

# PETROLEUM DEVELOPMENT CORP Weld County CO

**Well Name: Maxey 240-232**

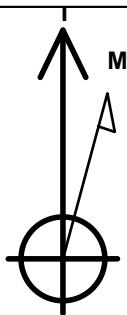
Surface Location: Maxey 240-HZ Pad Sec.24-T5N-R65W  
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4636.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1383922.72	3247717.36	40.383860	-104.610760	
RKB - 15' WELL @ 4651.0ft (RKB - 15')						

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
BHL 2058'FSL & 2140'FWL, Sec.19	6726.0	-312.9	4605.1	Point



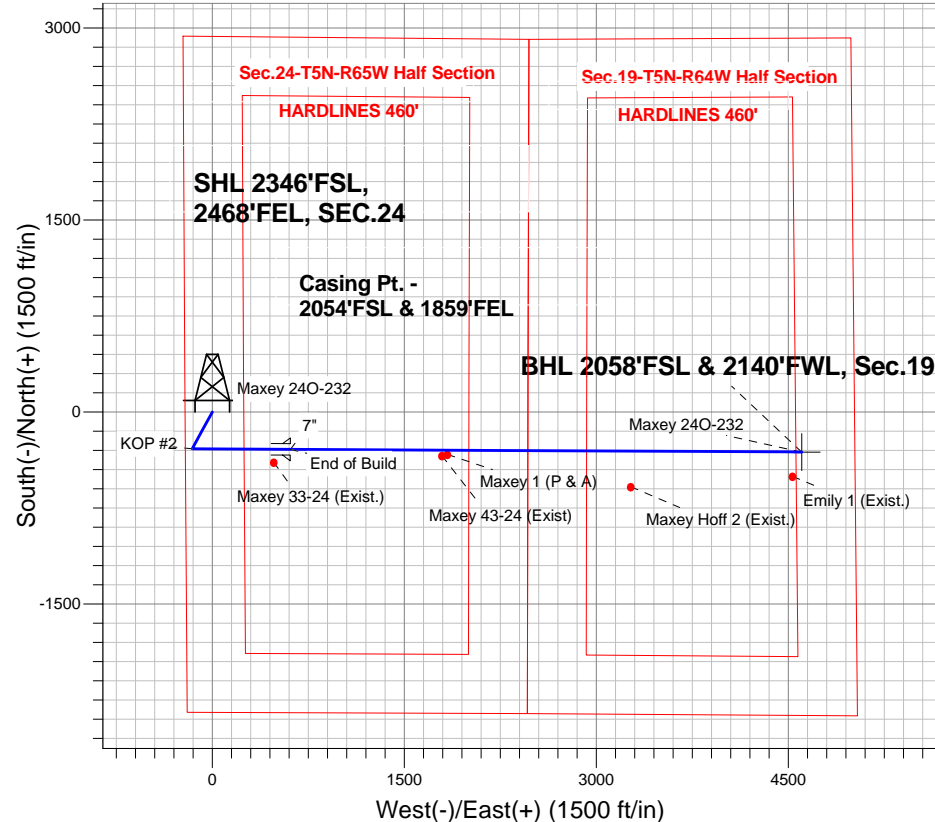
Azimuths to True North  
Magnetic North: 8.55°

Magnetic Field  
Strength: 52958.8nT  
Dip Angle: 67.00°  
Date: 3/7/2013  
Model: IGRF2010

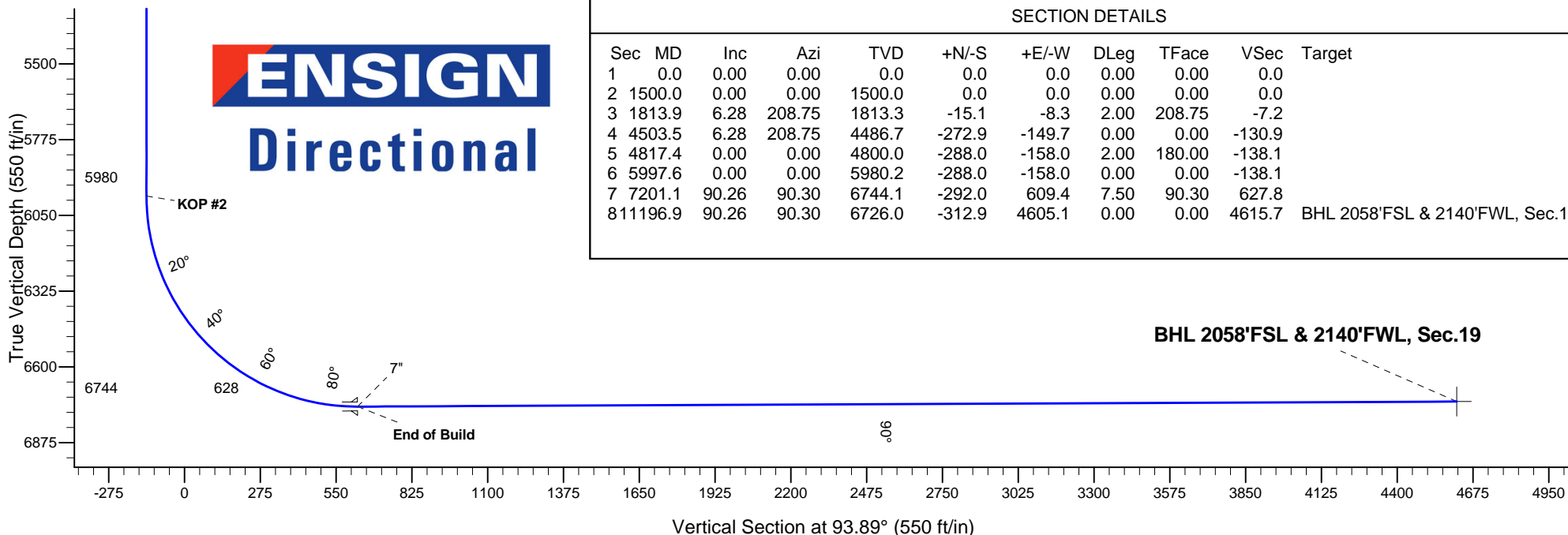
## ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP #1
5980.2	5997.6	KOP #2
6744.1	7201.1	End of Build

Maxey 240-HZ Pad Sec.24-T5N-R65W  
Maxey 240-232  
Plan #1 (3-7-13)



**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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1813.9	6.28	208.75	1813.3	-15.1	-8.3	2.00	208.75	-7.2	
4	4503.5	6.28	208.75	4486.7	-272.9	-149.7	0.00	0.00	-130.9	
5	4817.4	0.00	0.00	4800.0	-288.0	-158.0	2.00	180.00	-138.1	
6	5997.6	0.00	0.00	5980.2	-288.0	-158.0	0.00	0.00	-138.1	
7	7201.1	90.26	90.30	6744.1	-292.0	609.4	7.50	90.30	627.8	
8	11196.9	90.26	90.30	6726.0	-312.9	4605.1	0.00	0.00	4615.7	BHL 2058'FSL & 2140'FWL, Sec.19



## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24O-232**

**Wellbore #1**

**Plan: Plan #1 (3-7-13)**

## **Standard Planning Report**

**11 March, 2013**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

<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

<b>Site</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W		
<b>Site Position:</b>		<b>Northing:</b>	1,383,922.11 ft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,247,656.08 ft
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"
		<b>Latitude:</b>	40.383860
		<b>Longitude:</b>	-104.610980
		<b>Grid Convergence:</b>	0.57 °

<b>Well</b>	Maxey 24O-232		
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>
	<b>+E/-W</b>	61.3 ft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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	3/7/2013	8.55	67.00	52,959

<b>Design</b>	Plan #1 (3-7-13)			
<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	93.89

<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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,813.9	6.28	208.75	1,813.3	-15.1	-8.3	2.00	2.00	0.00	208.75	
4,503.5	6.28	208.75	4,486.7	-272.9	-149.7	0.00	0.00	0.00	0.00	
4,817.4	0.00	0.00	4,800.0	-288.0	-158.0	2.00	-2.00	0.00	180.00	
5,997.6	0.00	0.00	5,980.2	-288.0	-158.0	0.00	0.00	0.00	0.00	
7,201.1	90.26	90.30	6,744.1	-292.0	609.4	7.50	7.50	0.00	90.30	
11,196.9	90.26	90.30	6,726.0	-312.9	4,605.1	0.00	0.00	0.00	0.00	BHL 2058'FSL & 21

