	0.00
1,200.0	4.00	337.85	1,199.8	6.5	-2.6	-2.2	2.00	2.00	0.00
1,291.5	5.83	337.85	1,291.0	13.7	-5.6	-4.7	2.00	2.00	0.00
1,300.0	5.83	337.85	1,299.5	14.5	-5.9	-5.0	0.00	0.00	0.00
1,400.0	5.83	337.85	1,398.9	23.9	-9.7	-8.2	0.00	0.00	0.00
1,500.0	5.83	337.85	1,498.4	33.3	-13.6	-11.5	0.00	0.00	0.00
1,600.0	5.83	337.85	1,597.9	42.8	-17.4	-14.7	0.00	0.00	0.00
1,700.0	5.83	337.85	1,697.4	52.2	-21.2	-17.9	0.00	0.00	0.00
1,800.0	5.83	337.85	1,796.9	61.6	-25.1	-21.2	0.00	0.00	0.00
1,900.0	5.83	337.85	1,896.3	71.0	-28.9	-24.4	0.00	0.00	0.00
2,000.0	5.83	337.85	1,995.8	80.4	-32.7	-27.7	0.00	0.00	0.00
2,100.0	5.83	337.85	2,095.3	89.8	-36.5	-30.9	0.00	0.00	0.00
2,200.0	5.83	337.85	2,194.8	99.2	-40.4	-34.1	0.00	0.00	0.00
2,300.0	5.83	337.85	2,294.3	108.6	-44.2	-37.4	0.00	0.00	0.00
2,400.0	5.83	337.85	2,393.8	118.0	-48.0	-40.6	0.00	0.00	0.00
2,500.0	5.83	337.85	2,493.2	127.4	-51.9	-43.8	0.00	0.00	0.00
2,600.0	5.83	337.85	2,592.7	136.8	-55.7	-47.1	0.00	0.00	0.00
2,700.0	5.83	337.85	2,692.2	146.2	-59.5	-50.3	0.00	0.00	0.00
2,800.0	5.83	337.85	2,791.7	155.7	-63.4	-53.6	0.00	0.00	0.00
2,900.0	5.83	337.85	2,891.2	165.1	-67.2	-56.8	0.00	0.00	0.00
3,000.0	5.83	337.85	2,990.7	174.5	-71.0	-60.0	0.00	0.00	0.00
3,100.0	5.83	337.85	3,090.1	183.9	-74.8	-63.3	0.00	0.00	0.00
3,200.0	5.83	337.85	3,189.6	193.3	-78.7	-66.5	0.00	0.00	0.00
3,300.0	5.83	337.85	3,289.1	202.7	-82.5	-69.7	0.00	0.00	0.00
3,400.0	5.83	337.85	3,388.6	212.1	-86.3	-73.0	0.00	0.00	0.00
3,500.0	5.83	337.85	3,488.1	221.5	-90.2	-76.2	0.00	0.00	0.00
3,532.1	5.83	337.85	3,520.0	224.5	-91.4	-77.3	0.00	0.00	0.00
<b>PARKMAN</b>									
3,600.0	5.83	337.85	3,587.6	230.9	-94.0	-79.5	0.00	0.00	0.00
3,700.0	5.83	337.85	3,687.0	240.3	-97.8	-82.7	0.00	0.00	0.00
3,800.0	5.83	337.85	3,786.5	249.7	-101.7	-85.9	0.00	0.00	0.00
3,900.0	5.83	337.85	3,886.0	259.2	-105.5	-89.2	0.00	0.00	0.00
4,000.0	5.83	337.85	3,985.5	268.6	-109.3	-92.4	0.00	0.00	0.00
4,100.0	5.83	337.85	4,085.0	278.0	-113.1	-95.6	0.00	0.00	0.00
4,200.0	5.83	337.85	4,184.5	287.4	-117.0	-98.9	0.00	0.00	0.00
4,265.9	5.83	337.85	4,250.0	293.6	-119.5	-101.0	0.00	0.00	0.00
<b>SUSSEX</b>									
4,300.0	5.83	337.85	4,283.9	296.8	-120.8	-102.1	0.00	0.00	0.00
4,400.0	5.83	337.85	4,383.4	306.2	-124.6	-105.4	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

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)
4,500.0	5.83	337.85	4,482.9	315.6	-128.5	-108.6	0.00	0.00	0.00
4,600.0	5.83	337.85	4,582.4	325.0	-132.3	-111.8	0.00	0.00	0.00
4,700.0	5.83	337.85	4,681.9	334.4	-136.1	-115.1	0.00	0.00	0.00
4,800.0	5.83	337.85	4,781.3	343.8	-140.0	-118.3	0.00	0.00	0.00
4,900.0	5.83	337.85	4,880.8	353.2	-143.8	-121.5	0.00	0.00	0.00
4,979.6	5.83	337.85	4,960.0	360.7	-146.8	-124.1	0.00	0.00	0.00
<b>SHANNON</b>									
5,000.0	5.83	337.85	4,980.3	362.6	-147.6	-124.8	0.00	0.00	0.00
5,100.0	5.83	337.85	5,079.8	372.1	-151.4	-128.0	0.00	0.00	0.00
5,200.0	5.83	337.85	5,179.3	381.5	-155.3	-131.2	0.00	0.00	0.00
5,229.9	5.83	337.85	5,209.0	384.3	-156.4	-132.2	0.00	0.00	0.00
5,300.0	4.43	337.85	5,278.8	390.1	-158.8	-134.2	2.00	-2.00	0.00
5,400.0	2.43	337.85	5,378.7	395.6	-161.0	-136.1	2.00	-2.00	0.00
5,500.0	0.43	337.85	5,478.6	397.9	-162.0	-136.9	2.00	-2.00	0.00
5,521.4	0.00	0.00	5,500.0	398.0	-162.0	-136.9	2.00	-2.00	0.00
5,600.0	0.00	0.00	5,578.6	398.0	-162.0	-136.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,678.6	398.0	-162.0	-136.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,778.6	398.0	-162.0	-136.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,878.6	398.0	-162.0	-136.9	0.00	0.00	0.00
6,000.0	0.00	0.00	5,978.6	398.0	-162.0	-136.9	0.00	0.00	0.00
6,090.7	0.00	0.00	6,069.3	398.0	-162.0	-136.9	0.00	0.00	0.00
<b>KOP #2</b>									
6,100.0	0.70	90.31	6,078.6	398.0	-161.9	-136.9	7.51	7.51	0.00
6,200.0	8.20	90.31	6,178.2	398.0	-154.2	-129.1	7.50	7.50	0.00
6,300.0	15.70	90.31	6,276.0	397.8	-133.5	-108.5	7.50	7.50	0.00
6,400.0	23.20	90.31	6,370.2	397.7	-100.2	-75.3	7.50	7.50	0.00
6,489.2	29.89	90.31	6,450.0	397.4	-60.4	-35.6	7.50	7.50	0.00
<b>SHARON SPRINGS</b>									
6,500.0	30.70	90.31	6,459.3	397.4	-55.0	-30.1	7.50	7.50	0.00
6,600.0	38.20	90.31	6,541.7	397.1	1.6	26.3	7.50	7.50	0.00
6,700.0	45.70	90.31	6,616.0	396.7	68.4	92.9	7.50	7.50	0.00
6,800.0	53.20	90.31	6,681.0	396.3	144.3	168.7	7.50	7.50	0.00
6,900.0	60.70	90.31	6,735.5	395.9	228.1	252.2	7.50	7.50	0.00
7,000.0	68.20	90.31	6,778.6	395.4	318.2	342.2	7.50	7.50	0.00
7,100.0	75.70	90.31	6,809.6	394.9	413.2	437.0	7.50	7.50	0.00
7,200.0	83.20	90.31	6,827.9	394.3	511.5	535.0	7.50	7.50	0.00
7,299.9	90.69	90.31	6,833.2	393.8	611.1	634.4	7.50	7.50	0.00
<b>End of Build - 7"</b>									
7,300.0	90.69	90.31	6,833.2	393.8	611.2	634.5	0.00	0.00	0.00
7,400.0	90.69	90.31	6,832.0	393.2	711.2	734.3	0.00	0.00	0.00
7,500.0	90.69	90.31	6,830.8	392.7	811.2	834.1	0.00	0.00	0.00
7,600.0	90.69	90.31	6,829.6	392.1	911.2	933.8	0.00	0.00	0.00
7,700.0	90.69	90.31	6,828.4	391.6	1,011.2	1,033.6	0.00	0.00	0.00
7,800.0	90.69	90.31	6,827.2	391.0	1,111.2	1,133.4	0.00	0.00	0.00
7,900.0	90.69	90.31	6,826.0	390.5	1,211.2	1,233.1	0.00	0.00	0.00
8,000.0	90.69	90.31	6,824.8	389.9	1,311.2	1,332.9	0.00	0.00	0.00
8,100.0	90.69	90.31	6,823.6	389.4	1,411.2	1,432.6	0.00	0.00	0.00
8,200.0	90.69	90.31	6,822.4	388.8	1,511.2	1,532.4	0.00	0.00	0.00
8,300.0	90.69	90.31	6,821.2	388.3	1,611.2	1,632.2	0.00	0.00	0.00
8,400.0	90.69	90.31	6,820.0	387.7	1,711.1	1,731.9	0.00	0.00	0.00
8,500.0	90.69	90.31	6,818.8	387.2	1,811.1	1,831.7	0.00	0.00	0.00
8,600.0	90.69	90.31	6,817.5	386.6	1,911.1	1,931.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

### 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)
8,700.0	90.69	90.31	6,816.3	386.1	2,011.1	2,031.2	0.00	0.00	0.00
8,800.0	90.69	90.31	6,815.1	385.6	2,111.1	2,131.0	0.00	0.00	0.00
8,900.0	90.69	90.31	6,813.9	385.0	2,211.1	2,230.8	0.00	0.00	0.00
9,000.0	90.69	90.31	6,812.7	384.5	2,311.1	2,330.5	0.00	0.00	0.00
9,100.0	90.69	90.31	6,811.5	383.9	2,411.1	2,430.3	0.00	0.00	0.00
9,200.0	90.69	90.31	6,810.3	383.4	2,511.1	2,530.1	0.00	0.00	0.00
9,300.0	90.69	90.31	6,809.1	382.8	2,611.1	2,629.8	0.00	0.00	0.00
9,400.0	90.69	90.31	6,807.9	382.3	2,711.1	2,729.6	0.00	0.00	0.00
9,500.0	90.69	90.31	6,806.7	381.7	2,811.0	2,829.3	0.00	0.00	0.00
9,600.0	90.69	90.31	6,805.5	381.2	2,911.0	2,929.1	0.00	0.00	0.00
9,700.0	90.69	90.31	6,804.3	380.6	3,011.0	3,028.9	0.00	0.00	0.00
9,800.0	90.69	90.31	6,803.1	380.1	3,111.0	3,128.6	0.00	0.00	0.00
9,900.0	90.69	90.31	6,801.9	379.5	3,211.0	3,228.4	0.00	0.00	0.00
10,000.0	90.69	90.31	6,800.7	379.0	3,311.0	3,328.2	0.00	0.00	0.00
10,100.0	90.69	90.31	6,799.5	378.4	3,411.0	3,427.9	0.00	0.00	0.00
10,200.0	90.69	90.31	6,798.3	377.9	3,511.0	3,527.7	0.00	0.00	0.00
10,300.0	90.69	90.31	6,797.1	377.3	3,611.0	3,627.5	0.00	0.00	0.00
10,400.0	90.69	90.31	6,795.9	376.8	3,711.0	3,727.2	0.00	0.00	0.00
10,500.0	90.69	90.31	6,794.7	376.2	3,811.0	3,827.0	0.00	0.00	0.00
10,600.0	90.69	90.31	6,793.5	375.7	3,910.9	3,926.7	0.00	0.00	0.00
10,700.0	90.69	90.31	6,792.3	375.2	4,010.9	4,026.5	0.00	0.00	0.00
10,800.0	90.69	90.31	6,791.1	374.6	4,110.9	4,126.3	0.00	0.00	0.00
10,900.0	90.69	90.31	6,789.8	374.1	4,210.9	4,226.0	0.00	0.00	0.00
11,000.0	90.69	90.31	6,788.6	373.5	4,310.9	4,325.8	0.00	0.00	0.00
11,100.0	90.69	90.31	6,787.4	373.0	4,410.9	4,425.6	0.00	0.00	0.00
11,200.0	90.69	90.31	6,786.2	372.4	4,510.9	4,525.3	0.00	0.00	0.00
11,300.0	90.69	90.31	6,785.0	371.9	4,610.9	4,625.1	0.00	0.00	0.00
11,400.0	90.69	90.31	6,783.8	371.3	4,710.9	4,724.9	0.00	0.00	0.00
11,500.0	90.69	90.31	6,782.6	370.8	4,810.9	4,824.6	0.00	0.00	0.00
11,600.0	90.69	90.31	6,781.4	370.2	4,910.9	4,924.4	0.00	0.00	0.00
11,700.0	90.69	90.31	6,780.2	369.7	5,010.9	5,024.1	0.00	0.00	0.00
11,800.0	90.69	90.31	6,779.0	369.1	5,110.8	5,123.9	0.00	0.00	0.00
11,900.0	90.69	90.31	6,777.8	368.6	5,210.8	5,223.7	0.00	0.00	0.00
12,000.0	90.69	90.31	6,776.6	368.0	5,310.8	5,323.4	0.00	0.00	0.00
12,100.0	90.69	90.31	6,775.4	367.5	5,410.8	5,423.2	0.00	0.00	0.00
12,200.0	90.69	90.31	6,774.2	366.9	5,510.8	5,523.0	0.00	0.00	0.00
12,300.0	90.69	90.31	6,773.0	366.4	5,610.8	5,622.7	0.00	0.00	0.00
12,400.0	90.69	90.31	6,771.8	365.8	5,710.8	5,722.5	0.00	0.00	0.00
12,500.0	90.69	90.31	6,770.6	365.3	5,810.8	5,822.3	0.00	0.00	0.00
12,548.3	90.69	90.31	6,770.0	365.0	5,859.1	5,870.5	0.00	0.00	0.00
BHL 738'FSL & 1800'FEL, SEC.19									

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,299.9	6,833.2	7"	7	7-1/2

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

#### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,532.1	3,520.0	PARKMAN			
4,265.9	4,250.0	SUSSEX			
4,979.6	4,960.0	SHANNON			
6,489.2	6,450.0	SHARON SPRINGS			

#### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.0	1,000.0	0.0	0.0	KOP #1
6,090.7	6,069.3	398.0	-162.0	KOP #2
7,299.9	6,833.2	393.8	611.1	End of Build



# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

**Maxey 24Q-HZ Pad Sec.24-T5N-R65W**

**Maxey 24P-332**

**Wellbore #1**

**Plan #3 (1-22-14)**

## **Anticollision Report**

**23 January, 2014**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #3 (1-22-14)
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria
<b>Interpolation Method:</b>	MD Interval 100.0ft
<b>Depth Range:</b>	Unlimited
<b>Results Limited by:</b>	Maximum center-center distance of 1,000.0ft
<b>Warning Levels Evaluated at:</b>	2.00 Sigma
<b>Error Model:</b>	ISCWSA
<b>Scan Method:</b>	Closest Approach 3D
<b>Error Surface:</b>	Elliptical Conic

Survey Tool Program		Date	1/23/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	12,547.4	Plan #3 (1-22-14) (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						
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Emily 24-19 (Exist.) - Wellbore #1 - Wellbore #1	11,125.0	6,766.1	77.3	-56.0	0.580	Level 1, CC, ES, SF
Maxey 2 (Exist.) - Wellbore #1 - Wellbore #1	7,170.8	6,808.9	106.6	78.0	3.725	CC, ES, SF
Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)	200.0	200.0	30.6	30.0	45.451	CC
Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)	300.0	299.8	31.0	29.9	27.592	ES
Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)	12,548.3	12,498.6	363.4	34.3	1.104	Level 2, SF
Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)	1,000.0	1,000.0	30.6	26.4	7.176	CC, ES
Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)	12,548.3	12,329.1	372.5	76.8	1.260	Level 3, SF
Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)	1,000.0	1,000.0	61.3	57.0	14.353	CC, ES
Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)	12,548.3	12,535.8	659.4	329.7	2.000	SF
Maxey 44-24 (Exist.) - Wellbore #1 - Wellbore #1	8,515.3	6,800.6	274.1	212.6	4.459	CC, ES, SF
Maxey Hoff 1 (Exist.) - Wellbore #1 - Wellbore #1	9,726.5	6,787.6	181.6	82.4	1.830	CC, ES, SF
Phil Wilson 19-1 (Exist.) - Wellbore #1 - Wellbore #1	12,412.1	6,771.6	59.1	-238.0	0.199	Level 1, CC, ES, SF

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Emily 24-19 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 7300-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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,200.0	6,798.3	6,777.3	6,777.3	100.1	7.6	98.20	295.5	4,435.4	928.1	821.3	106.86	8.686	
10,300.0	6,797.1	6,776.1	6,776.1	102.9	7.6	97.32	295.5	4,435.4	828.5	718.7	109.78	7.547	
10,400.0	6,795.9	6,774.9	6,774.9	105.7	7.6	96.44	295.5	4,435.4	729.0	616.3	112.70	6.469	
10,500.0	6,794.7	6,773.7	6,773.7	108.4	7.6	95.56	295.5	4,435.4	629.7	514.1	115.61	5.447	
10,600.0	6,793.5	6,772.5	6,772.5	111.2	7.6	94.67	295.5	4,435.4	530.6	412.1	118.50	4.478	
10,700.0	6,792.3	6,771.3	6,771.3	114.0	7.6	93.79	295.5	4,435.4	431.9	310.5	121.37	3.559	
10,800.0	6,791.1	6,770.1	6,770.1	116.8	7.6	92.90	295.5	4,435.4	334.0	209.8	124.23	2.689	
10,900.0	6,789.8	6,768.8	6,768.8	119.5	7.6	92.01	295.5	4,435.4	237.9	110.8	127.06	1.872	
11,000.0	6,788.6	6,767.6	6,767.6	122.3	7.6	91.11	295.5	4,435.4	146.9	17.1	129.87	1.131	Level 2
11,100.0	6,787.4	6,766.4	6,766.4	125.1	7.6	90.22	295.5	4,435.4	81.2	-51.4	132.66	0.612	Level 1
11,125.0	6,787.1	6,766.1	6,766.1	125.8	7.6	90.00	295.5	4,435.4	77.3	-56.0	133.35	0.580	Level 1, CC, ES, SF
11,200.0	6,786.2	6,765.2	6,765.2	127.9	7.6	89.33	295.5	4,435.4	107.7	-27.7	135.42	0.796	Level 1
11,300.0	6,785.0	6,764.0	6,764.0	130.7	7.6	88.44	295.5	4,435.4	191.3	53.2	138.15	1.385	Level 3
11,400.0	6,783.8	6,762.8	6,762.8	133.5	7.6	87.55	295.5	4,435.4	285.7	144.8	140.85	2.028	
11,500.0	6,782.6	6,761.6	6,761.6	136.3	7.6	86.66	295.5	4,435.4	382.9	239.4	143.52	2.668	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 7300-MWD												<b>Offset Well Error:</b>	0.0 ft
Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Emily 24-19 (Exist.) - Wellbore #1 - Wellbore #1													
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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,600.0	6,781.4	6,760.4	6,760.4	139.1	7.6	85.77	295.5	4,435.4	481.3	335.1	146.16	3.293	
11,700.0	6,780.2	6,759.2	6,759.2	141.8	7.6	84.88	295.5	4,435.4	580.2	431.4	148.76	3.900	
11,800.0	6,779.0	6,758.0	6,758.0	144.6	7.6	84.00	295.5	4,435.4	679.4	528.1	151.32	4.490	
11,900.0	6,777.8	6,756.8	6,756.8	147.4	7.6	83.12	295.5	4,435.4	778.8	625.0	153.84	5.063	
12,000.0	6,776.6	6,755.6	6,755.6	150.2	7.6	82.24	295.5	4,435.4	878.4	722.1	156.32	5.619	
12,100.0	6,775.4	6,754.4	6,754.4	153.0	7.6	81.37	295.5	4,435.4	978.0	819.3	158.76	6.160	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design													Offset Site Error:	0.0 ft
Survey Program: 7300-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	59.16	287.8	482.0	561.6					
100.0	100.0	85.0	85.0	0.1	0.1	59.16	287.8	482.0	561.4	561.2	0.21	2,697.619		
200.0	200.0	185.0	185.0	0.3	0.2	59.16	287.8	482.0	561.4	560.8	0.55	1,029.599		
300.0	300.0	285.0	285.0	0.6	0.3	59.16	287.8	482.0	561.4	560.5	0.88	636.210		
400.0	400.0	385.0	385.0	0.8	0.4	59.16	287.8	482.0	561.4	560.2	1.22	460.328		
500.0	500.0	485.0	485.0	1.0	0.5	59.16	287.8	482.0	561.4	559.8	1.56	360.631		
600.0	600.0	585.0	585.0	1.2	0.7	59.16	287.8	482.0	561.4	559.5	1.89	296.431		
700.0	700.0	685.0	685.0	1.5	0.8	59.16	287.8	482.0	561.4	559.2	2.23	251.634		
800.0	800.0	785.0	785.0	1.7	0.9	59.16	287.8	482.0	561.4	558.8	2.57	218.599		
900.0	900.0	885.0	885.0	1.9	1.0	59.16	287.8	482.0	561.4	558.5	2.91	193.232		
1,000.0	1,000.0	985.0	985.0	2.1	1.1	59.16	287.8	482.0	561.4	558.1	3.24	173.139		
1,100.0	1,100.0	1,085.0	1,085.0	2.4	1.2	81.49	287.8	482.0	561.1	557.6	3.58	156.825		
1,200.0	1,199.8	1,184.8	1,184.8	2.6	1.3	82.03	287.8	482.0	560.4	556.5	3.91	143.172		
1,300.0	1,299.5	1,284.5	1,284.5	2.8	1.4	82.93	287.8	482.0	559.2	555.0	4.26	131.366		
1,400.0	1,398.9	1,383.9	1,383.9	3.1	1.6	83.96	287.8	482.0	558.1	553.5	4.61	121.042		
1,500.0	1,498.4	1,483.4	1,483.4	3.3	1.7	84.99	287.8	482.0	557.1	552.1	4.97	112.047		
1,600.0	1,597.9	1,582.9	1,582.9	3.6	1.8	86.03	287.8	482.0	556.3	550.9	5.34	104.184		
1,700.0	1,697.4	1,682.4	1,682.4	3.8	1.9	87.07	287.8	482.0	555.7	550.0	5.71	97.281		
1,800.0	1,796.9	1,781.9	1,781.9	4.1	2.0	88.11	287.8	482.0	555.2	549.2	6.09	91.194		
1,900.0	1,896.3	1,881.3	1,881.3	4.4	2.1	89.15	287.8	482.0	555.0	548.5	6.47	85.803		
1,981.2	1,977.1	1,962.1	1,962.1	4.6	2.2	90.00	287.8	482.0	554.9	548.2	6.78	81.866		
2,000.0	1,995.8	1,980.8	1,980.8	4.6	2.2	90.20	287.8	482.0	554.9	548.1	6.85	81.006		
2,100.0	2,095.3	2,080.3	2,080.3	4.9	2.3	91.24	287.8	482.0	555.1	547.8	7.23	76.721		
2,200.0	2,194.8	2,179.8	2,179.8	5.2	2.4	92.28	287.8	482.0	555.4	547.8	7.62	72.878		
2,300.0	2,294.3	2,279.3	2,279.3	5.5	2.6	93.32	287.8	482.0	555.9	547.9	8.01	69.417		
2,400.0	2,393.8	2,378.8	2,378.8	5.7	2.7	94.36	287.8	482.0	556.6	548.2	8.40	66.291		
2,500.0	2,493.2	2,478.2	2,478.2	6.0	2.8	95.40	287.8	482.0	557.4	548.7	8.78	63.457		
2,600.0	2,592.7	2,577.7	2,577.7	6.3	2.9	96.43	287.8	482.0	558.5	549.3	9.17	60.882		
2,700.0	2,692.2	2,677.2	2,677.2	6.6	3.0	97.46	287.8	482.0	559.7	550.2	9.56	58.533		
2,800.0	2,791.7	2,776.7	2,776.7	6.9	3.1	98.48	287.8	482.0	561.1	551.2	9.95	56.387		
2,900.0	2,891.2	2,876.2	2,876.2	7.1	3.2	99.50	287.8	482.0	562.7	552.4	10.34	54.421		
3,000.0	2,990.7	2,975.7	2,975.7	7.4	3.3	100.51	287.8	482.0	564.5	553.8	10.73	52.615		
3,100.0	3,090.1	3,075.1	3,075.1	7.7	3.5	101.52	287.8	482.0	566.5	555.3	11.12	50.954		
3,200.0	3,189.6	3,174.6	3,174.6	8.0	3.6	102.51	287.8	482.0	568.6	557.1	11.50	49.423		
3,300.0	3,289.1	3,274.1	3,274.1	8.3	3.7	103.50	287.8	482.0	570.9	559.0	11.89	48.009		
3,400.0	3,388.6	3,373.6	3,373.6	8.6	3.8	104.49	287.8	482.0	573.3	561.1	12.28	46.700		
3,500.0	3,488.1	3,473.1	3,473.1	8.8	3.9	105.46	287.8	482.0	576.0	563.3	12.66	45.488		
3,600.0	3,587.6	3,572.6	3,572.6	9.1	4.0	106.43	287.8	482.0	578.8	565.7	13.05	44.364		
3,700.0	3,687.0	3,672.0	3,672.0	9.4	4.1	107.38	287.8	482.0	581.8	568.3	13.43	43.319		
3,800.0	3,786.5	3,771.5	3,771.5	9.7	4.2	108.33	287.8	482.0	584.9	571.1	13.81	42.347		
3,900.0	3,886.0	3,871.0	3,871.0	10.0	4.4	109.26	287.8	482.0	588.2	574.0	14.19	41.442		
4,000.0	3,985.5	3,970.5	3,970.5	10.3	4.5	110.19	287.8	482.0	591.6	577.0	14.57	40.598		
4,100.0	4,085.0	4,070.0	4,070.0	10.6	4.6	111.10	287.8	482.0	595.2	580.3	14.95	39.811		
4,200.0	4,184.5	4,169.5	4,169.5	10.9	4.7	112.00	287.8	482.0	599.0	583.6	15.33	39.075		
4,300.0	4,283.9	4,268.9	4,268.9	11.1	4.8	112.89	287.8	482.0	602.9	587.2	15.70	38.387		
4,400.0	4,383.4	4,368.4	4,368.4	11.4	4.9	113.77	287.8	482.0	606.9	590.8	16.08	37.743		
4,500.0	4,482.9	4,467.9	4,467.9	11.7	5.0	114.64	287.8	482.0	611.1	594.6	16.45	37.140		
4,600.0	4,582.4	4,567.4	4,567.4	12.0	5.1	115.50	287.8	482.0	615.4	598.6	16.83	36.575		
4,700.0	4,681.9	4,666.9	4,666.9	12.3	5.2	116.34	287.8	482.0	619.9	602.7	17.20	36.044		
4,800.0	4,781.3	4,766.3	4,766.3	12.6	5.4	117.17	287.8	482.0	624.5	606.9	17.57	35.546		
4,900.0	4,880.8	4,865.8	4,865.8	12.9	5.5	117.99	287.8	482.0	629.2	611.2	17.94	35.079		