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	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
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.00	0.00	1,040.0	0.0	0.0	0.0	0.00	0.00	0.00
1,080.0	0.00	0.00	1,080.0	0.0	0.0	0.0	0.00	0.00	0.00
1,120.0	0.00	0.00	1,120.0	0.0	0.0	0.0	0.00	0.00	0.00
1,160.0	0.00	0.00	1,160.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,240.0	0.00	0.00	1,240.0	0.0	0.0	0.0	0.00	0.00	0.00
1,280.0	0.00	0.00	1,280.0	0.0	0.0	0.0	0.00	0.00	0.00
1,320.0	0.00	0.00	1,320.0	0.0	0.0	0.0	0.00	0.00	0.00
1,360.0	0.00	0.00	1,360.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,440.0	0.00	0.00	1,440.0	0.0	0.0	0.0	0.00	0.00	0.00
1,480.0	0.00	0.00	1,480.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP #1</b>									
1,520.0	0.40	208.75	1,520.0	-0.1	0.0	0.0	2.00	2.00	0.00
1,560.0	1.20	208.75	1,560.0	-0.6	-0.3	-0.3	2.00	2.00	0.00
1,600.0	2.00	208.75	1,600.0	-1.5	-0.8	-0.7	2.00	2.00	0.00
1,640.0	2.80	208.75	1,639.9	-3.0	-1.6	-1.4	2.00	2.00	0.00
1,680.0	3.60	208.75	1,679.9	-5.0	-2.7	-2.4	2.00	2.00	0.00
1,720.0	4.40	208.75	1,719.8	-7.4	-4.1	-3.5	2.00	2.00	0.00
1,760.0	5.20	208.75	1,759.6	-10.3	-5.7	-5.0	2.00	2.00	0.00
1,800.0	6.00	208.75	1,799.5	-13.8	-7.5	-6.6	2.00	2.00	0.00
1,813.9	6.28	208.75	1,813.3	-15.1	-8.3	-7.2	2.00	2.00	0.00
1,840.0	6.28	208.75	1,839.2	-17.6	-9.6	-8.4	0.00	0.00	0.00
1,880.0	6.28	208.75	1,879.0	-21.4	-11.7	-10.3	0.00	0.00	0.00
1,920.0	6.28	208.75	1,918.7	-25.2	-13.8	-12.1	0.00	0.00	0.00
1,960.0	6.28	208.75	1,958.5	-29.1	-15.9	-13.9	0.00	0.00	0.00

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<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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	6.28	208.75	1,998.3	-32.9	-18.1	-15.8	0.00	0.00	0.00
2,040.0	6.28	208.75	2,038.0	-36.7	-20.2	-17.6	0.00	0.00	0.00
2,080.0	6.28	208.75	2,077.8	-40.6	-22.3	-19.5	0.00	0.00	0.00
2,120.0	6.28	208.75	2,117.5	-44.4	-24.4	-21.3	0.00	0.00	0.00
2,160.0	6.28	208.75	2,157.3	-48.2	-26.5	-23.1	0.00	0.00	0.00
2,200.0	6.28	208.75	2,197.1	-52.1	-28.6	-25.0	0.00	0.00	0.00
2,240.0	6.28	208.75	2,236.8	-55.9	-30.7	-26.8	0.00	0.00	0.00
2,280.0	6.28	208.75	2,276.6	-59.8	-32.8	-28.7	0.00	0.00	0.00
2,320.0	6.28	208.75	2,316.3	-63.6	-34.9	-30.5	0.00	0.00	0.00
2,360.0	6.28	208.75	2,356.1	-67.4	-37.0	-32.3	0.00	0.00	0.00
2,400.0	6.28	208.75	2,395.9	-71.3	-39.1	-34.2	0.00	0.00	0.00
2,440.0	6.28	208.75	2,435.6	-75.1	-41.2	-36.0	0.00	0.00	0.00
2,480.0	6.28	208.75	2,475.4	-78.9	-43.3	-37.9	0.00	0.00	0.00
2,520.0	6.28	208.75	2,515.1	-82.8	-45.4	-39.7	0.00	0.00	0.00
2,560.0	6.28	208.75	2,554.9	-86.6	-47.5	-41.5	0.00	0.00	0.00
2,600.0	6.28	208.75	2,594.7	-90.4	-49.6	-43.4	0.00	0.00	0.00
2,640.0	6.28	208.75	2,634.4	-94.3	-51.7	-45.2	0.00	0.00	0.00
2,680.0	6.28	208.75	2,674.2	-98.1	-53.8	-47.0	0.00	0.00	0.00
2,720.0	6.28	208.75	2,713.9	-101.9	-55.9	-48.9	0.00	0.00	0.00
2,760.0	6.28	208.75	2,753.7	-105.8	-58.0	-50.7	0.00	0.00	0.00
2,800.0	6.28	208.75	2,793.5	-109.6	-60.1	-52.6	0.00	0.00	0.00
2,840.0	6.28	208.75	2,833.2	-113.4	-62.2	-54.4	0.00	0.00	0.00
2,880.0	6.28	208.75	2,873.0	-117.3	-64.3	-56.2	0.00	0.00	0.00
2,920.0	6.28	208.75	2,912.7	-121.1	-66.4	-58.1	0.00	0.00	0.00
2,960.0	6.28	208.75	2,952.5	-124.9	-68.5	-59.9	0.00	0.00	0.00
3,000.0	6.28	208.75	2,992.3	-128.8	-70.7	-61.8	0.00	0.00	0.00
3,040.0	6.28	208.75	3,032.0	-132.6	-72.8	-63.6	0.00	0.00	0.00
3,080.0	6.28	208.75	3,071.8	-136.5	-74.9	-65.4	0.00	0.00	0.00
3,120.0	6.28	208.75	3,111.5	-140.3	-77.0	-67.3	0.00	0.00	0.00
3,160.0	6.28	208.75	3,151.3	-144.1	-79.1	-69.1	0.00	0.00	0.00
3,200.0	6.28	208.75	3,191.1	-148.0	-81.2	-71.0	0.00	0.00	0.00
3,240.0	6.28	208.75	3,230.8	-151.8	-83.3	-72.8	0.00	0.00	0.00
3,280.0	6.28	208.75	3,270.6	-155.6	-85.4	-74.6	0.00	0.00	0.00
3,320.0	6.28	208.75	3,310.3	-159.5	-87.5	-76.5	0.00	0.00	0.00
3,360.0	6.28	208.75	3,350.1	-163.3	-89.6	-78.3	0.00	0.00	0.00
3,400.0	6.28	208.75	3,389.9	-167.1	-91.7	-80.2	0.00	0.00	0.00
3,440.0	6.28	208.75	3,429.6	-171.0	-93.8	-82.0	0.00	0.00	0.00
3,480.0	6.28	208.75	3,469.4	-174.8	-95.9	-83.8	0.00	0.00	0.00
3,520.0	6.28	208.75	3,509.1	-178.6	-98.0	-85.7	0.00	0.00	0.00
3,560.0	6.28	208.75	3,548.9	-182.5	-100.1	-87.5	0.00	0.00	0.00
3,600.0	6.28	208.75	3,588.7	-186.3	-102.2	-89.3	0.00	0.00	0.00
3,640.0	6.28	208.75	3,628.4	-190.1	-104.3	-91.2	0.00	0.00	0.00
3,680.0	6.28	208.75	3,668.2	-194.0	-106.4	-93.0	0.00	0.00	0.00
3,720.0	6.28	208.75	3,707.9	-197.8	-108.5	-94.9	0.00	0.00	0.00
3,760.0	6.28	208.75	3,747.7	-201.7	-110.6	-96.7	0.00	0.00	0.00
3,800.0	6.28	208.75	3,787.5	-205.5	-112.7	-98.5	0.00	0.00	0.00
3,840.0	6.28	208.75	3,827.2	-209.3	-114.8	-100.4	0.00	0.00	0.00
3,880.0	6.28	208.75	3,867.0	-213.2	-116.9	-102.2	0.00	0.00	0.00
3,920.0	6.28	208.75	3,906.7	-217.0	-119.0	-104.1	0.00	0.00	0.00
3,960.0	6.28	208.75	3,946.5	-220.8	-121.1	-105.9	0.00	0.00	0.00
4,000.0	6.28	208.75	3,986.3	-224.7	-123.3	-107.7	0.00	0.00	0.00
4,040.0	6.28	208.75	4,026.0	-228.5	-125.4	-109.6	0.00	0.00	0.00
4,080.0	6.28	208.75	4,065.8	-232.3	-127.5	-111.4	0.00	0.00	0.00

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<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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)
4,120.0	6.28	208.75	4,105.5	-236.2	-129.6	-113.3	0.00	0.00	0.00
4,160.0	6.28	208.75	4,145.3	-240.0	-131.7	-115.1	0.00	0.00	0.00
4,200.0	6.28	208.75	4,185.1	-243.8	-133.8	-116.9	0.00	0.00	0.00
4,240.0	6.28	208.75	4,224.8	-247.7	-135.9	-118.8	0.00	0.00	0.00
4,280.0	6.28	208.75	4,264.6	-251.5	-138.0	-120.6	0.00	0.00	0.00
4,320.0	6.28	208.75	4,304.3	-255.3	-140.1	-122.5	0.00	0.00	0.00
4,360.0	6.28	208.75	4,344.1	-259.2	-142.2	-124.3	0.00	0.00	0.00
4,400.0	6.28	208.75	4,383.9	-263.0	-144.3	-126.1	0.00	0.00	0.00
4,440.0	6.28	208.75	4,423.6	-266.9	-146.4	-128.0	0.00	0.00	0.00
4,480.0	6.28	208.75	4,463.4	-270.7	-148.5	-129.8	0.00	0.00	0.00
4,503.5	6.28	208.75	4,486.7	-272.9	-149.7	-130.9	0.00	0.00	0.00
4,520.0	5.95	208.75	4,503.1	-274.5	-150.6	-131.6	2.00	-2.00	0.00
4,560.0	5.15	208.75	4,543.0	-277.9	-152.4	-133.3	2.00	-2.00	0.00
4,600.0	4.35	208.75	4,582.8	-280.8	-154.0	-134.6	2.00	-2.00	0.00
4,640.0	3.55	208.75	4,622.7	-283.2	-155.4	-135.8	2.00	-2.00	0.00
4,680.0	2.75	208.75	4,662.7	-285.1	-156.4	-136.7	2.00	-2.00	0.00
4,720.0	1.95	208.75	4,702.6	-286.5	-157.2	-137.4	2.00	-2.00	0.00
4,760.0	1.15	208.75	4,742.6	-287.5	-157.7	-137.9	2.00	-2.00	0.00
4,800.0	0.35	208.75	4,782.6	-288.0	-158.0	-138.1	2.00	-2.00	0.00
4,817.4	0.00	0.00	4,800.0	-288.0	-158.0	-138.1	2.00	-2.00	0.00
4,840.0	0.00	0.00	4,822.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
4,880.0	0.00	0.00	4,862.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
4,920.0	0.00	0.00	4,902.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
4,960.0	0.00	0.00	4,942.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,000.0	0.00	0.00	4,982.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,040.0	0.00	0.00	5,022.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,080.0	0.00	0.00	5,062.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,120.0	0.00	0.00	5,102.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,160.0	0.00	0.00	5,142.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,200.0	0.00	0.00	5,182.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,240.0	0.00	0.00	5,222.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,280.0	0.00	0.00	5,262.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,320.0	0.00	0.00	5,302.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,360.0	0.00	0.00	5,342.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,400.0	0.00	0.00	5,382.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,440.0	0.00	0.00	5,422.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,480.0	0.00	0.00	5,462.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,520.0	0.00	0.00	5,502.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,560.0	0.00	0.00	5,542.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,582.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,640.0	0.00	0.00	5,622.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,680.0	0.00	0.00	5,662.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,720.0	0.00	0.00	5,702.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,760.0	0.00	0.00	5,742.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,782.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,840.0	0.00	0.00	5,822.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,880.0	0.00	0.00	5,862.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,920.0	0.00	0.00	5,902.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,960.0	0.00	0.00	5,942.6	-288.0	-158.0	-138.1	0.00	0.00	0.00
5,997.6	0.00	0.00	5,980.2	-288.0	-158.0	-138.1	0.00	0.00	0.00
<b>KOP #2</b>									
6,000.0	0.18	90.30	5,982.6	-288.0	-158.0	-138.1	7.56	7.56	0.00
6,040.0	3.18	90.30	6,022.6	-288.0	-156.8	-136.9	7.50	7.50	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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	6.18	90.30	6,062.5	-288.0	-153.6	-133.7	7.50	7.50	0.00
6,120.0	9.18	90.30	6,102.1	-288.1	-148.2	-128.3	7.50	7.50	0.00
6,160.0	12.18	90.30	6,141.4	-288.1	-140.8	-120.9	7.50	7.50	0.00
6,200.0	15.18	90.30	6,180.3	-288.1	-131.3	-111.5	7.50	7.50	0.00
6,240.0	18.18	90.30	6,218.6	-288.2	-119.9	-100.0	7.50	7.50	0.00
6,280.0	21.18	90.30	6,256.2	-288.3	-106.4	-86.6	7.50	7.50	0.00
6,320.0	24.18	90.30	6,293.1	-288.4	-91.0	-71.2	7.50	7.50	0.00
6,360.0	27.18	90.30	6,329.2	-288.4	-73.6	-53.9	7.50	7.50	0.00
6,400.0	30.18	90.30	6,364.3	-288.5	-54.4	-34.8	7.50	7.50	0.00
6,440.0	33.18	90.30	6,398.3	-288.7	-33.4	-13.8	7.50	7.50	0.00
6,480.0	36.18	90.30	6,431.2	-288.8	-10.7	8.9	7.50	7.50	0.00
6,520.0	39.18	90.30	6,462.8	-288.9	13.8	33.3	7.50	7.50	0.00
6,560.0	42.18	90.30	6,493.2	-289.0	39.8	59.3	7.50	7.50	0.00
6,600.0	45.18	90.30	6,522.1	-289.2	67.5	86.9	7.50	7.50	0.00
6,640.0	48.18	90.30	6,549.5	-289.3	96.6	116.0	7.50	7.50	0.00
6,680.0	51.18	90.30	6,575.4	-289.5	127.1	146.4	7.50	7.50	0.00
6,720.0	54.18	90.30	6,599.7	-289.7	158.9	178.1	7.50	7.50	0.00
6,760.0	57.18	90.30	6,622.2	-289.8	191.9	211.1	7.50	7.50	0.00
6,800.0	60.18	90.30	6,643.0	-290.0	226.1	245.2	7.50	7.50	0.00
6,840.0	63.18	90.30	6,662.0	-290.2	261.3	280.3	7.50	7.50	0.00
6,880.0	66.18	90.30	6,679.1	-290.4	297.4	316.4	7.50	7.50	0.00
6,920.0	69.18	90.30	6,694.3	-290.6	334.4	353.3	7.50	7.50	0.00
6,960.0	72.18	90.30	6,707.5	-290.8	372.2	391.0	7.50	7.50	0.00
7,000.0	75.18	90.30	6,718.7	-291.0	410.5	429.3	7.50	7.50	0.00