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

Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 2 (Exist.) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 7300-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,000.0	4,980.3	4,965.3	4,965.3	13.2	5.6	118.80	287.8	482.0	634.0	615.7	18.30	34.639		
5,100.0	5,079.8	5,064.8	5,064.8	13.5	5.7	119.59	287.8	482.0	639.0	620.3	18.67	34.225		
5,200.0	5,179.3	5,164.3	5,164.3	13.7	5.8	120.38	287.8	482.0	644.1	625.1	19.04	33.836		
5,300.0	5,278.8	5,263.8	5,263.8	14.0	5.9	121.14	287.8	482.0	648.9	629.5	19.38	33.489		
5,400.0	5,378.7	5,363.7	5,363.7	14.2	6.0	121.64	287.8	482.0	652.0	632.3	19.66	33.158		
5,500.0	5,478.6	5,463.6	5,463.6	14.4	6.1	121.85	287.8	482.0	653.3	633.4	19.93	32.774		
5,600.0	5,578.6	5,563.6	5,563.6	14.5	6.3	99.71	287.8	482.0	653.3	633.9	19.48	33.539		
5,700.0	5,678.6	5,663.6	5,663.6	14.7	6.4	99.71	287.8	482.0	653.3	633.5	19.80	32.998		
5,800.0	5,778.6	5,763.6	5,763.6	14.9	6.5	99.71	287.8	482.0	653.3	633.2	20.12	32.473		
5,900.0	5,878.6	5,863.6	5,863.6	15.1	6.6	99.71	287.8	482.0	653.3	632.9	20.44	31.963		
6,000.0	5,978.6	5,963.6	5,963.6	15.3	6.7	99.71	287.8	482.0	653.3	632.6	20.76	31.468		
6,100.0	6,078.6	6,063.6	6,063.6	15.5	6.8	9.40	287.8	482.0	653.3	631.6	21.74	30.049		
6,200.0	6,178.2	6,163.2	6,163.2	15.6	6.9	9.60	287.8	482.0	645.6	623.8	21.85	29.553		
6,300.0	6,276.0	6,261.0	6,261.0	15.7	7.0	10.19	287.8	482.0	625.3	603.5	21.74	28.763		
6,400.0	6,370.2	6,355.2	6,355.2	15.8	7.1	11.26	287.8	482.0	592.5	571.1	21.43	27.654		
6,500.0	6,459.3	6,444.3	6,444.3	15.9	7.2	12.99	287.8	482.0	548.0	527.1	20.94	26.170		
6,600.0	6,541.7	6,526.7	6,526.7	16.0	7.3	15.75	287.8	482.0	492.7	472.3	20.34	24.217		
6,700.0	6,616.0	6,601.0	6,601.0	16.1	7.4	20.24	287.8	482.0	427.7	407.9	19.79	21.617		
6,800.0	6,681.0	6,666.0	6,666.0	16.3	7.5	27.76	287.8	482.0	354.7	335.1	19.64	18.063		
6,900.0	6,735.5	6,720.5	6,720.5	17.2	7.6	40.57	287.8	482.0	276.0	255.2	20.74	13.303		
7,000.0	6,778.6	6,763.6	6,763.6	18.4	7.6	60.21	287.8	482.0	195.9	172.2	23.78	8.239		
7,100.0	6,809.6	6,794.6	6,794.6	20.0	7.6	80.87	287.8	482.0	127.2	100.2	27.02	4.707		
7,170.8	6,823.9	6,808.9	6,808.9	21.2	7.7	90.00	287.8	482.0	106.6	78.0	28.63	3.725	CC, ES, SF	
7,200.0	6,827.9	6,812.9	6,812.9	21.8	7.7	91.84	287.8	482.0	110.5	81.3	29.18	3.786		
7,300.0	6,833.2	6,818.2	6,818.2	23.8	7.7	89.17	287.8	482.0	167.1	136.0	31.15	5.365		
7,400.0	6,832.0	6,817.0	6,817.0	25.9	7.7	88.52	287.8	482.0	252.3	219.0	33.27	7.585		
7,500.0	6,830.8	6,815.8	6,815.8	28.1	7.7	87.87	287.8	482.0	345.5	310.0	35.50	9.734		
7,600.0	6,829.6	6,814.6	6,814.6	30.5	7.7	87.23	287.8	482.0	441.7	403.9	37.82	11.680		
7,700.0	6,828.4	6,813.4	6,813.4	32.9	7.7	86.58	287.8	482.0	539.3	499.1	40.20	13.414		
7,800.0	6,827.2	6,812.2	6,812.2	35.3	7.7	85.94	287.8	482.0	637.6	595.0	42.64	14.953		
7,900.0	6,826.0	6,811.0	6,811.0	37.9	7.7	85.30	287.8	482.0	736.4	691.3	45.12	16.321		
8,000.0	6,824.8	6,809.8	6,809.8	40.4	7.7	84.65	287.8	482.0	835.4	787.8	47.62	17.543		
8,100.0	6,823.6	6,808.6	6,808.6	43.0	7.7	84.01	287.8	482.0	934.7	884.6	50.15	18.638		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.04	-90.04	0.0	-30.6	30.6				
100.0	100.0	100.0	100.0	0.1	0.1	-90.04	-90.04	0.0	-30.6	30.6	30.4	0.22	136.352	
200.0	200.0	200.0	200.0	0.3	0.3	-90.04	-90.04	0.0	-30.6	30.6	30.0	0.67	45.451 CC	
300.0	300.0	299.8	299.7	0.6	0.6	-86.88	-86.88	1.7	-31.0	31.0	29.9	1.12	27.592 ES	
400.0	400.0	399.3	399.1	0.8	0.8	-77.97	-77.97	6.8	-31.9	32.6	31.0	1.58	20.631	
500.0	500.0	498.3	497.8	1.0	1.0	-65.48	-65.48	15.2	-33.4	36.8	34.8	2.05	17.976	
600.0	600.0	596.7	595.4	1.2	1.3	-52.83	-52.83	27.0	-35.6	44.9	42.3	2.52	17.824	
700.0	700.0	694.8	692.4	1.5	1.6	-42.58	-42.58	41.6	-38.2	57.0	54.0	2.99	19.094	
800.0	800.0	793.6	789.9	1.7	2.0	-35.80	-35.80	56.9	-41.0	70.8	67.4	3.44	20.588	
900.0	900.0	892.3	887.5	1.9	2.3	-31.26	-31.26	72.1	-43.8	85.3	81.4	3.90	21.874	
1,000.0	1,000.0	991.1	985.0	2.1	2.7	-28.05	-28.05	87.4	-46.6	100.1	95.7	4.36	22.944	
1,100.0	1,100.0	1,090.1	1,082.8	2.4	3.0	-3.56	-3.56	102.6	-49.3	113.5	108.6	4.85	23.379	
1,200.0	1,199.8	1,189.5	1,181.0	2.6	3.4	-1.77	-1.77	118.0	-52.1	123.5	118.2	5.31	23.245	
1,300.0	1,299.5	1,289.2	1,279.5	2.8	3.7	-0.26	-0.26	133.4	-54.9	130.1	124.4	5.77	22.547	
1,400.0	1,398.9	1,389.1	1,378.0	3.1	4.1	1.11	1.11	148.8	-57.7	135.4	129.2	6.24	21.692	
1,500.0	1,498.4	1,488.9	1,476.6	3.3	4.4	2.38	2.38	164.2	-60.5	140.8	134.0	6.71	20.964	
1,600.0	1,597.9	1,588.7	1,575.2	3.6	4.8	3.55	3.55	179.6	-63.4	146.2	139.0	7.19	20.336	
1,700.0	1,697.4	1,688.5	1,673.8	3.8	5.2	4.64	4.64	195.1	-66.2	151.6	144.0	7.66	19.789	
1,800.0	1,796.9	1,788.3	1,772.3	4.1	5.5	5.66	5.66	210.5	-69.0	157.2	149.0	8.14	19.308	
1,900.0	1,896.3	1,888.1	1,870.9	4.4	5.9	6.60	6.60	225.9	-71.8	162.7	154.1	8.62	18.882	
2,000.0	1,995.8	1,987.9	1,969.5	4.6	6.2	7.48	7.48	241.3	-74.6	168.3	159.2	9.10	18.503	
2,100.0	2,095.3	2,087.7	2,068.1	4.9	6.6	8.31	8.31	256.7	-77.4	174.0	164.4	9.58	18.162	
2,200.0	2,194.8	2,187.5	2,166.6	5.2	7.0	9.08	9.08	272.1	-80.2	179.7	169.6	10.06	17.855	
2,300.0	2,294.3	2,287.3	2,265.2	5.5	7.3	9.81	9.81	287.5	-83.0	185.4	174.8	10.55	17.576	
2,400.0	2,393.8	2,387.2	2,363.8	5.7	7.7	10.49	10.49	302.9	-85.8	191.1	180.1	11.03	17.322	
2,500.0	2,493.2	2,487.0	2,462.3	6.0	8.1	11.13	11.13	318.4	-88.6	196.9	185.4	11.52	17.089	
2,600.0	2,592.7	2,586.8	2,560.9	6.3	8.4	11.74	11.74	333.8	-91.4	202.7	190.7	12.01	16.876	
2,700.0	2,692.2	2,686.6	2,659.5	6.6	8.8	12.31	12.31	349.2	-94.2	208.5	196.0	12.50	16.679	
2,800.0	2,791.7	2,786.4	2,758.1	6.9	9.2	12.85	12.85	364.6	-97.0	214.3	201.3	12.99	16.497	
2,900.0	2,891.2	2,886.2	2,856.6	7.1	9.5	13.36	13.36	380.0	-99.8	220.1	206.7	13.48	16.328	
3,000.0	2,990.7	2,986.0	2,955.2	7.4	9.9	13.85	13.85	395.4	-102.6	226.0	212.0	13.98	16.171	
3,100.0	3,090.1	3,085.8	3,053.8	7.7	10.2	14.31	14.31	410.8	-105.4	231.9	217.4	14.47	16.024	
3,200.0	3,189.6	3,185.6	3,152.4	8.0	10.6	14.75	14.75	426.3	-108.3	237.8	222.8	14.97	15.887	
3,300.0	3,289.1	3,285.4	3,250.9	8.3	11.0	15.17	15.17	441.7	-111.1	243.7	228.2	15.46	15.759	
3,400.0	3,388.6	3,385.3	3,349.5	8.6	11.3	15.56	15.56	457.1	-113.9	249.6	233.6	15.96	15.638	
3,500.0	3,488.1	3,485.1	3,448.1	8.8	11.7	15.94	15.94	472.5	-116.7	255.5	239.1	16.46	15.525	
3,600.0	3,587.6	3,584.9	3,546.6	9.1	12.1	16.31	16.31	487.9	-119.5	261.5	244.5	16.96	15.418	
3,700.0	3,687.0	3,684.7	3,645.2	9.4	12.4	16.65	16.65	503.3	-122.3	267.4	250.0	17.46	15.317	
3,800.0	3,786.5	3,784.5	3,743.8	9.7	12.8	16.98	16.98	518.7	-125.1	273.4	255.4	17.96	15.222	
3,900.0	3,886.0	3,884.3	3,842.4	10.0	13.2	17.30	17.30	534.2	-127.9	279.3	260.9	18.46	15.132	
4,000.0	3,985.5	3,984.1	3,940.9	10.3	13.5	17.60	17.60	549.6	-130.7	285.3	266.4	18.96	15.046	
4,100.0	4,085.0	4,083.9	4,039.5	10.6	13.9	17.89	17.89	565.0	-133.5	291.3	271.8	19.47	14.965	
4,200.0	4,184.5	4,183.7	4,138.1	10.9	14.3	18.17	18.17	580.4	-136.3	297.3	277.3	19.97	14.887	
4,300.0	4,283.9	4,283.5	4,236.7	11.1	14.6	18.44	18.44	595.8	-139.1	303.3	282.8	20.47	14.813	
4,400.0	4,383.4	4,383.4	4,335.2	11.4	15.0	18.70	18.70	611.2	-141.9	309.3	288.3	20.98	14.743	
4,500.0	4,482.9	4,483.2	4,433.8	11.7	15.3	18.95	18.95	626.6	-144.7	315.3	293.8	21.48	14.676	
4,600.0	4,582.4	4,583.0	4,532.4	12.0	15.7	19.18	19.18	642.1	-147.5	321.3	299.3	21.99	14.612	
4,700.0	4,681.9	4,682.8	4,630.9	12.3	16.1	19.41	19.41	657.5	-150.3	327.3	304.8	22.50	14.551	
4,800.0	4,781.3	4,782.6	4,729.5	12.6	16.4	19.64	19.64	672.9	-153.2	333.4	310.4	23.00	14.492	
4,900.0	4,880.8	4,882.4	4,828.1	12.9	16.8	19.85	19.85	688.3	-156.0	339.4	315.9	23.51	14.436	
5,000.0	4,980.3	4,982.2	4,926.7	13.2	17.2	20.06	20.06	703.7	-158.8	345.4	321.4	24.02	14.382	