7,040.0	78.18	90.30	6,727.9	-291.2	449.5	468.2	7.50	7.50	0.00
7,080.0	81.18	90.30	6,735.1	-291.4	488.8	507.4	7.50	7.50	0.00
7,120.0	84.18	90.30	6,740.2	-291.6	528.5	547.0	7.50	7.50	0.00
7,160.0	87.18	90.30	6,743.2	-291.8	568.4	586.8	7.50	7.50	0.00
7,200.0	90.18	90.30	6,744.1	-292.0	608.4	626.7	7.50	7.50	0.00
7,201.1	90.26	90.30	6,744.1	-292.0	609.5	627.8	7.17	7.17	0.00
End of Build - 7"									
7,240.0	90.26	90.30	6,744.0	-292.2	648.3	666.7	0.00	0.00	0.00
7,280.0	90.26	90.30	6,743.8	-292.4	688.3	706.6	0.00	0.00	0.00
7,320.0	90.26	90.30	6,743.6	-292.6	728.3	746.5	0.00	0.00	0.00
7,360.0	90.26	90.30	6,743.4	-292.8	768.3	786.4	0.00	0.00	0.00
7,400.0	90.26	90.30	6,743.2	-293.0	808.3	826.3	0.00	0.00	0.00
7,440.0	90.26	90.30	6,743.0	-293.3	848.3	866.3	0.00	0.00	0.00
7,480.0	90.26	90.30	6,742.9	-293.5	888.3	906.2	0.00	0.00	0.00
7,520.0	90.26	90.30	6,742.7	-293.7	928.3	946.1	0.00	0.00	0.00
7,560.0	90.26	90.30	6,742.5	-293.9	968.3	986.0	0.00	0.00	0.00
7,600.0	90.26	90.30	6,742.3	-294.1	1,008.3	1,026.0	0.00	0.00	0.00
7,640.0	90.26	90.30	6,742.1	-294.3	1,048.3	1,065.9	0.00	0.00	0.00
7,680.0	90.26	90.30	6,742.0	-294.5	1,088.3	1,105.8	0.00	0.00	0.00
7,720.0	90.26	90.30	6,741.8	-294.7	1,128.3	1,145.7	0.00	0.00	0.00
7,760.0	90.26	90.30	6,741.6	-294.9	1,168.3	1,185.6	0.00	0.00	0.00
7,800.0	90.26	90.30	6,741.4	-295.1	1,208.3	1,225.6	0.00	0.00	0.00
7,840.0	90.26	90.30	6,741.2	-295.3	1,248.3	1,265.5	0.00	0.00	0.00
7,880.0	90.26	90.30	6,741.1	-295.6	1,288.3	1,305.4	0.00	0.00	0.00
7,920.0	90.26	90.30	6,740.9	-295.8	1,328.3	1,345.3	0.00	0.00	0.00
7,960.0	90.26	90.30	6,740.7	-296.0	1,368.3	1,385.2	0.00	0.00	0.00
8,000.0	90.26	90.30	6,740.5	-296.2	1,408.3	1,425.2	0.00	0.00	0.00
8,040.0	90.26	90.30	6,740.3	-296.4	1,448.3	1,465.1	0.00	0.00	0.00
8,080.0	90.26	90.30	6,740.1	-296.6	1,488.3	1,505.0	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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)
8,120.0	90.26	90.30	6,740.0	-296.8	1,528.3	1,544.9	0.00	0.00	0.00
8,160.0	90.26	90.30	6,739.8	-297.0	1,568.3	1,584.9	0.00	0.00	0.00
8,200.0	90.26	90.30	6,739.6	-297.2	1,608.3	1,624.8	0.00	0.00	0.00
8,240.0	90.26	90.30	6,739.4	-297.4	1,648.3	1,664.7	0.00	0.00	0.00
8,280.0	90.26	90.30	6,739.2	-297.6	1,688.3	1,704.6	0.00	0.00	0.00
8,320.0	90.26	90.30	6,739.1	-297.8	1,728.3	1,744.5	0.00	0.00	0.00
8,360.0	90.26	90.30	6,738.9	-298.1	1,768.3	1,784.5	0.00	0.00	0.00
8,400.0	90.26	90.30	6,738.7	-298.3	1,808.3	1,824.4	0.00	0.00	0.00
8,440.0	90.26	90.30	6,738.5	-298.5	1,848.3	1,864.3	0.00	0.00	0.00
8,480.0	90.26	90.30	6,738.3	-298.7	1,888.3	1,904.2	0.00	0.00	0.00
8,520.0	90.26	90.30	6,738.1	-298.9	1,928.3	1,944.1	0.00	0.00	0.00
8,560.0	90.26	90.30	6,738.0	-299.1	1,968.3	1,984.1	0.00	0.00	0.00
8,600.0	90.26	90.30	6,737.8	-299.3	2,008.3	2,024.0	0.00	0.00	0.00
8,640.0	90.26	90.30	6,737.6	-299.5	2,048.3	2,063.9	0.00	0.00	0.00
8,680.0	90.26	90.30	6,737.4	-299.7	2,088.3	2,103.8	0.00	0.00	0.00
8,720.0	90.26	90.30	6,737.2	-299.9	2,128.3	2,143.7	0.00	0.00	0.00
8,760.0	90.26	90.30	6,737.1	-300.1	2,168.3	2,183.7	0.00	0.00	0.00
8,800.0	90.26	90.30	6,736.9	-300.4	2,208.3	2,223.6	0.00	0.00	0.00
8,840.0	90.26	90.30	6,736.7	-300.6	2,248.3	2,263.5	0.00	0.00	0.00
8,880.0	90.26	90.30	6,736.5	-300.8	2,288.3	2,303.4	0.00	0.00	0.00
8,920.0	90.26	90.30	6,736.3	-301.0	2,328.3	2,343.4	0.00	0.00	0.00
8,960.0	90.26	90.30	6,736.2	-301.2	2,368.3	2,383.3	0.00	0.00	0.00
9,000.0	90.26	90.30	6,736.0	-301.4	2,408.3	2,423.2	0.00	0.00	0.00
9,040.0	90.26	90.30	6,735.8	-301.6	2,448.3	2,463.1	0.00	0.00	0.00
9,080.0	90.26	90.30	6,735.6	-301.8	2,488.3	2,503.0	0.00	0.00	0.00
9,120.0	90.26	90.30	6,735.4	-302.0	2,528.3	2,543.0	0.00	0.00	0.00
9,160.0	90.26	90.30	6,735.2	-302.2	2,568.3	2,582.9	0.00	0.00	0.00
9,200.0	90.26	90.30	6,735.1	-302.4	2,608.3	2,622.8	0.00	0.00	0.00
9,240.0	90.26	90.30	6,734.9	-302.7	2,648.3	2,662.7	0.00	0.00	0.00
9,280.0	90.26	90.30	6,734.7	-302.9	2,688.3	2,702.6	0.00	0.00	0.00
9,320.0	90.26	90.30	6,734.5	-303.1	2,728.3	2,742.6	0.00	0.00	0.00
9,360.0	90.26	90.30	6,734.3	-303.3	2,768.3	2,782.5	0.00	0.00	0.00
9,400.0	90.26	90.30	6,734.2	-303.5	2,808.3	2,822.4	0.00	0.00	0.00
9,440.0	90.26	90.30	6,734.0	-303.7	2,848.3	2,862.3	0.00	0.00	0.00
9,480.0	90.26	90.30	6,733.8	-303.9	2,888.3	2,902.3	0.00	0.00	0.00
9,520.0	90.26	90.30	6,733.6	-304.1	2,928.3	2,942.2	0.00	0.00	0.00
9,560.0	90.26	90.30	6,733.4	-304.3	2,968.3	2,982.1	0.00	0.00	0.00
9,600.0	90.26	90.30	6,733.2	-304.5	3,008.3	3,022.0	0.00	0.00	0.00
9,640.0	90.26	90.30	6,733.1	-304.7	3,048.3	3,061.9	0.00	0.00	0.00
9,680.0	90.26	90.30	6,732.9	-305.0	3,088.3	3,101.9	0.00	0.00	0.00
9,720.0	90.26	90.30	6,732.7	-305.2	3,128.3	3,141.8	0.00	0.00	0.00
9,760.0	90.26	90.30	6,732.5	-305.4	3,168.3	3,181.7	0.00	0.00	0.00
9,800.0	90.26	90.30	6,732.3	-305.6	3,208.3	3,221.6	0.00	0.00	0.00
9,840.0	90.26	90.30	6,732.2	-305.8	3,248.3	3,261.5	0.00	0.00	0.00
9,880.0	90.26	90.30	6,732.0	-306.0	3,288.3	3,301.5	0.00	0.00	0.00
9,920.0	90.26	90.30	6,731.8	-306.2	3,328.3	3,341.4	0.00	0.00	0.00
9,960.0	90.26	90.30	6,731.6	-306.4	3,368.3	3,381.3	0.00	0.00	0.00
10,000.0	90.26	90.30	6,731.4	-306.6	3,408.3	3,421.2	0.00	0.00	0.00
10,040.0	90.26	90.30	6,731.2	-306.8	3,448.3	3,461.1	0.00	0.00	0.00
10,080.0	90.26	90.30	6,731.1	-307.0	3,488.3	3,501.1	0.00	0.00	0.00
10,120.0	90.26	90.30	6,730.9	-307.2	3,528.3	3,541.0	0.00	0.00	0.00
10,160.0	90.26	90.30	6,730.7	-307.5	3,568.3	3,580.9	0.00	0.00	0.00
10,200.0	90.26	90.30	6,730.5	-307.7	3,608.3	3,620.8	0.00	0.00	0.00