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

Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)													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	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)			
5,100.0	5,079.8	5,082.0	5,025.2	13.5	17.5	20.26	719.1	-161.6	351.5	326.9	24.53	14.331		
5,200.0	5,179.3	5,192.3	5,134.3	13.7	17.9	20.50	734.9	-164.4	356.4	331.4	25.04	14.236		
5,300.0	5,278.8	5,306.3	5,247.7	14.0	18.2	20.80	747.0	-166.7	358.4	332.9	25.47	14.069		
5,400.0	5,378.7	5,420.4	5,361.5	14.2	18.4	21.00	754.7	-168.0	359.5	333.7	25.82	13.926		
5,500.0	5,478.6	5,534.6	5,475.6	14.4	18.6	21.09	757.9	-168.6	360.0	333.9	26.11	13.786		
5,600.0	5,578.6	5,637.6	5,578.6	14.5	18.7	-1.06	758.0	-168.6	360.0	327.2	32.82	10.970		
5,700.0	5,678.6	5,737.6	5,678.6	14.7	18.8	-1.06	758.0	-168.6	360.0	326.9	33.15	10.860		
5,800.0	5,778.6	5,837.6	5,778.6	14.9	19.0	-1.06	758.0	-168.6	360.0	326.6	33.49	10.752		
5,900.0	5,878.6	5,937.6	5,878.6	15.1	19.1	-1.06	758.0	-168.6	360.0	326.2	33.82	10.645		
6,000.0	5,978.6	6,037.6	5,978.6	15.3	19.3	-1.06	758.0	-168.6	360.0	325.9	34.16	10.540		
6,100.0	6,078.6	6,138.2	6,078.9	15.5	19.4	-90.33	757.9	-162.0	359.9	331.4	28.56	12.602		
6,117.0	6,095.6	6,155.0	6,095.6	15.5	19.4	-90.01	757.9	-159.6	359.9	331.3	28.63	12.570		
6,200.0	6,178.2	6,236.9	6,175.7	15.6	19.5	-88.45	757.8	-142.8	360.1	331.1	28.98	12.424		
6,300.0	6,276.0	6,334.3	6,267.9	15.7	19.6	-86.62	757.7	-111.7	360.6	331.2	29.36	12.282		
6,400.0	6,370.2	6,430.2	6,354.2	15.8	19.6	-84.86	757.5	-69.9	361.4	331.7	29.71	12.163		
6,500.0	6,459.3	6,525.0	6,433.6	15.9	19.7	-83.20	757.2	-18.3	362.5	332.4	30.11	12.040		
6,600.0	6,541.7	6,618.6	6,505.2	16.0	19.8	-81.67	756.9	41.9	363.8	333.2	30.66	11.867		
6,700.0	6,616.0	6,711.2	6,568.3	16.1	20.0	-80.28	756.5	109.6	365.2	333.8	31.48	11.603		
6,800.0	6,681.0	6,803.0	6,622.2	16.3	20.2	-79.06	756.1	183.8	366.7	334.0	32.72	11.207		
6,900.0	6,735.5	6,894.0	6,666.6	17.2	20.6	-78.02	755.7	263.2	368.0	333.5	34.50	10.666		
7,000.0	6,778.6	6,984.5	6,701.0	18.4	21.3	-77.17	755.2	346.8	369.2	332.3	36.89	10.010		
7,100.0	6,809.6	7,074.5	6,725.2	20.0	22.3	-76.52	754.8	433.4	370.2	330.4	39.85	9.290		
7,200.0	6,827.9	7,164.1	6,739.0	21.8	23.7	-76.07	754.3	522.0	370.9	327.6	43.32	8.563		
7,300.0	6,833.2	7,255.1	6,742.5	23.8	25.4	-75.86	753.8	612.9	371.3	324.1	47.21	7.865		
7,400.0	6,832.0	7,355.1	6,742.2	25.9	27.4	-75.99	753.3	712.9	371.1	319.7	51.38	7.223		
7,500.0	6,830.8	7,455.1	6,741.8	28.1	29.5	-76.12	752.7	812.9	370.9	315.1	55.77	6.650		
7,600.0	6,829.6	7,555.1	6,741.5	30.5	31.8	-76.26	752.2	912.9	370.7	310.3	60.35	6.143		
7,700.0	6,828.4	7,655.1	6,741.2	32.9	34.1	-76.39	751.7	1,012.9	370.5	305.4	65.07	5.694		
7,800.0	6,827.2	7,755.1	6,740.9	35.3	36.5	-76.53	751.1	1,112.9	370.3	300.4	69.91	5.297		
7,900.0	6,826.0	7,855.1	6,740.6	37.9	39.0	-76.66	750.6	1,212.8	370.1	295.2	74.85	4.945		
8,000.0	6,824.8	7,955.1	6,740.3	40.4	41.5	-76.80	750.0	1,312.8	369.9	290.0	79.86	4.632		
8,100.0	6,823.6	8,055.1	6,740.0	43.0	44.1	-76.93	749.5	1,412.8	369.7	284.8	84.95	4.352		
8,200.0	6,822.4	8,155.1	6,739.6	45.6	46.6	-77.06	749.0	1,512.8	369.5	279.4	90.08	4.102		
8,300.0	6,821.2	8,255.1	6,739.3	48.2	49.3	-77.20	748.4	1,612.8	369.3	274.1	95.27	3.877		
8,400.0	6,820.0	8,355.1	6,739.0	50.9	51.9	-77.33	747.9	1,712.8	369.1	268.6	100.50	3.673		
8,500.0	6,818.8	8,455.1	6,738.7	53.6	54.5	-77.47	747.4	1,812.8	369.0	263.2	105.76	3.489		
8,600.0	6,817.5	8,555.1	6,738.4	56.2	57.2	-77.61	746.8	1,912.8	368.8	257.7	111.06	3.321		
8,700.0	6,816.3	8,655.1	6,738.1	58.9	59.9	-77.74	746.3	2,012.8	368.6	252.2	116.38	3.167		
8,800.0	6,815.1	8,755.1	6,737.8	61.6	62.5	-77.88	745.8	2,112.8	368.4	246.7	121.72	3.027		
8,900.0	6,813.9	8,855.1	6,737.4	64.4	65.2	-78.01	745.2	2,212.8	368.3	241.2	127.09	2.898		
9,000.0	6,812.7	8,955.1	6,737.1	67.1	67.9	-78.15	744.7	2,312.8	368.1	235.6	132.48	2.778		
9,100.0	6,811.5	9,055.1	6,736.8	69.8	70.7	-78.28	744.2	2,412.8	367.9	230.0	137.89	2.668		
9,200.0	6,810.3	9,155.1	6,736.5	72.5	73.4	-78.42	743.6	2,512.8	367.7	224.4	143.31	2.566		
9,300.0	6,809.1	9,255.1	6,736.2	75.3	76.1	-78.56	743.1	2,612.8	367.6	218.8	148.75	2.471		
9,400.0	6,807.9	9,355.1	6,735.9	78.0	78.8	-78.69	742.5	2,712.8	367.4	213.2	154.20	2.383		
9,500.0	6,806.7	9,455.1	6,735.6	80.8	81.6	-78.83	742.0	2,812.8	367.2	207.6	159.66	2.300		
9,600.0	6,805.5	9,555.1	6,735.2	83.5	84.3	-78.97	741.5	2,912.7	367.1	202.0	165.14	2.223		
9,700.0	6,804.3	9,655.1	6,734.9	86.3	87.1	-79.10	740.9	3,012.7	366.9	196.3	170.62	2.151		
9,800.0	6,803.1	9,755.0	6,734.6	89.0	89.8	-79.24	740.4	3,112.7	366.8	190.7	176.12	2.083		
9,900.0	6,801.9	9,855.0	6,734.3	91.8	92.6	-79.38	739.9	3,212.7	366.6	185.0	181.63	2.019		
10,000.0	6,800.7	9,955.0	6,734.0	94.6	95.3	-79.51	739.3	3,312.7	366.5	179.3	187.14	1.958		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	6,799.5	10,055.0	6,733.7	97.3	98.1	-79.65	738.8	3,412.7	366.3	173.7	192.67	1.901		
10,200.0	6,798.3	10,155.0	6,733.4	100.1	100.9	-79.79	738.3	3,512.7	366.2	168.0	198.20	1.848		
10,300.0	6,797.1	10,255.0	6,733.0	102.9	103.6	-79.93	737.7	3,612.7	366.0	162.3	203.74	1.797		
10,400.0	6,795.9	10,355.0	6,732.7	105.7	106.4	-80.06	737.2	3,712.7	365.9	156.6	209.29	1.748		
10,500.0	6,794.7	10,455.0	6,732.4	108.4	109.2	-80.20	736.7	3,812.7	365.7	150.9	214.84	1.702		
10,600.0	6,793.5	10,555.0	6,732.1	111.2	111.9	-80.34	736.1	3,912.7	365.6	145.2	220.40	1.659		
10,700.0	6,792.3	10,655.0	6,731.8	114.0	114.7	-80.48	735.6	4,012.7	365.5	139.5	225.96	1.617		
10,800.0	6,791.1	10,755.0	6,731.5	116.8	117.5	-80.61	735.0	4,112.7	365.3	133.8	231.54	1.578		
10,900.0	6,789.8	10,855.0	6,731.2	119.5	120.3	-80.75	734.5	4,212.7	365.2	128.1	237.11	1.540		
11,000.0	6,788.6	10,955.0	6,730.8	122.3	123.0	-80.89	734.0	4,312.7	365.1	122.4	242.69	1.504		
11,100.0	6,787.4	11,055.0	6,730.5	125.1	125.8	-81.03	733.4	4,412.7	364.9	116.7	248.28	1.470	Level 3	
11,200.0	6,786.2	11,155.0	6,730.2	127.9	128.6	-81.17	732.9	4,512.7	364.8	110.9	253.87	1.437	Level 3	
11,300.0	6,785.0	11,255.0	6,729.9	130.7	131.4	-81.31	732.4	4,612.6	364.7	105.2	259.47	1.406	Level 3	
11,400.0	6,783.8	11,355.0	6,729.6	133.5	134.2	-81.44	731.8	4,712.6	364.6	99.5	265.07	1.375	Level 3	
11,500.0	6,782.6	11,455.0	6,729.3	136.3	137.0	-81.58	731.3	4,812.6	364.5	93.8	270.67	1.346	Level 3	
11,600.0	6,781.4	11,555.0	6,729.0	139.1	139.7	-81.72	730.8	4,912.6	364.3	88.1	276.28	1.319	Level 3	
11,700.0	6,780.2	11,655.0	6,728.7	141.8	142.5	-81.86	730.2	5,012.6	364.2	82.3	281.89	1.292	Level 3	
11,800.0	6,779.0	11,755.0	6,728.3	144.6	145.3	-82.00	729.7	5,112.6	364.1	76.6	287.51	1.266	Level 3	
11,900.0	6,777.8	11,855.0	6,728.0	147.4	148.1	-82.14	729.2	5,212.6	364.0	70.9	293.13	1.242	Level 2	
12,000.0	6,776.6	11,955.0	6,727.7	150.2	150.9	-82.28	728.6	5,312.6	363.9	65.1	298.75	1.218	Level 2	
12,100.0	6,775.4	12,055.0	6,727.4	153.0	153.7	-82.42	728.1	5,412.6	363.8	59.4	304.38	1.195	Level 2	
12,200.0	6,774.2	12,155.0	6,727.1	155.8	156.5	-82.56	727.5	5,512.6	363.7	53.7	310.00	1.173	Level 2	
12,300.0	6,773.0	12,255.0	6,726.8	158.6	159.3	-82.70	727.0	5,612.6	363.6	47.9	315.64	1.152	Level 2	
12,400.0	6,771.8	12,354.9	6,726.5	161.4	162.1	-82.84	726.5	5,712.6	363.5	42.2	321.27	1.131	Level 2	
12,500.0	6,770.6	12,454.9	6,726.1	164.2	164.8	-82.97	725.9	5,812.6	363.4	36.5	326.90	1.112	Level 2	
12,537.5	6,770.1	12,492.4	6,726.0	164.9	165.9	-83.03	725.7	5,850.1	363.3	34.7	328.65	1.106	Level 2	
12,548.3	6,770.0	12,498.6	6,726.0	165.1	166.1	-83.04	725.7	5,856.2	363.4	34.3	329.02	1.104	Level 2, SF	



Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													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	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	0.0	0.0	0.0	0.0	90.01	0.0	30.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	90.01	0.0	30.6	30.6	30.4	0.22	136.352		
200.0	200.0	200.0	200.0	0.3	0.3	90.01	0.0	30.6	30.6	30.0	0.67	45.451		
300.0	300.0	300.0	300.0	0.6	0.6	90.01	0.0	30.6	30.6	29.5	1.12	27.270		
400.0	400.0	400.0	400.0	0.8	0.8	90.01	0.0	30.6	30.6	29.1	1.57	19.479		
500.0	500.0	500.0	500.0	1.0	1.0	90.01	0.0	30.6	30.6	28.6	2.02	15.150		
600.0	600.0	600.0	600.0	1.2	1.2	90.01	0.0	30.6	30.6	28.2	2.47	12.396		
700.0	700.0	700.0	700.0	1.5	1.5	90.01	0.0	30.6	30.6	27.7	2.92	10.489		
800.0	800.0	800.0	800.0	1.7	1.7	90.01	0.0	30.6	30.6	27.3	3.37	9.090		
900.0	900.0	900.0	900.0	1.9	1.9	90.01	0.0	30.6	30.6	26.8	3.82	8.021		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.01	0.0	30.6	30.6	26.4	4.27	7.176 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	115.10	0.0	30.6	31.3	26.6	4.72	6.644		
1,200.0	1,199.8	1,199.8	1,199.8	2.6	2.6	123.08	0.0	30.6	33.9	28.7	5.16	6.566		
1,300.0	1,299.5	1,299.5	1,299.5	2.8	2.8	133.67	0.0	30.6	39.3	33.7	5.61	7.015		
1,400.0	1,398.9	1,398.9	1,398.9	3.1	3.0	142.66	0.0	30.6	46.9	40.9	6.06	7.752		
1,500.0	1,498.4	1,498.4	1,498.4	3.3	3.3	149.04	0.0	30.6	55.4	48.9	6.51	8.511		
1,600.0	1,597.9	1,599.9	1,599.9	3.6	3.5	154.37	0.6	29.0	62.7	55.8	6.95	9.025		
1,700.0	1,697.4	1,701.7	1,701.6	3.8	3.7	159.91	2.4	24.0	67.3	60.0	7.39	9.114		
1,800.0	1,796.9	1,803.5	1,803.0	4.1	3.9	166.29	5.5	15.5	69.5	61.7	7.83	8.873		
1,900.0	1,896.3	1,903.5	1,902.3	4.4	4.2	173.28	9.3	5.2	70.7	62.4	8.29	8.535		
2,000.0	1,995.8	2,003.1	2,001.3	4.6	4.4	179.95	13.0	-5.2	72.9	64.2	8.76	8.328		
2,100.0	2,095.3	2,102.7	2,100.3	4.9	4.6	-173.86	16.8	-15.6	76.1	66.8	9.25	8.228		
2,200.0	2,194.8	2,202.3	2,199.3	5.2	4.9	-168.21	20.6	-26.0	80.0	70.3	9.75	8.207		
2,300.0	2,294.3	2,302.0	2,298.3	5.5	5.2	-163.13	24.4	-36.4	84.7	74.4	10.27	8.244		
2,400.0	2,393.8	2,401.6	2,397.3	5.7	5.4	-158.61	28.2	-46.8	89.9	79.1	10.80	8.324		
2,500.0	2,493.2	2,501.2	2,496.3	6.0	5.7	-154.61	31.9	-57.2	95.7	84.3	11.35	8.433		
2,600.0	2,592.7	2,600.8	2,595.3	6.3	6.0	-151.08	35.7	-67.6	101.8	89.9	11.90	8.561		
2,700.0	2,692.2	2,700.5	2,694.3	6.6	6.3	-147.96	39.5	-78.0	108.3	95.9	12.45	8.701		
2,800.0	2,791.7	2,800.1	2,793.4	6.9	6.5	-145.19	43.3	-88.4	115.1	102.1	13.01	8.849		
2,900.0	2,891.2	2,899.7	2,892.4	7.1	6.8	-142.74	47.1	-98.8	122.2	108.6	13.57	9.000		
3,000.0	2,990.7	2,999.3	2,991.4	7.4	7.1	-140.56	50.8	-109.2	129.4	115.2	14.14	9.152		
3,100.0	3,090.1	3,099.0	3,090.4	7.7	7.4	-138.62	54.6	-119.6	136.8	122.1	14.70	9.302		
3,200.0	3,189.6	3,198.6	3,189.4	8.0	7.7	-136.87	58.4	-130.0	144.3	129.0	15.27	9.450		
3,300.0	3,289.1	3,298.2	3,288.4	8.3	8.0	-135.30	62.2	-140.4	152.0	136.1	15.84	9.595		
3,400.0	3,388.6	3,398.2	3,387.9	8.6	8.2	-134.58	65.3	-149.0	159.6	143.3	16.33	9.776		
3,500.0	3,488.1	3,498.2	3,487.8	8.8	8.4	-135.13	67.2	-154.3	167.1	150.3	16.78	9.957		
3,600.0	3,587.6	3,598.0	3,587.5	9.1	8.5	-136.77	68.0	-156.3	174.5	157.3	17.20	10.145		
3,700.0	3,687.0	3,697.5	3,687.0	9.4	8.7	-138.95	68.0	-156.4	182.0	164.4	17.60	10.342		
3,800.0	3,786.5	3,796.9	3,786.5	9.7	8.9	-140.96	68.0	-156.4	189.8	171.8	18.02	10.533		
3,900.0	3,886.0	3,896.4	3,886.0	10.0	9.1	-142.81	68.0	-156.4	197.8	179.4	18.44	10.727		
4,000.0	3,985.5	3,995.9	3,985.5	10.3	9.3	-144.51	68.0	-156.4	206.0	187.1	18.86	10.922		
4,100.0	4,085.0	4,095.4	4,085.0	10.6	9.5	-146.09	68.0	-156.4	214.4	195.1	19.28	11.117		
4,200.0	4,184.5	4,194.9	4,184.5	10.9	9.7	-147.54	68.0	-156.4	222.9	203.2	19.70	11.311		
4,300.0	4,283.9	4,294.4	4,283.9	11.1	9.9	-148.89	68.0	-156.4	231.5	211.4	20.13	11.503		
4,400.0	4,383.4	4,393.8	4,383.4	11.4	10.1	-150.14	68.0	-156.4	240.3	219.7	20.55	11.692		
4,500.0	4,482.9	4,493.3	4,482.9	11.7	10.4	-151.30	68.0	-156.4	249.2	228.2	20.98	11.878		
4,600.0	4,582.4	4,592.8	4,582.4	12.0	10.6	-152.38	68.0	-156.4	258.1	236.7	21.40	12.060		
4,700.0	4,681.9	4,692.3	4,681.9	12.3	10.8	-153.39	68.0	-156.4	267.2	245.4	21.83	12.239		
4,800.0	4,781.3	4,791.8	4,781.3	12.6	11.0	-154.33	68.0	-156.4	276.3	254.1	22.26	12.413		
4,900.0	4,880.8	4,891.3	4,880.8	12.9	11.2	-155.22	68.0	-156.4	285.5	262.8	22.69	12.583		
5,000.0	4,980.3	4,990.7	4,980.3	13.2	11.4	-156.04	68.0	-156.4	294.8	271.7	23.12	12.749		