<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24O-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-7-13)		

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)
10,240.0	90.26	90.30	6,730.3	-307.9	3,648.3	3,660.8	0.00	0.00	0.00
10,280.0	90.26	90.30	6,730.2	-308.1	3,688.3	3,700.7	0.00	0.00	0.00
10,320.0	90.26	90.30	6,730.0	-308.3	3,728.3	3,740.6	0.00	0.00	0.00
10,360.0	90.26	90.30	6,729.8	-308.5	3,768.3	3,780.5	0.00	0.00	0.00
10,400.0	90.26	90.30	6,729.6	-308.7	3,808.3	3,820.4	0.00	0.00	0.00
10,440.0	90.26	90.30	6,729.4	-308.9	3,848.3	3,860.4	0.00	0.00	0.00
10,480.0	90.26	90.30	6,729.3	-309.1	3,888.3	3,900.3	0.00	0.00	0.00
10,520.0	90.26	90.30	6,729.1	-309.3	3,928.3	3,940.2	0.00	0.00	0.00
10,560.0	90.26	90.30	6,728.9	-309.5	3,968.3	3,980.1	0.00	0.00	0.00
10,600.0	90.26	90.30	6,728.7	-309.8	4,008.3	4,020.0	0.00	0.00	0.00
10,640.0	90.26	90.30	6,728.5	-310.0	4,048.3	4,060.0	0.00	0.00	0.00
10,680.0	90.26	90.30	6,728.3	-310.2	4,088.3	4,099.9	0.00	0.00	0.00
10,720.0	90.26	90.30	6,728.2	-310.4	4,128.3	4,139.8	0.00	0.00	0.00
10,760.0	90.26	90.30	6,728.0	-310.6	4,168.3	4,179.7	0.00	0.00	0.00
10,800.0	90.26	90.30	6,727.8	-310.8	4,208.3	4,219.7	0.00	0.00	0.00
10,840.0	90.26	90.30	6,727.6	-311.0	4,248.3	4,259.6	0.00	0.00	0.00
10,880.0	90.26	90.30	6,727.4	-311.2	4,288.3	4,299.5	0.00	0.00	0.00
10,920.0	90.26	90.30	6,727.3	-311.4	4,328.3	4,339.4	0.00	0.00	0.00
10,960.0	90.26	90.30	6,727.1	-311.6	4,368.3	4,379.3	0.00	0.00	0.00
11,000.0	90.26	90.30	6,726.9	-311.8	4,408.3	4,419.3	0.00	0.00	0.00
11,040.0	90.26	90.30	6,726.7	-312.1	4,448.3	4,459.2	0.00	0.00	0.00
11,080.0	90.26	90.30	6,726.5	-312.3	4,488.3	4,499.1	0.00	0.00	0.00
11,120.0	90.26	90.30	6,726.3	-312.5	4,528.3	4,539.0	0.00	0.00	0.00
11,160.0	90.26	90.30	6,726.2	-312.7	4,568.3	4,578.9	0.00	0.00	0.00
11,196.9	90.26	90.30	6,726.0	-312.9	4,605.1	4,615.7	0.00	0.00	0.00

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,201.1	6,744.1	7"	7	7-1/2

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,500.0	1,500.0	0.0	0.0	KOP #1
5,997.6	5,980.2	-288.0	-158.0	KOP #2
7,201.1	6,744.1	-292.0	609.5	End of Build



## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24O-232**

**Wellbore #1**

**Plan #1 (3-7-13)**

## **Anticollision Report**

**11 March, 2013**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (3-7-13)
<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	3/11/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,196.9	Plan #1 (3-7-13) (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						
Maxey 24O-HZ Pad Sec.24-T5N-R65W						
Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)	1,500.0	1,500.0	28.1	21.6	4.310	CC, ES
Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)	11,196.9	11,354.5	392.9	161.0	1.694	SF
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	966.3	967.3	30.6	26.5	7.435	CC
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	1,000.0	1,001.0	30.6	26.4	7.173	ES
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	11,196.9	11,303.1	339.2	84.1	1.330	Level 3, SF
Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)	166.3	167.3	61.3	60.8	116.700	CC
Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)	300.0	300.7	61.5	60.4	55.783	ES
Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)	11,196.9	11,407.4	656.8	406.1	2.619	SF
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Emily 1 (Exist.) - Wellbore #1 - Wellbore #1	11,125.5	6,703.3	189.8	54.0	1.398	Level 3, CC, ES, SF
Maxey 1 (P & A) - Wellbore #1 - Wellbore #1	8,427.8	6,720.6	33.0	-28.2	0.539	Level 1, CC, ES, SF
Maxey 33-24 (Exist.) - Wellbore #1 - Wellbore #1	7,070.8	6,718.6	102.1	74.5	3.700	CC, ES, SF
Maxey 43-24 (Exist.) - Wellbore #1 - Wellbore #1	8,386.0	6,722.8	44.2	-16.0	0.735	Level 1, CC, ES, SF
Maxey Hoff 2 (Exist.) - Wellbore #1 - Wellbore #1	9,861.1	6,712.1	276.8	176.2	2.750	CC, ES
Maxey Hoff 2 (Exist.) - Wellbore #1 - Wellbore #1	9,900.0	6,711.9	279.5	177.8	2.748	SF

<b>Offset Design</b>												
Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)												
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
0.0	0.0	0.0	0.0	0.0	0.0	97.45	-3.6	27.9	28.1			
100.0	100.0	100.0	100.0	0.1	0.1	97.45	-3.6	27.9	28.1	27.9	0.22	125.001
200.0	200.0	200.0	200.0	0.3	0.3	97.45	-3.6	27.9	28.1	27.4	0.67	41.667
300.0	300.0	300.0	300.0	0.6	0.6	97.45	-3.6	27.9	28.1	27.0	1.12	25.000
400.0	400.0	400.0	400.0	0.8	0.8	97.45	-3.6	27.9	28.1	26.5	1.57	17.857
500.0	500.0	500.0	500.0	1.0	1.0	97.45	-3.6	27.9	28.1	26.1	2.02	13.889
600.0	600.0	600.0	600.0	1.2	1.2	97.45	-3.6	27.9	28.1	25.6	2.47	11.364
700.0	700.0	700.0	700.0	1.5	1.5	97.45	-3.6	27.9	28.1	25.2	2.92	9.615
800.0	800.0	800.0	800.0	1.7	1.7	97.45	-3.6	27.9	28.1	24.7	3.37	8.333
900.0	900.0	900.0	900.0	1.9	1.9	97.45	-3.6	27.9	28.1	24.3	3.82	7.353
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	97.45	-3.6	27.9	28.1	23.8	4.27	6.579

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)													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
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	97.45	97.45	-3.6	27.9	28.1	23.4	4.72	5.952	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	97.45	97.45	-3.6	27.9	28.1	22.9	5.17	5.435	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	97.45	97.45	-3.6	27.9	28.1	22.5	5.62	5.000	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	97.45	97.45	-3.6	27.9	28.1	22.0	6.07	4.630	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	97.45	97.45	-3.6	27.9	28.1	21.6	6.52	4.310 CC, ES	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-114.53	-114.53	-3.6	27.9	28.8	21.8	6.94	4.147	
1,700.0	1,699.8	1,699.8	1,699.8	3.6	3.7	-123.22	-123.22	-3.6	27.9	31.3	24.0	7.34	4.269	
1,800.0	1,799.5	1,799.5	1,799.5	3.8	3.9	-134.54	-134.54	-3.6	27.9	36.8	29.1	7.73	4.763	
1,900.0	1,898.9	1,898.9	1,898.9	4.0	4.2	-144.41	-144.41	-3.6	27.9	45.2	37.0	8.14	5.551	
2,000.0	1,998.3	1,998.3	1,998.3	4.2	4.4	-151.12	-151.12	-3.6	27.9	54.4	45.9	8.55	6.368	
2,100.0	2,097.7	2,098.9	2,098.9	4.5	4.6	-157.14	-157.14	-3.1	26.2	63.3	54.3	8.96	7.064	
2,200.0	2,197.1	2,199.5	2,199.3	4.7	4.8	-164.11	-164.11	-1.6	21.2	71.0	61.6	9.36	7.580	
2,300.0	2,296.5	2,299.7	2,299.2	4.9	5.0	-172.02	-172.02	1.0	12.9	78.2	68.5	9.78	8.002	
2,400.0	2,395.9	2,398.8	2,397.7	5.2	5.3	-179.65	-179.65	4.1	2.9	86.3	76.1	10.21	8.455	
2,500.0	2,495.3	2,497.9	2,496.3	5.5	5.5	174.11	174.11	7.2	-7.2	95.6	85.0	10.65	8.975	
2,600.0	2,594.7	2,597.0	2,594.8	5.7	5.7	169.02	169.02	10.4	-17.2	105.9	94.8	11.12	9.525	
2,700.0	2,694.1	2,696.1	2,693.3	6.0	6.0	164.84	164.84	13.5	-27.2	116.8	105.2	11.59	10.080	
2,800.0	2,793.5	2,795.1	2,791.8	6.3	6.2	161.39	161.39	16.6	-37.3	128.3	116.2	12.07	10.625	
2,900.0	2,892.9	2,894.2	2,890.3	6.5	6.5	158.52	158.52	19.7	-47.3	140.1	127.5	12.56	11.152	
3,000.0	2,992.3	2,993.3	2,988.8	6.8	6.7	156.09	156.09	22.8	-57.3	152.2	139.2	13.06	11.656	
3,100.0	3,091.7	3,092.3	3,087.3	7.1	7.0	154.03	154.03	26.0	-67.4	164.6	151.0	13.56	12.136	
3,200.0	3,191.1	3,191.4	3,185.8	7.4	7.3	152.25	152.25	29.1	-77.4	177.2	163.1	14.07	12.589	
3,300.0	3,290.5	3,290.5	3,284.4	7.7	7.5	150.71	150.71	32.2	-87.4	189.8	175.3	14.58	13.018	
3,400.0	3,389.9	3,389.6	3,382.9	7.9	7.8	149.36	149.36	35.3	-97.4	202.6	187.6	15.10	13.422	
3,500.0	3,489.3	3,488.6	3,481.4	8.2	8.1	148.18	148.18	38.4	-107.5	215.6	199.9	15.62	13.803	
3,600.0	3,588.7	3,587.7	3,579.9	8.5	8.3	147.12	147.12	41.5	-117.5	228.5	212.4	16.14	14.162	
3,700.0	3,688.1	3,686.8	3,678.4	8.8	8.6	146.18	146.18	44.7	-127.5	241.6	224.9	16.66	14.501	
3,800.0	3,787.5	3,785.8	3,776.9	9.1	8.9	145.34	145.34	47.8	-137.6	254.7	237.5	17.19	14.820	
3,900.0	3,886.9	3,884.9	3,875.4	9.4	9.2	144.58	144.58	50.9	-147.6	267.9	250.2	17.71	15.121	
4,000.0	3,986.3	3,987.3	3,977.3	9.7	9.4	144.09	144.09	53.8	-156.9	280.6	262.4	18.22	15.402	
4,100.0	4,085.7	4,090.8	4,080.7	10.0	9.6	144.29	144.29	55.6	-162.8	291.9	273.3	18.67	15.635	
4,200.0	4,185.1	4,194.6	4,184.4	10.3	9.8	145.12	145.12	56.3	-165.1	301.8	282.7	19.10	15.803	
4,300.0	4,284.5	4,294.6	4,284.5	10.6	10.0	146.27	146.27	56.4	-165.1	310.9	291.4	19.52	15.929	
4,400.0	4,383.9	4,394.0	4,383.9	10.9	10.2	147.36	147.36	56.4	-165.1	320.1	300.1	19.95	16.040	
4,500.0	4,483.3	4,493.4	4,483.3	11.2	10.4	148.38	148.38	56.4	-165.1	329.3	308.9	20.39	16.150	
4,600.0	4,582.8	4,593.0	4,582.8	11.4	10.6	149.29	149.29	56.4	-165.1	337.3	316.5	20.84	16.187	
4,700.0	4,682.6	4,692.8	4,682.6	11.6	10.8	149.84	149.84	56.4	-165.1	342.3	321.1	21.25	16.108	
4,800.0	4,782.6	4,792.8	4,782.6	11.8	11.0	150.06	150.06	56.4	-165.1	344.4	322.7	21.65	15.907	
4,900.0	4,882.6	4,892.8	4,882.6	12.0	11.2	-1.19	-1.19	56.4	-165.1	344.4	322.2	22.27	15.470	
5,000.0	4,982.6	4,992.8	4,982.6	12.2	11.4	-1.19	-1.19	56.4	-165.1	344.4	321.8	22.66	15.201	
5,100.0	5,082.6	5,092.8	5,082.6	12.3	11.6	-1.19	-1.19	56.4	-165.1	344.4	321.4	23.05	14.941	
5,200.0	5,182.6	5,192.8	5,182.6	12.5	11.9	-1.19	-1.19	56.4	-165.1	344.4	321.0	23.45	14.689	
5,300.0	5,282.6	5,292.8	5,282.6	12.7	12.1	-1.19	-1.19	56.4	-165.1	344.4	320.6	23.85	14.443	
5,400.0	5,382.6	5,392.8	5,382.6	12.9	12.3	-1.19	-1.19	56.4	-165.1	344.4	320.2	24.25	14.205	
5,500.0	5,482.6	5,492.8	5,482.6	13.0	12.5	-1.19	-1.19	56.4	-165.1	344.4	319.8	24.65	13.974	
5,600.0	5,582.6	5,592.8	5,582.6	13.2	12.7	-1.19	-1.19	56.4	-165.1	344.4	319.4	25.05	13.749	
5,700.0	5,682.6	5,692.8	5,682.6	13.4	12.9	-1.19	-1.19	56.4	-165.1	344.4	319.0	25.46	13.530	
5,800.0	5,782.6	5,792.8	5,782.6	13.6	13.1	-1.19	-1.19	56.4	-165.1	344.4	318.6	25.86	13.318	
5,900.0	5,882.6	5,892.8	5,882.6	13.8	13.3	-1.19	-1.19	56.4	-165.1	344.4	318.2	26.27	13.112	
5,965.8	5,948.5	5,958.6	5,948.5	13.9	13.5	-91.50	-91.50	56.4	-165.1	344.4	318.0	26.41	13.044	
6,000.0	5,982.6	5,992.8	5,982.6	14.0	13.6	-91.49	-91.49	56.4	-165.1	344.4	317.9	26.55	12.974	