COMPASS 2003.21 Build 46



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,079.8	5,090.2	5,079.8	13.5	11.6	-156.82		68.0	-156.4	304.1	280.5	23.55	12.910	
5,200.0	5,179.3	5,189.7	5,179.3	13.7	11.8	-157.55		68.0	-156.4	313.5	289.5	23.99	13.067	
5,300.0	5,278.8	5,289.3	5,278.8	14.0	12.0	-158.22		68.0	-156.4	322.1	297.7	24.42	13.191	
5,400.0	5,378.7	5,389.1	5,378.7	14.2	12.2	-158.65		68.0	-156.4	327.7	302.9	24.80	13.213	
5,500.0	5,478.6	5,489.0	5,478.6	14.4	12.5	-158.83		68.0	-156.4	330.0	304.8	25.16	13.117	
5,600.0	5,578.6	5,589.0	5,578.6	14.5	12.7	179.02		68.0	-156.4	330.1	303.6	26.43	12.489	
5,700.0	5,678.6	5,689.0	5,678.6	14.7	12.9	179.02		68.0	-156.4	330.1	303.2	26.84	12.299	
5,800.0	5,778.6	5,789.0	5,778.6	14.9	13.1	179.02		68.0	-156.4	330.1	302.8	27.25	12.114	
5,863.5	5,842.1	5,852.6	5,842.1	15.0	13.2	179.02		68.0	-156.4	330.1	302.5	27.51	11.999	
5,900.0	5,878.6	5,889.0	5,878.5	15.1	13.3	179.01		68.0	-156.3	330.1	302.4	27.66	11.934	
6,000.0	5,978.6	5,987.3	5,976.5	15.3	13.5	177.72		68.0	-148.9	330.3	302.2	28.07	11.768	
6,100.0	6,078.6	6,082.2	6,069.4	15.5	13.6	84.12		67.8	-129.9	331.8	304.4	27.41	12.104	
6,200.0	6,178.2	6,173.5	6,155.9	15.6	13.7	80.06		67.7	-100.8	335.3	307.7	27.58	12.157	
6,300.0	6,276.0	6,262.5	6,236.3	15.7	13.8	76.28		67.5	-62.8	340.2	312.5	27.74	12.263	
6,400.0	6,370.2	6,350.0	6,310.6	15.8	14.0	72.80		67.2	-16.5	346.1	318.2	27.92	12.396	
6,500.0	6,459.3	6,434.7	6,376.9	15.9	14.3	69.73		66.9	36.1	352.6	324.4	28.16	12.522	
6,600.0	6,541.7	6,518.5	6,436.4	16.0	14.7	67.02		66.6	95.0	359.3	330.8	28.50	12.605	
6,700.0	6,616.0	6,600.0	6,487.8	16.1	15.3	64.73		66.2	158.2	365.8	336.8	29.01	12.608	
6,800.0	6,681.0	6,682.6	6,532.7	16.3	16.1	62.79		65.8	227.5	371.7	341.9	29.81	12.470	
6,900.0	6,735.5	6,763.3	6,569.0	17.2	17.1	61.26		65.4	299.5	376.9	345.9	30.95	12.178	
7,000.0	6,778.6	6,843.4	6,597.5	18.4	18.3	60.11		65.0	374.4	381.0	348.5	32.50	11.723	
7,100.0	6,809.6	6,923.1	6,617.8	20.0	19.7	59.34		64.5	451.4	383.9	349.4	34.51	11.124	
7,200.0	6,827.9	7,000.0	6,629.7	21.8	21.2	58.93		64.1	527.3	385.5	348.6	36.91	10.442	
7,300.0	6,833.2	7,085.3	6,633.9	23.8	22.9	58.89		63.6	612.5	385.7	345.8	39.88	9.671	
7,400.0	6,832.0	7,180.9	6,633.3	25.9	25.0	58.96		63.0	708.1	385.4	341.8	43.53	8.853	
7,500.0	6,830.8	7,280.9	6,632.6	28.1	27.3	59.03		62.5	808.0	385.1	337.6	47.47	8.112	
7,600.0	6,829.6	7,380.9	6,632.0	30.5	29.6	59.11		61.9	908.0	384.8	333.3	51.58	7.460	
7,700.0	6,828.4	7,480.9	6,631.3	32.9	32.1	59.18		61.3	1,008.0	384.6	328.8	55.83	6.888	
7,800.0	6,827.2	7,580.9	6,630.7	35.3	34.6	59.25		60.7	1,108.0	384.3	324.1	60.18	6.386	
7,900.0	6,826.0	7,680.9	6,630.1	37.9	37.1	59.33		60.2	1,208.0	384.1	319.4	64.62	5.943	
8,000.0	6,824.8	7,780.9	6,629.4	40.4	39.7	59.40		59.6	1,308.0	383.8	314.7	69.13	5.551	
8,100.0	6,823.6	7,880.9	6,628.8	43.0	42.3	59.47		59.0	1,408.0	383.5	309.8	73.70	5.204	
8,200.0	6,822.4	7,980.9	6,628.1	45.6	44.9	59.55		58.5	1,508.0	383.3	304.9	78.33	4.893	
8,300.0	6,821.2	8,080.9	6,627.5	48.2	47.6	59.62		57.9	1,608.0	383.0	300.0	82.99	4.615	
8,400.0	6,820.0	8,180.9	6,626.8	50.9	50.2	59.70		57.3	1,708.0	382.7	295.1	87.70	4.364	
8,500.0	6,818.8	8,280.9	6,626.2	53.6	52.9	59.77		56.7	1,808.0	382.5	290.1	92.43	4.138	
8,600.0	6,817.5	8,380.9	6,625.5	56.2	55.6	59.84		56.2	1,908.0	382.2	285.0	97.20	3.932	
8,700.0	6,816.3	8,480.9	6,624.9	58.9	58.3	59.92		55.6	2,008.0	382.0	280.0	101.99	3.745	
8,800.0	6,815.1	8,580.9	6,624.2	61.6	61.1	59.99		55.0	2,108.0	381.7	274.9	106.81	3.574	
8,900.0	6,813.9	8,680.9	6,623.6	64.4	63.8	60.07		54.4	2,208.0	381.5	269.8	111.64	3.417	
9,000.0	6,812.7	8,780.8	6,623.0	67.1	66.5	60.14		53.9	2,308.0	381.2	264.7	116.50	3.272	
9,100.0	6,811.5	8,880.8	6,622.3	69.8	69.2	60.22		53.3	2,408.0	380.9	259.6	121.37	3.139	
9,200.0	6,810.3	8,980.8	6,621.7	72.5	72.0	60.29		52.7	2,508.0	380.7	254.4	126.26	3.015	
9,300.0	6,809.1	9,080.8	6,621.0	75.3	74.7	60.37		52.2	2,608.0	380.4	249.3	131.17	2.900	
9,400.0	6,807.9	9,180.8	6,620.4	78.0	77.5	60.44		51.6	2,707.9	380.2	244.1	136.09	2.794	
9,500.0	6,806.7	9,280.8	6,619.7	80.8	80.2	60.52		51.0	2,807.9	379.9	238.9	141.02	2.694	
9,600.0	6,805.5	9,380.8	6,619.1	83.5	83.0	60.59		50.4	2,907.9	379.7	233.7	145.97	2.601	
9,700.0	6,804.3	9,480.8	6,618.4	86.3	85.8	60.67		49.9	3,007.9	379.4	228.5	150.93	2.514	
9,800.0	6,803.1	9,580.8	6,617.8	89.0	88.5	60.74		49.3	3,107.9	379.2	223.3	155.90	2.432	
9,900.0	6,801.9	9,680.8	6,617.1	91.8	91.3	60.82		48.7	3,207.9	378.9	218.0	160.89	2.355	
10,000.0	6,800.7	9,780.8	6,616.5	94.6	94.1	60.89		48.1	3,307.9	378.7	212.8	165.88	2.283	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	6,799.5	9,880.8	6,615.8	97.3	96.9	60.97	47.6	3,407.9	378.4	207.5	170.89	2.214		
10,200.0	6,798.3	9,980.8	6,615.2	100.1	99.6	61.05	47.0	3,507.9	378.2	202.3	175.90	2.150		
10,300.0	6,797.1	10,080.8	6,614.6	102.9	102.4	61.12	46.4	3,607.9	377.9	197.0	180.93	2.089		
10,400.0	6,795.9	10,180.8	6,613.9	105.7	105.2	61.20	45.8	3,707.9	377.7	191.7	185.96	2.031		
10,500.0	6,794.7	10,280.8	6,613.3	108.4	108.0	61.27	45.3	3,807.9	377.4	186.4	191.01	1.976		
10,600.0	6,793.5	10,380.8	6,612.6	111.2	110.7	61.35	44.7	3,907.9	377.2	181.1	196.06	1.924		
10,700.0	6,792.3	10,480.8	6,612.0	114.0	113.5	61.43	44.1	4,007.9	376.9	175.8	201.12	1.874		
10,800.0	6,791.1	10,580.8	6,611.3	116.8	116.3	61.50	43.6	4,107.9	376.7	170.5	206.20	1.827		
10,900.0	6,789.8	10,680.8	6,610.7	119.5	119.1	61.58	43.0	4,207.9	376.5	165.2	211.28	1.782		
11,000.0	6,788.6	10,780.8	6,610.0	122.3	121.9	61.66	42.4	4,307.9	376.2	159.9	216.36	1.739		
11,100.0	6,787.4	10,880.8	6,609.4	125.1	124.7	61.73	41.8	4,407.9	376.0	154.5	221.46	1.698		
11,200.0	6,786.2	10,980.8	6,608.7	127.9	127.5	61.81	41.3	4,507.9	375.7	149.2	226.56	1.658		
11,300.0	6,785.0	11,080.8	6,608.1	130.7	130.3	61.89	40.7	4,607.8	375.5	143.8	231.68	1.621		
11,400.0	6,783.8	11,180.8	6,607.5	133.5	133.0	61.96	40.1	4,707.8	375.2	138.5	236.80	1.585		
11,500.0	6,782.6	11,280.8	6,606.8	136.3	135.8	62.04	39.5	4,807.8	375.0	133.1	241.93	1.550		
11,600.0	6,781.4	11,380.8	6,606.2	139.1	138.6	62.12	39.0	4,907.8	374.8	127.7	247.06	1.517		
11,700.0	6,780.2	11,480.8	6,605.5	141.8	141.4	62.20	38.4	5,007.8	374.5	122.3	252.21	1.485 Level 3		
11,800.0	6,779.0	11,580.8	6,604.9	144.6	144.2	62.27	37.8	5,107.8	374.3	116.9	257.36	1.454 Level 3		
11,900.0	6,777.8	11,680.8	6,604.2	147.4	147.0	62.35	37.3	5,207.8	374.1	111.5	262.52	1.425 Level 3		
12,000.0	6,776.6	11,780.8	6,603.6	150.2	149.8	62.43	36.7	5,307.8	373.8	106.1	267.68	1.397 Level 3		
12,100.0	6,775.4	11,880.8	6,602.9	153.0	152.6	62.51	36.1	5,407.8	373.6	100.7	272.86	1.369 Level 3		
12,200.0	6,774.2	11,980.8	6,602.3	155.8	155.4	62.58	35.5	5,507.8	373.4	95.3	278.04	1.343 Level 3		
12,300.0	6,773.0	12,080.8	6,601.6	158.6	158.2	62.66	35.0	5,607.8	373.1	89.9	283.23	1.317 Level 3		
12,400.0	6,771.8	12,180.8	6,601.0	161.4	161.0	62.74	34.4	5,707.8	372.9	84.5	288.42	1.293 Level 3		
12,500.0	6,770.6	12,280.8	6,600.3	164.2	163.8	62.82	33.8	5,807.8	372.7	79.0	293.62	1.269 Level 3		
12,548.3	6,770.0	12,329.1	6,600.0	165.1	165.1	62.86	33.5	5,856.1	372.5	76.8	295.71	1.260 Level 3, SF		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.02	90.02	0.0	61.3	61.3				
100.0	100.0	100.0	100.0	0.1	0.1	90.02	90.02	0.0	61.3	61.3	61.1	0.22	272.703	
200.0	200.0	200.0	200.0	0.3	0.3	90.02	90.02	0.0	61.3	61.3	60.6	0.67	90.901	
300.0	300.0	300.0	300.0	0.6	0.6	90.02	90.02	0.0	61.3	61.3	60.2	1.12	54.541	
400.0	400.0	400.0	400.0	0.8	0.8	90.02	90.02	0.0	61.3	61.3	59.7	1.57	38.958	
500.0	500.0	500.0	500.0	1.0	1.0	90.02	90.02	0.0	61.3	61.3	59.3	2.02	30.300	
600.0	600.0	600.0	600.0	1.2	1.2	90.02	90.02	0.0	61.3	61.3	58.8	2.47	24.791	
700.0	700.0	700.0	700.0	1.5	1.5	90.02	90.02	0.0	61.3	61.3	58.4	2.92	20.977	
800.0	800.0	800.0	800.0	1.7	1.7	90.02	90.02	0.0	61.3	61.3	57.9	3.37	18.180	
900.0	900.0	900.0	900.0	1.9	1.9	90.02	90.02	0.0	61.3	61.3	57.5	3.82	16.041	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.02	90.02	0.0	61.3	61.3	57.0	4.27	14.353 CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	113.64	113.64	0.0	61.3	62.0	57.3	4.72	13.135	
1,200.0	1,199.8	1,199.8	1,199.8	2.6	2.6	117.88	117.88	0.0	61.3	64.3	59.1	5.16	12.443	
1,300.0	1,299.5	1,299.5	1,299.5	2.8	2.8	124.22	124.22	0.0	61.3	68.8	63.2	5.61	12.254	
1,400.0	1,398.9	1,398.9	1,398.9	3.1	3.0	130.63	130.63	0.0	61.3	75.0	68.9	6.06	12.362	
1,500.0	1,498.4	1,498.4	1,498.4	3.3	3.3	136.02	136.02	0.0	61.3	82.0	75.4	6.52	12.573	
1,600.0	1,597.9	1,597.9	1,597.9	3.6	3.5	140.52	140.52	0.0	61.3	89.6	82.6	6.97	12.842	
1,700.0	1,697.4	1,697.4	1,697.4	3.8	3.7	144.31	144.31	0.0	61.3	97.6	90.2	7.43	13.141	
1,800.0	1,796.9	1,797.1	1,797.1	4.1	3.9	148.40	148.40	-1.3	60.2	106.0	98.1	7.86	13.484	
1,900.0	1,896.3	1,896.2	1,896.1	4.4	4.1	153.59	153.59	-5.2	57.0	114.8	106.5	8.26	13.896	
2,000.0	1,995.8	1,994.6	1,994.1	4.6	4.3	159.52	159.52	-11.7	51.6	124.9	116.2	8.67	14.404	
2,100.0	2,095.3	2,092.7	2,091.6	4.9	4.5	165.59	165.59	-20.1	44.6	136.7	127.6	9.09	15.036	
2,200.0	2,194.8	2,191.0	2,189.2	5.2	4.7	170.73	170.73	-28.7	37.5	149.9	140.4	9.53	15.732	
2,300.0	2,294.3	2,289.3	2,286.9	5.5	4.9	175.03	175.03	-37.3	30.4	164.1	154.1	9.97	16.451	
2,400.0	2,393.8	2,387.6	2,384.5	5.7	5.1	178.63	178.63	-45.9	23.3	179.0	168.6	10.43	17.170	
2,500.0	2,493.2	2,485.9	2,482.2	6.0	5.4	-178.32	-178.32	-54.5	16.1	194.6	183.7	10.89	17.872	
2,600.0	2,592.7	2,584.1	2,579.8	6.3	5.6	-175.73	-175.73	-63.2	9.0	210.6	199.2	11.35	18.550	
2,700.0	2,692.2	2,682.4	2,677.5	6.6	5.9	-173.51	-173.51	-71.8	1.9	227.0	215.1	11.82	19.199	
2,800.0	2,791.7	2,780.7	2,775.1	6.9	6.1	-171.58	-171.58	-80.4	-5.3	243.6	231.3	12.29	19.816	
2,900.0	2,891.2	2,879.0	2,872.8	7.1	6.4	-169.90	-169.90	-89.0	-12.4	260.5	247.8	12.77	20.402	
3,000.0	2,990.7	2,977.3	2,970.4	7.4	6.7	-168.43	-168.43	-97.6	-19.5	277.6	264.4	13.25	20.956	
3,100.0	3,090.1	3,075.6	3,068.1	7.7	6.9	-167.13	-167.13	-106.2	-26.6	294.9	281.1	13.73	21.479	
3,200.0	3,189.6	3,173.9	3,165.8	8.0	7.2	-165.97	-165.97	-114.8	-33.8	312.2	298.0	14.21	21.974	
3,300.0	3,289.1	3,272.2	3,263.4	8.3	7.5	-164.93	-164.93	-123.4	-40.9	329.7	315.0	14.69	22.442	
3,400.0	3,388.6	3,370.5	3,361.1	8.6	7.8	-164.00	-164.00	-132.0	-48.0	347.3	332.1	15.18	22.883	
3,500.0	3,488.1	3,468.8	3,458.7	8.8	8.0	-163.16	-163.16	-140.6	-55.1	365.0	349.3	15.66	23.301	
3,600.0	3,587.6	3,567.1	3,556.4	9.1	8.3	-162.39	-162.39	-149.2	-62.3	382.7	366.6	16.15	23.696	
3,700.0	3,687.0	3,665.4	3,654.0	9.4	8.6	-161.70	-161.70	-157.8	-69.4	400.5	383.9	16.64	24.070	
3,800.0	3,786.5	3,763.7	3,751.7	9.7	8.9	-161.06	-161.06	-166.4	-76.5	418.4	401.2	17.13	24.424	
3,900.0	3,886.0	3,861.9	3,849.3	10.0	9.2	-160.47	-160.47	-175.0	-83.6	436.3	418.6	17.62	24.760	
4,000.0	3,985.5	3,960.2	3,947.0	10.3	9.5	-159.93	-159.93	-183.6	-90.8	454.2	436.1	18.11	25.079	
4,100.0	4,085.0	4,058.5	4,044.6	10.6	9.8	-159.44	-159.44	-192.2	-97.9	472.2	453.6	18.60	25.382	
4,200.0	4,184.5	4,156.8	4,142.3	10.9	10.1	-158.97	-158.97	-200.8	-105.0	490.2	471.1	19.10	25.670	
4,300.0	4,283.9	4,255.1	4,240.0	11.1	10.4	-158.54	-158.54	-209.4	-112.2	508.2	488.6	19.59	25.944	
4,400.0	4,383.4	4,353.4	4,337.6	11.4	10.6	-158.14	-158.14	-218.0	-119.3	526.3	506.2	20.08	26.205	
4,500.0	4,482.9	4,451.7	4,435.3	11.7	10.9	-157.77	-157.77	-226.6	-126.4	544.3	523.8	20.58	26.454	
4,600.0	4,582.4	4,550.0	4,532.9	12.0	11.2	-157.42	-157.42	-235.3	-133.5	562.4	541.4	21.07	26.692	
4,700.0	4,681.9	4,648.3	4,630.6	12.3	11.5	-157.09	-157.09	-243.9	-140.7	580.6	559.0	21.57	26.919	
4,800.0	4,781.3	4,757.1	4,738.8	12.6	11.8	-156.80	-156.80	-252.8	-148.1	598.2	576.2	22.06	27.113	