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 240-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 240-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 240-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 240-HZ Pad Sec.24-T5N-R65W - Maxey 240-402 - Wellbore #1 - Plan #1 (3-7-13)													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
6,100.0	6,082.3	6,092.5	6,082.3	14.1	13.8	-92.60		56.4	-165.1	344.7	317.7	26.95	12.791	
6,200.0	6,180.3	6,192.5	6,182.3	14.2	14.0	-95.58		56.4	-163.8	346.0	318.7	27.31	12.671	
6,300.0	6,274.8	6,296.4	6,285.3	14.3	14.1	-98.83		56.3	-150.7	348.6	321.0	27.58	12.642	
6,400.0	6,364.3	6,403.5	6,388.6	14.4	14.3	-101.94		56.2	-122.7	352.2	324.4	27.78	12.679	
6,500.0	6,447.2	6,513.9	6,489.8	14.5	14.4	-104.82		55.9	-79.1	356.6	328.6	27.99	12.738	
6,600.0	6,522.1	6,627.5	6,586.4	14.6	14.6	-107.43		55.7	-19.4	361.4	333.0	28.34	12.749	
6,700.0	6,587.7	6,744.2	6,675.3	15.0	15.0	-109.69		55.3	56.1	366.2	337.2	29.02	12.619	
6,800.0	6,643.0	6,863.9	6,753.4	15.9	15.8	-111.56		54.8	146.7	370.7	340.4	30.24	12.257	
6,900.0	6,686.9	6,986.2	6,817.5	17.2	17.0	-113.01		54.3	250.6	374.4	342.3	32.19	11.633	
7,000.0	6,718.7	7,110.4	6,864.9	18.9	18.8	-114.00		53.8	365.3	377.2	342.2	34.95	10.792	
7,100.0	6,737.9	7,235.9	6,893.3	20.7	20.9	-114.51		53.2	487.4	378.7	340.2	38.50	9.837	
7,200.0	6,744.1	7,342.4	6,905.1	22.8	23.0	-115.03		52.7	593.2	380.7	338.5	42.17	9.027	
7,300.0	6,743.7	7,459.0	6,911.3	25.0	25.5	-115.94		52.1	709.6	383.2	337.1	46.14	8.306	
7,400.0	6,743.2	7,559.4	6,911.3	27.3	27.8	-116.00		51.6	810.0	383.5	333.2	50.25	7.632	
7,500.0	6,742.8	7,659.4	6,911.4	29.7	30.2	-116.06		51.1	910.0	383.7	329.2	54.50	7.041	
7,600.0	6,742.3	7,759.4	6,911.4	32.1	32.6	-116.12		50.7	1,010.0	384.0	325.1	58.87	6.522	
7,700.0	6,741.9	7,859.4	6,911.4	34.6	35.1	-116.18		50.2	1,110.0	384.2	320.9	63.34	6.066	
7,800.0	6,741.4	7,959.4	6,911.4	37.2	37.6	-116.24		49.7	1,210.0	384.5	316.6	67.89	5.663	
7,900.0	6,741.0	8,059.4	6,911.4	39.8	40.2	-116.30		49.2	1,310.0	384.7	312.2	72.50	5.306	
8,000.0	6,740.5	8,159.4	6,911.4	42.4	42.7	-116.36		48.7	1,410.0	384.9	307.8	77.16	4.989	
8,100.0	6,740.1	8,259.4	6,911.5	45.0	45.4	-116.42		48.2	1,510.0	385.2	303.3	81.87	4.705	
8,200.0	6,739.6	8,359.4	6,911.5	47.7	48.0	-116.48		47.7	1,610.0	385.4	298.8	86.60	4.451	
8,300.0	6,739.1	8,459.4	6,911.5	50.4	50.7	-116.54		47.3	1,710.0	385.7	294.3	91.36	4.221	
8,400.0	6,738.7	8,559.4	6,911.5	53.0	53.3	-116.60		46.8	1,810.0	385.9	289.8	96.14	4.014	
8,500.0	6,738.2	8,659.4	6,911.5	55.7	56.0	-116.66		46.3	1,910.0	386.2	285.2	100.95	3.825	
8,600.0	6,737.8	8,759.4	6,911.5	58.5	58.7	-116.72		45.8	2,010.0	386.4	280.6	105.76	3.653	
8,700.0	6,737.3	8,859.4	6,911.6	61.2	61.4	-116.78		45.3	2,110.0	386.6	276.1	110.59	3.496	
8,800.0	6,736.9	8,959.4	6,911.6	63.9	64.2	-116.84		44.8	2,210.0	386.9	271.5	115.43	3.352	
8,900.0	6,736.4	9,059.4	6,911.6	66.6	66.9	-116.90		44.4	2,310.0	387.1	266.9	120.28	3.219	
9,000.0	6,736.0	9,159.4	6,911.6	69.4	69.6	-116.96		43.9	2,410.0	387.4	262.2	125.13	3.096	
9,100.0	6,735.5	9,259.4	6,911.6	72.1	72.3	-117.02		43.4	2,509.9	387.6	257.6	129.99	2.982	
9,200.0	6,735.1	9,359.4	6,911.7	74.9	75.1	-117.08		42.9	2,609.9	387.9	253.0	134.86	2.876	
9,300.0	6,734.6	9,459.4	6,911.7	77.6	77.8	-117.14		42.4	2,709.9	388.1	248.4	139.72	2.778	
9,400.0	6,734.2	9,559.4	6,911.7	80.4	80.6	-117.20		41.9	2,809.9	388.4	243.8	144.59	2.686	
9,500.0	6,733.7	9,659.4	6,911.7	83.1	83.3	-117.26		41.4	2,909.9	388.6	239.2	149.46	2.600	
9,600.0	6,733.2	9,759.4	6,911.7	85.9	86.1	-117.32		41.0	3,009.9	388.9	234.5	154.34	2.520	
9,700.0	6,732.8	9,859.4	6,911.7	88.7	88.9	-117.38		40.5	3,109.9	389.1	229.9	159.21	2.444	
9,800.0	6,732.3	9,959.4	6,911.8	91.4	91.6	-117.44		40.0	3,209.9	389.4	225.3	164.08	2.373	
9,900.0	6,731.9	10,059.4	6,911.8	94.2	94.4	-117.50		39.5	3,309.9	389.6	220.7	168.96	2.306	
10,000.0	6,731.4	10,159.4	6,911.8	97.0	97.2	-117.56		39.0	3,409.9	389.9	216.0	173.83	2.243	
10,100.0	6,731.0	10,259.4	6,911.8	99.8	99.9	-117.61		38.5	3,509.9	390.1	211.4	178.70	2.183	
10,200.0	6,730.5	10,359.4	6,911.8	102.5	102.7	-117.67		38.0	3,609.9	390.4	206.8	183.57	2.127	
10,300.0	6,730.1	10,459.4	6,911.8	105.3	105.5	-117.73		37.6	3,709.9	390.6	202.2	188.43	2.073	
10,400.0	6,729.6	10,559.4	6,911.9	108.1	108.3	-117.79		37.1	3,809.9	390.9	197.6	193.30	2.022	
10,500.0	6,729.2	10,659.4	6,911.9	110.9	111.1	-117.85		36.6	3,909.9	391.1	193.0	198.16	1.974	
10,600.0	6,728.7	10,759.4	6,911.9	113.7	113.8	-117.91		36.1	4,009.9	391.4	188.4	203.02	1.928	
10,700.0	6,728.3	10,859.4	6,911.9	116.5	116.6	-117.97		35.6	4,109.9	391.6	183.8	207.88	1.884	
10,800.0	6,727.8	10,959.4	6,911.9	119.2	119.4	-118.02		35.1	4,209.9	391.9	179.2	212.74	1.842	
10,900.0	6,727.3	11,059.4	6,911.9	122.0	122.2	-118.08		34.7	4,309.9	392.1	174.6	217.59	1.802	
11,000.0	6,726.9	11,159.4	6,912.0	124.8	125.0	-118.14		34.2	4,409.9	392.4	170.0	222.44	1.764	
11,100.0	6,726.4	11,259.4	6,912.0	127.6	127.8	-118.20		33.7	4,509.9	392.7	165.4	227.28	1.728	