4,900.0	4,880.8	4,875.6	4,856.9	12.9	12.1	-156.75	-156.75	-259.3	-153.4	613.0	590.5	22.55	27.183	
5,000.0	4,980.3	4,995.0	4,976.3	13.2	12.3	-156.99	-156.99	-261.9	-155.6	624.7	601.6	23.03	27.126	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,079.8	5,098.5	5,079.8	13.5	12.5	-157.36		-262.0	-155.7	634.1	610.6	23.47	27.018	
5,200.0	5,179.3	5,198.0	5,179.3	13.7	12.7	-157.71		-262.0	-155.7	643.5	619.6	23.90	26.919	
5,300.0	5,278.8	5,297.5	5,278.8	14.0	12.8	-158.06		-262.0	-155.7	652.1	627.8	24.35	26.782	
5,400.0	5,378.7	5,397.3	5,378.7	14.2	13.0	-158.30		-262.0	-155.7	657.7	632.9	24.74	26.581	
5,500.0	5,478.6	5,497.3	5,478.6	14.4	13.2	-158.40		-262.0	-155.7	660.0	634.9	25.11	26.287	
5,600.0	5,578.6	5,597.3	5,578.6	14.5	13.4	179.45		-262.0	-155.7	660.0	633.0	27.00	24.447	
5,700.0	5,678.6	5,697.3	5,678.6	14.7	13.5	179.45		-262.0	-155.7	660.0	632.7	27.38	24.109	
5,800.0	5,778.6	5,797.3	5,778.6	14.9	13.7	179.45		-262.0	-155.7	660.0	632.3	27.76	23.779	
5,900.0	5,878.6	5,897.3	5,878.6	15.1	13.9	179.45		-262.0	-155.7	660.0	631.9	28.14	23.457	
6,000.0	5,978.6	5,997.3	5,978.6	15.3	14.1	179.45		-262.0	-155.7	660.0	631.5	28.52	23.141	
6,100.0	6,078.6	6,097.2	6,078.5	15.5	14.3	89.14		-262.0	-155.7	660.0	632.5	27.53	23.977	
6,200.0	6,178.2	6,195.9	6,176.9	15.6	14.4	89.15		-262.1	-148.1	660.0	632.2	27.84	23.708	
6,300.0	6,276.0	6,294.7	6,273.5	15.7	14.5	89.17		-262.2	-127.9	660.0	632.0	28.08	23.505	
6,400.0	6,370.2	6,393.5	6,366.7	15.8	14.6	89.21		-262.3	-95.4	660.0	631.7	28.29	23.328	
6,500.0	6,459.3	6,492.3	6,455.0	15.9	14.6	89.26		-262.6	-51.2	660.0	631.5	28.56	23.111	
6,600.0	6,541.7	6,591.3	6,537.0	16.0	14.7	89.32		-262.9	4.2	660.0	631.0	28.99	22.764	
6,700.0	6,616.0	6,690.3	6,611.1	16.1	14.8	89.40		-263.2	69.7	660.0	630.2	29.74	22.188	
6,800.0	6,681.0	6,789.5	6,676.3	16.3	15.0	89.48		-263.6	144.4	660.0	629.0	30.97	21.312	
6,900.0	6,735.5	6,888.8	6,731.3	17.2	15.9	89.57		-264.1	226.9	660.0	627.2	32.78	20.130	
7,000.0	6,778.6	6,988.2	6,775.2	18.4	17.2	89.68		-264.6	316.1	659.9	624.7	35.25	18.721	
7,100.0	6,809.6	7,087.8	6,807.2	20.0	18.7	89.78		-265.1	410.3	659.9	621.6	38.34	17.211	
7,200.0	6,827.9	7,187.5	6,826.7	21.8	20.5	89.89		-265.6	508.1	659.9	617.9	41.96	15.728	
7,300.0	6,833.2	7,287.5	6,833.3	23.8	22.5	90.00		-266.1	607.7	659.9	613.9	45.96	14.359	
7,400.0	6,832.0	7,387.5	6,832.1	25.9	24.7	90.01		-266.7	707.7	659.9	609.6	50.24	13.135	
7,500.0	6,830.8	7,487.5	6,830.9	28.1	26.9	90.01		-267.2	807.7	659.9	605.1	54.76	12.050	
7,600.0	6,829.6	7,587.5	6,829.7	30.5	29.3	90.01		-267.7	907.7	659.9	600.4	59.47	11.096	
7,700.0	6,828.4	7,687.5	6,828.5	32.9	31.7	90.01		-268.3	1,007.7	659.9	595.5	64.32	10.259	
7,800.0	6,827.2	7,787.5	6,827.3	35.3	34.2	90.01		-268.8	1,107.6	659.8	590.6	69.29	9.523	
7,900.0	6,826.0	7,887.5	6,826.1	37.9	36.7	90.01		-269.3	1,207.6	659.8	585.5	74.36	8.874	
8,000.0	6,824.8	7,987.5	6,824.9	40.4	39.3	90.01		-269.9	1,307.6	659.8	580.3	79.49	8.300	
8,100.0	6,823.6	8,087.5	6,823.7	43.0	41.9	90.01		-270.4	1,407.6	659.8	575.1	84.69	7.791	
8,200.0	6,822.4	8,187.5	6,822.5	45.6	44.5	90.01		-271.0	1,507.6	659.8	569.9	89.94	7.336	
8,300.0	6,821.2	8,287.5	6,821.3	48.2	47.2	90.01		-271.5	1,607.6	659.8	564.6	95.23	6.928	
8,400.0	6,820.0	8,387.5	6,820.1	50.9	49.9	90.01		-272.0	1,707.6	659.8	559.2	100.56	6.561	
8,500.0	6,818.8	8,487.5	6,818.9	53.6	52.5	90.01		-272.6	1,807.6	659.8	553.9	105.92	6.229	
8,600.0	6,817.5	8,587.5	6,817.7	56.2	55.2	90.01		-273.1	1,907.6	659.8	548.5	111.30	5.928	
8,700.0	6,816.3	8,687.5	6,816.5	58.9	57.9	90.01		-273.6	2,007.6	659.8	543.1	116.70	5.653	
8,800.0	6,815.1	8,787.5	6,815.3	61.6	60.7	90.01		-274.2	2,107.6	659.7	537.6	122.13	5.402	
8,900.0	6,813.9	8,887.5	6,814.0	64.4	63.4	90.01		-274.7	2,207.6	659.7	532.2	127.57	5.172	
9,000.0	6,812.7	8,987.5	6,812.8	67.1	66.1	90.01		-275.3	2,307.5	659.7	526.7	133.03	4.959	
9,100.0	6,811.5	9,087.5	6,811.6	69.8	68.8	90.01		-275.8	2,407.5	659.7	521.2	138.49	4.763	
9,200.0	6,810.3	9,187.5	6,810.4	72.5	71.6	90.01		-276.3	2,507.5	659.7	515.7	143.98	4.582	
9,300.0	6,809.1	9,287.5	6,809.2	75.3	74.3	90.01		-276.9	2,607.5	659.7	510.2	149.47	4.414	
9,400.0	6,807.9	9,387.5	6,808.0	78.0	77.1	90.01		-277.4	2,707.5	659.7	504.7	154.97	4.257	
9,500.0	6,806.7	9,487.5	6,806.8	80.8	79.8	90.01		-277.9	2,807.5	659.7	499.2	160.47	4.111	
9,600.0	6,805.5	9,587.5	6,805.6	83.5	82.6	90.01		-278.5	2,907.5	659.7	493.7	165.99	3.974	
9,700.0	6,804.3	9,687.5	6,804.4	86.3	85.4	90.01		-279.0	3,007.5	659.7	488.1	171.51	3.846	
9,800.0	6,803.1	9,787.5	6,803.2	89.0	88.1	90.01		-279.6	3,107.5	659.6	482.6	177.04	3.726	
9,900.0	6,801.9	9,887.5	6,802.0	91.8	90.9	90.01		-280.1	3,207.5	659.6	477.1	182.57	3.613	
10,000.0	6,800.7	9,987.5	6,800.8	94.6	93.7	90.01		-280.6	3,307.5	659.6	471.5	188.11	3.507	
10,100.0	6,799.5	10,087.5	6,799.6	97.3	96.4	90.01		-281.2	3,407.4	659.6	466.0	193.66	3.406	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	6,798.3	10,187.5	6,798.4	100.1	99.2	90.01	90.01	-281.7	3,507.4	659.6	460.4	199.20	3.311	
10,300.0	6,797.1	10,287.5	6,797.2	102.9	102.0	90.01	90.01	-282.2	3,607.4	659.6	454.8	204.76	3.221	
10,400.0	6,795.9	10,387.5	6,796.0	105.7	104.8	90.01	90.01	-282.8	3,707.4	659.6	449.3	210.31	3.136	
10,500.0	6,794.7	10,487.5	6,794.8	108.4	107.5	90.01	90.01	-283.3	3,807.4	659.6	443.7	215.87	3.055	
10,600.0	6,793.5	10,587.5	6,793.6	111.2	110.3	90.01	90.01	-283.9	3,907.4	659.6	438.1	221.43	2.979	
10,700.0	6,792.3	10,687.5	6,792.4	114.0	113.1	90.01	90.01	-284.4	4,007.4	659.6	432.6	227.00	2.906	
10,800.0	6,791.1	10,787.5	6,791.2	116.8	115.9	90.01	90.01	-284.9	4,107.4	659.5	427.0	232.56	2.836	
10,900.0	6,789.8	10,887.5	6,790.0	119.5	118.7	90.01	90.01	-285.5	4,207.4	659.5	421.4	238.13	2.770	
11,000.0	6,788.6	10,987.5	6,788.8	122.3	121.5	90.01	90.01	-286.0	4,307.4	659.5	415.8	243.70	2.706	
11,100.0	6,787.4	11,087.5	6,787.6	125.1	124.2	90.01	90.01	-286.5	4,407.4	659.5	410.2	249.28	2.646	
11,200.0	6,786.2	11,187.5	6,786.3	127.9	127.0	90.01	90.01	-287.1	4,507.4	659.5	404.7	254.85	2.588	
11,300.0	6,785.0	11,287.5	6,785.1	130.7	129.8	90.01	90.01	-287.6	4,607.3	659.5	399.1	260.43	2.532	
11,400.0	6,783.8	11,387.5	6,783.9	133.5	132.6	90.01	90.01	-288.2	4,707.3	659.5	393.5	266.01	2.479	
11,500.0	6,782.6	11,487.5	6,782.7	136.3	135.4	90.01	90.01	-288.7	4,807.3	659.5	387.9	271.59	2.428	
11,600.0	6,781.4	11,587.5	6,781.5	139.1	138.2	90.01	90.01	-289.2	4,907.3	659.5	382.3	277.17	2.379	
11,700.0	6,780.2	11,687.5	6,780.3	141.8	141.0	90.01	90.01	-289.8	5,007.3	659.5	376.7	282.76	2.332	
11,800.0	6,779.0	11,787.5	6,779.1	144.6	143.8	90.01	90.01	-290.3	5,107.3	659.4	371.1	288.34	2.287	
11,900.0	6,777.8	11,887.5	6,777.9	147.4	146.6	90.01	90.01	-290.9	5,207.3	659.4	365.5	293.93	2.244	
12,000.0	6,776.6	11,987.5	6,776.7	150.2	149.4	90.01	90.01	-291.4	5,307.3	659.4	359.9	299.52	2.202	
12,100.0	6,775.4	12,087.5	6,775.5	153.0	152.2	90.01	90.01	-291.9	5,407.3	659.4	354.3	305.10	2.161	
12,200.0	6,774.2	12,187.5	6,774.3	155.8	155.0	90.01	90.01	-292.5	5,507.3	659.4	348.7	310.69	2.122	
12,300.0	6,773.0	12,287.5	6,773.1	158.6	157.8	90.01	90.01	-293.0	5,607.3	659.4	343.1	316.29	2.085	
12,400.0	6,771.8	12,387.5	6,771.9	161.4	160.6	90.01	90.01	-293.5	5,707.2	659.4	337.5	321.88	2.049	
12,500.0	6,770.6	12,487.5	6,770.7	164.2	163.3	90.01	90.01	-294.1	5,807.2	659.4	331.9	327.47	2.014	
12,548.3	6,770.0	12,535.8	6,770.1	165.1	164.7	90.01	90.01	-294.3	5,855.6	659.4	329.7	329.69	2.000 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 44-24 (Exist.) - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 7300-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
7,600.0	6,829.6	6,811.6	6,811.6	30.5	7.7	92.30	113.0	1,824.9	955.4	917.4	37.93	25.190	
7,700.0	6,828.4	6,810.4	6,810.4	32.9	7.7	92.05	113.0	1,824.9	860.1	819.7	40.34	21.318	
7,800.0	6,827.2	6,809.2	6,809.2	35.3	7.7	91.80	113.0	1,824.9	765.9	723.1	42.82	17.887	
7,900.0	6,826.0	6,808.0	6,808.0	37.9	7.7	91.55	113.0	1,824.9	673.5	628.2	45.34	14.854	
8,000.0	6,824.8	6,806.8	6,806.8	40.4	7.6	91.30	113.0	1,824.9	583.6	535.7	47.90	12.183	
8,100.0	6,823.6	6,805.6	6,805.6	43.0	7.6	91.05	113.0	1,824.9	497.5	447.0	50.49	9.854	
8,200.0	6,822.4	6,804.4	6,804.4	45.6	7.6	90.79	113.0	1,824.9	417.7	364.6	53.11	7.866	
8,300.0	6,821.2	6,803.2	6,803.2	48.2	7.6	90.54	113.0	1,824.9	348.5	292.8	55.74	6.252	
8,400.0	6,820.0	6,802.0	6,802.0	50.9	7.6	90.29	113.0	1,824.9	297.3	238.9	58.40	5.092	
8,500.0	6,818.8	6,800.8	6,800.8	53.6	7.6	90.04	113.0	1,824.9	274.5	213.5	61.07	4.495	
8,515.3	6,818.6	6,800.6	6,800.6	54.0	7.6	90.00	113.0	1,824.9	274.1	212.6	61.48	4.459 CC, ES, SF	
8,600.0	6,817.5	6,799.5	6,799.5	56.2	7.6	89.79	113.0	1,824.9	286.9	223.1	63.75	4.500	
8,700.0	6,816.3	6,798.3	6,798.3	58.9	7.6	89.54	113.0	1,824.9	330.5	264.1	66.44	4.975	
8,800.0	6,815.1	6,797.1	6,797.1	61.6	7.6	89.28	113.0	1,824.9	395.2	326.1	69.14	5.716	
8,900.0	6,813.9	6,795.9	6,795.9	64.4	7.6	89.03	113.0	1,824.9	472.4	400.5	71.85	6.575	
9,000.0	6,812.7	6,794.7	6,794.7	67.1	7.6	88.78	113.0	1,824.9	556.8	482.3	74.56	7.468	
9,100.0	6,811.5	6,793.5	6,793.5	69.8	7.6	88.53	113.0	1,824.9	645.8	568.5	77.28	8.356	
9,200.0	6,810.3	6,792.3	6,792.3	72.5	7.6	88.28	113.0	1,824.9	737.5	657.5	80.00	9.219	
9,300.0	6,809.1	6,791.1	6,791.1	75.3	7.6	88.03	113.0	1,824.9	831.2	748.4	82.73	10.047	
9,400.0	6,807.9	6,789.9	6,789.9	78.0	7.6	87.77	113.0	1,824.9	926.2	840.7	85.46	10.838	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey Hoff 1 (Exist.) - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.0 ft
<b>Survey Program:</b> 100-NS-GYRO-MS												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,800.0	6,815.1	6,800.0	6,799.3	61.6	12.3	94.51	199.0	3,036.5	944.0	870.3	73.72	12.805	
8,900.0	6,813.9	6,800.0	6,799.3	64.4	12.3	94.51	199.0	3,036.5	846.1	769.7	76.43	11.070	
9,000.0	6,812.7	6,800.1	6,799.4	67.1	12.3	94.54	199.0	3,036.5	748.8	669.6	79.15	9.460	
9,100.0	6,811.5	6,798.3	6,797.6	69.8	12.3	93.99	199.0	3,036.5	652.2	570.3	81.92	7.962	
9,200.0	6,810.3	6,796.6	6,795.9	72.5	12.3	93.45	199.0	3,036.5	556.9	472.2	84.68	6.576	
9,300.0	6,809.1	6,794.9	6,794.2	75.3	12.3	92.90	199.0	3,036.5	463.5	376.1	87.45	5.300	
9,400.0	6,807.9	6,793.2	6,792.5	78.0	12.3	92.36	198.9	3,036.5	373.6	283.4	90.22	4.141	
9,500.0	6,806.7	6,791.4	6,790.7	80.8	12.3	91.82	198.9	3,036.5	290.3	197.3	92.99	3.122	
9,600.0	6,805.5	6,789.7	6,789.0	83.5	12.3	91.28	198.9	3,036.6	221.3	125.6	95.76	2.311	
9,700.0	6,804.3	6,788.0	6,787.3	86.3	12.3	90.74	198.9	3,036.6	183.5	85.0	98.52	1.863	
9,726.5	6,804.0	6,787.6	6,786.9	87.0	12.3	90.60	198.9	3,036.6	181.6	82.4	99.25	1.830 CC, ES, SF	
9,800.0	6,803.1	6,786.3	6,785.6	89.0	12.3	90.20	198.9	3,036.6	195.9	94.6	101.28	1.934	
9,900.0	6,801.9	6,784.6	6,783.9	91.8	12.3	89.67	198.8	3,036.6	251.1	147.1	104.03	2.414	
10,000.0	6,800.7	6,782.9	6,782.2	94.6	12.3	89.13	198.8	3,036.6	328.3	221.5	106.78	3.074	
10,100.0	6,799.5	6,781.2	6,780.5	97.3	12.3	88.60	198.8	3,036.6	415.3	305.7	109.52	3.792	
10,200.0	6,798.3	6,779.6	6,778.9	100.1	12.3	88.07	198.8	3,036.6	507.1	394.8	112.25	4.517	
10,300.0	6,797.1	6,777.9	6,777.2	102.9	12.3	87.54	198.8	3,036.6	601.5	486.5	114.97	5.232	
10,400.0	6,795.9	6,776.2	6,775.5	105.7	12.3	87.02	198.8	3,036.6	697.5	579.8	117.69	5.926	
10,500.0	6,794.7	6,774.5	6,773.8	108.4	12.3	86.49	198.7	3,036.6	794.4	674.0	120.39	6.599	
10,600.0	6,793.5	6,772.9	6,772.2	111.2	12.3	85.97	198.7	3,036.6	892.0	769.0	123.09	7.247	
10,700.0	6,792.3	6,771.2	6,770.5	114.0	12.3	85.45	198.7	3,036.6	990.1	864.4	125.77	7.873	



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Phil Wilson 19-1 (Exist) - Wellbore #1 - Wellbore #1												Offset Site Error: 0.0 ft	
Survey Program: 7600-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)		
11,500.0	6,782.6	6,782.6	6,782.6	136.3	135.7	100.53	306.7	5,722.6	914.0	646.3	267.66	3.415	
11,600.0	6,781.4	6,781.4	6,781.4	139.1	135.6	99.40	306.7	5,722.6	814.2	543.0	271.26	3.002	
11,700.0	6,780.2	6,780.2	6,780.2	141.8	135.6	98.26	306.7	5,722.6	714.5	439.7	274.79	2.600	
11,800.0	6,779.0	6,779.0	6,779.0	144.6	135.6	97.11	306.7	5,722.6	614.9	336.7	278.23	2.210	
11,900.0	6,777.8	6,777.8	6,777.8	147.4	135.6	95.96	306.7	5,722.6	515.5	233.9	281.58	1.831	
12,000.0	6,776.6	6,776.6	6,776.6	150.2	135.5	94.80	306.7	5,722.6	416.3	131.5	284.83	1.462	Level 3
12,100.0	6,775.4	6,775.4	6,775.4	153.0	135.5	93.64	306.7	5,722.6	317.7	29.7	287.98	1.103	Level 2
12,200.0	6,774.2	6,774.2	6,774.2	155.8	135.5	92.48	306.7	5,722.6	220.2	-70.8	291.03	0.757	Level 1
12,300.0	6,773.0	6,773.0	6,773.0	158.6	135.5	91.31	306.7	5,722.6	126.7	-167.2	293.96	0.431	Level 1
12,400.0	6,771.8	6,771.8	6,771.8	161.4	135.4	90.14	306.7	5,722.6	60.3	-236.5	296.78	0.203	Level 1
12,412.1	6,771.6	6,771.6	6,771.6	161.7	135.4	90.00	306.7	5,722.6	59.1	-238.0	297.12	0.199	Level 1, CC, ES, SF
12,500.0	6,770.6	6,770.6	6,770.6	164.2	135.4	88.97	306.7	5,722.6	105.9	-193.6	299.48	0.354	Level 1
12,548.3	6,770.0	6,770.0	6,770.0	165.1	135.4	88.41	306.7	5,722.6	148.4	-151.8	300.27	0.494	Level 1



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4650.0ft (RKB - 15')

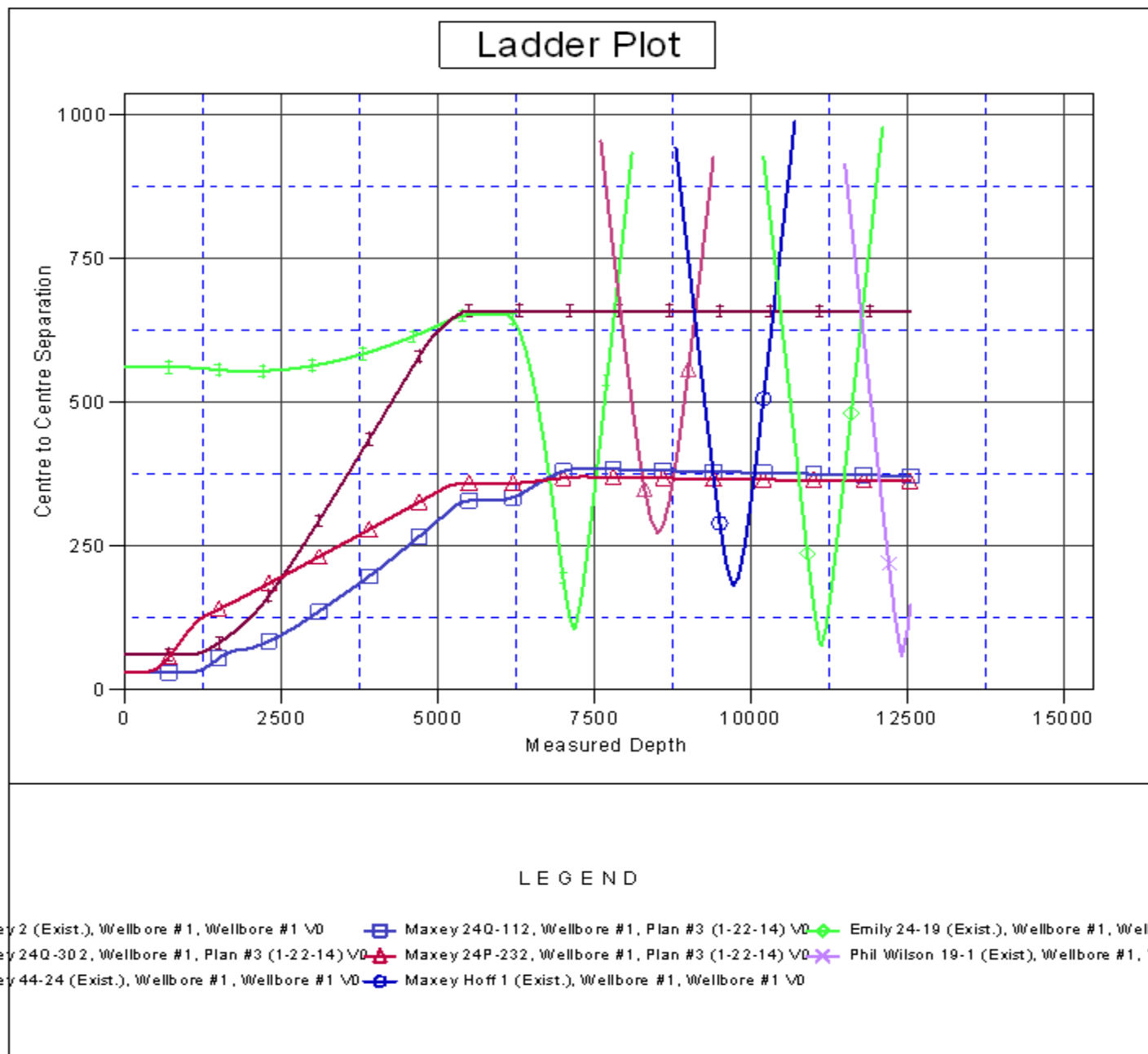
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24P-332

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-332
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-332	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4650.0ft (RKB - 15')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24P-332

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°