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,196.9	6,726.0	11,354.5	6,912.0	130.3	130.4	-118.25	33.2	4,605.1	392.9	161.0	231.93	1.694 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)													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	1.0	1.0	0.0	0.0	-90.00	-90.00	0.0	-30.6	30.6	30.6	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-90.00	-90.00	0.0	-30.6	30.6	30.4	0.23	134.991	
200.0	200.0	201.0	201.0	0.3	0.3	-90.00	-90.00	0.0	-30.6	30.6	30.0	0.68	45.296	
300.0	300.0	301.0	301.0	0.6	0.6	-90.00	-90.00	0.0	-30.6	30.6	29.5	1.13	27.214	
400.0	400.0	401.0	401.0	0.8	0.8	-90.00	-90.00	0.0	-30.6	30.6	29.1	1.58	19.449	
500.0	500.0	501.0	501.0	1.0	1.0	-90.00	-90.00	0.0	-30.6	30.6	28.6	2.03	15.132	
600.0	600.0	601.0	601.0	1.2	1.2	-90.00	-90.00	0.0	-30.6	30.6	28.2	2.47	12.383	
700.0	700.0	701.0	701.0	1.5	1.5	-90.00	-90.00	0.0	-30.6	30.6	27.7	2.92	10.480	
800.0	800.0	801.0	801.0	1.7	1.7	-90.00	-90.00	0.0	-30.6	30.6	27.3	3.37	9.083	
900.0	900.0	901.0	901.0	1.9	1.9	-90.00	-90.00	0.0	-30.6	30.6	26.8	3.82	8.015	
966.3	966.3	967.3	967.3	2.1	2.1	-90.00	-90.00	0.0	-30.6	30.6	26.5	4.12	7.435 CC	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-90.00	-90.00	0.0	-30.6	30.6	26.4	4.27	7.173 ES	
1,100.0	1,100.0	1,100.7	1,100.7	2.4	2.3	-93.19	-93.19	-1.7	-31.0	31.1	26.4	4.69	6.620	
1,200.0	1,200.0	1,200.0	1,199.8	2.6	2.5	-101.99	-101.99	-6.8	-32.1	32.9	27.8	5.09	6.449	
1,300.0	1,300.0	1,299.2	1,298.7	2.8	2.7	-114.22	-114.22	-15.3	-33.9	37.3	31.8	5.51	6.769	
1,400.0	1,400.0	1,397.5	1,396.3	3.0	2.9	-126.46	-126.46	-26.9	-36.4	45.6	39.6	5.93	7.685	
1,500.0	1,500.0	1,496.5	1,494.3	3.3	3.1	-135.75	-135.75	-40.4	-39.3	56.8	50.4	6.35	8.939	
1,600.0	1,600.0	1,595.8	1,592.6	3.5	3.4	9.55	9.55	-53.9	-42.2	67.3	60.5	6.76	9.946	
1,700.0	1,699.8	1,695.4	1,691.2	3.6	3.7	5.50	5.50	-67.4	-45.2	74.8	67.7	7.14	10.480	
1,800.0	1,799.5	1,795.2	1,790.0	3.8	4.0	2.31	2.31	-81.0	-48.1	79.2	71.7	7.52	10.532	
1,900.0	1,898.9	1,895.1	1,888.9	4.0	4.3	-0.55	-0.55	-94.6	-51.0	81.6	73.7	7.92	10.301	
2,000.0	1,998.3	1,994.9	1,987.9	4.2	4.6	-3.24	-3.24	-108.2	-53.9	84.2	75.8	8.33	10.100	
2,100.0	2,097.7	2,094.8	2,086.8	4.5	4.9	-5.76	-5.76	-121.8	-56.8	86.9	78.1	8.75	9.930	
2,200.0	2,197.1	2,194.7	2,185.7	4.7	5.2	-8.13	-8.13	-135.3	-59.8	89.8	80.6	9.17	9.785	
2,300.0	2,296.5	2,294.6	2,284.6	4.9	5.5	-10.35	-10.35	-148.9	-62.7	92.8	83.2	9.61	9.662	
2,400.0	2,395.9	2,394.5	2,383.5	5.2	5.8	-12.42	-12.42	-162.5	-65.6	96.0	85.9	10.04	9.555	
2,500.0	2,495.3	2,494.4	2,482.5	5.5	6.2	-14.36	-14.36	-176.1	-68.5	99.2	88.8	10.49	9.462	
2,600.0	2,594.7	2,594.3	2,581.4	5.7	6.5	-16.18	-16.18	-189.7	-71.5	102.6	91.7	10.94	9.381	
2,700.0	2,694.1	2,694.2	2,680.3	6.0	6.8	-17.87	-17.87	-203.3	-74.4	106.1	94.7	11.40	9.308	
2,800.0	2,793.5	2,794.1	2,779.2	6.3	7.2	-19.46	-19.46	-216.9	-77.3	109.7	97.8	11.87	9.243	
2,900.0	2,892.9	2,894.0	2,878.1	6.5	7.5	-20.95	-20.95	-230.5	-80.2	113.3	101.0	12.34	9.184	
3,000.0	2,992.3	2,993.9	2,977.1	6.8	7.8	-22.34	-22.34	-244.0	-83.2	117.1	104.2	12.82	9.131	
3,100.0	3,091.7	3,093.7	3,076.0	7.1	8.2	-23.65	-23.65	-257.6	-86.1	120.8	107.5	13.31	9.082	
3,200.0	3,191.1	3,193.6	3,174.9	7.4	8.5	-24.87	-24.87	-271.2	-89.0	124.7	110.9	13.80	9.036	
3,300.0	3,290.5	3,293.5	3,273.8	7.7	8.8	-26.03	-26.03	-284.8	-91.9	128.6	114.3	14.30	8.994	
3,400.0	3,389.9	3,393.4	3,372.7	7.9	9.2	-27.11	-27.11	-298.4	-94.9	132.5	117.7	14.80	8.955	
3,500.0	3,489.3	3,493.3	3,471.7	8.2	9.5	-28.13	-28.13	-312.0	-97.8	136.5	121.2	15.31	8.919	
3,600.0	3,588.7	3,593.2	3,570.6	8.5	9.9	-29.10	-29.10	-325.6	-100.7	140.6	124.7	15.82	8.884	
3,700.0	3,688.1	3,693.1	3,669.5	8.8	10.2	-30.01	-30.01	-339.1	-103.6	144.6	128.3	16.34	8.852	
3,800.0	3,787.5	3,793.0	3,768.4	9.1	10.6	-30.87	-30.87	-352.7	-106.6	148.7	131.9	16.86	8.822	
3,900.0	3,886.9	3,892.9	3,867.3	9.4	10.9	-31.68	-31.68	-366.3	-109.5	152.9	135.5	17.38	8.793	
4,000.0	3,986.3	3,992.8	3,966.3	9.7	11.2	-32.45	-32.45	-379.9	-112.4	157.0	139.1	17.91	8.766	
4,100.0	4,085.7	4,092.7	4,065.2	10.0	11.6	-33.18	-33.18	-393.5	-115.3	161.2	142.8	18.45	8.740	
4,200.0	4,185.1	4,192.6	4,164.1	10.3	11.9	-33.87	-33.87	-407.1	-118.3	165.4	146.5	18.98	8.716	
4,300.0	4,284.5	4,292.4	4,263.0	10.6	12.3	-34.53	-34.53	-420.7	-121.2	169.7	150.2	19.52	8.693	
4,400.0	4,383.9	4,392.3	4,361.9	10.9	12.6	-35.16	-35.16	-434.2	-124.1	173.9	153.9	20.06	8.671	
4,500.0	4,483.3	4,492.2	4,460.9	11.2	13.0	-35.75	-35.75	-447.8	-127.0	178.2	157.6	20.60	8.650	
4,600.0	4,582.8	4,592.1	4,559.7	11.4	13.3	-36.08	-36.08	-461.4	-129.9	183.8	162.7	21.11	8.709	
4,700.0	4,682.6	4,691.7	4,658.4	11.6	13.7	-35.82	-35.82	-475.0	-132.9	192.3	170.7	21.53	8.930	
4,800.0	4,782.6	4,791.0	4,756.7	11.8	14.0	-35.04	-35.04	-488.5	-135.8	203.5	181.6	21.89	9.297	
4,900.0	4,882.6	4,890.0	4,854.8	12.0	14.3	174.84	174.84	-501.9	-138.7	216.7	191.1	25.60	8.465	

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 240-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 240-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 240-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 240-HZ Pad Sec.24-T5N-R65W - Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)												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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,982.6	4,989.1	4,952.9	12.2	14.7	175.87	-515.4	-141.6	230.1	203.9	26.17	8.791	
5,100.0	5,082.6	5,088.1	5,050.9	12.3	15.0	176.78	-528.9	-144.5	243.5	216.7	26.73	9.107	
5,200.0	5,182.6	5,187.1	5,149.0	12.5	15.4	177.61	-542.3	-147.4	256.9	229.6	27.29	9.413	
5,300.0	5,282.6	5,286.1	5,247.1	12.7	15.7	178.35	-555.8	-150.3	270.4	242.6	27.85	9.710	
5,400.0	5,382.6	5,385.2	5,345.1	12.9	16.1	179.01	-569.3	-153.2	283.9	255.5	28.40	9.998	
5,500.0	5,482.6	5,484.2	5,443.2	13.0	16.4	179.62	-582.8	-156.1	297.5	268.6	28.95	10.276	
5,600.0	5,582.6	5,588.0	5,546.0	13.2	16.7	-179.81	-596.5	-159.0	310.8	281.3	29.49	10.538	
5,700.0	5,682.6	5,699.5	5,656.9	13.4	17.0	-179.38	-607.9	-161.5	321.0	291.1	29.95	10.719	
5,800.0	5,782.6	5,811.8	5,768.9	13.6	17.2	-179.12	-615.1	-163.0	327.4	297.1	30.36	10.786	
5,900.0	5,882.6	5,924.4	5,881.5	13.8	17.4	-179.02	-617.9	-163.6	330.0	299.3	30.72	10.740	
6,000.0	5,982.6	6,026.5	5,983.6	14.0	17.5	90.68	-618.0	-163.6	330.0	303.4	26.61	12.403	
6,100.0	6,082.3	6,126.6	6,083.7	14.1	17.7	91.78	-618.0	-163.2	330.2	303.3	26.90	12.276	
6,200.0	6,180.3	6,228.1	6,184.6	14.2	17.8	93.47	-618.1	-152.9	330.6	303.5	27.11	12.196	
6,300.0	6,274.8	6,331.0	6,284.6	14.3	17.9	95.10	-618.2	-128.9	331.3	304.0	27.30	12.136	
6,400.0	6,364.3	6,435.2	6,381.6	14.4	18.0	96.64	-618.4	-91.1	332.3	304.7	27.55	12.062	
6,500.0	6,447.2	6,540.8	6,473.8	14.5	18.1	98.07	-618.7	-39.8	333.4	305.4	27.95	11.929	
6,600.0	6,522.1	6,647.6	6,558.9	14.6	18.2	99.36	-619.0	24.6	334.6	305.9	28.63	11.687	
6,700.0	6,587.7	6,755.5	6,635.0	15.0	18.4	100.47	-619.5	101.1	335.7	306.0	29.76	11.282	
6,800.0	6,643.0	6,864.5	6,700.1	15.9	18.7	101.40	-619.9	188.3	336.8	305.3	31.46	10.704	
6,900.0	6,686.9	6,974.3	6,752.4	17.2	19.3	102.11	-620.5	284.7	337.7	303.9	33.83	9.983	
7,000.0	6,718.7	7,084.7	6,790.6	18.9	20.5	102.60	-621.0	388.2	338.3	301.5	36.84	9.184	
7,100.0	6,737.9	7,195.5	6,813.6	20.7	22.2	102.86	-621.6	496.6	338.7	298.3	40.42	8.379	
7,200.0	6,744.1	7,306.2	6,820.6	22.8	24.2	102.88	-622.3	606.9	338.8	294.3	44.44	7.623	
7,223.7	6,744.1	7,329.9	6,820.5	23.3	24.7	102.87	-622.4	630.6	338.8	293.3	45.45	7.454	
7,300.0	6,743.7	7,406.2	6,820.1	25.0	26.3	102.86	-622.8	706.9	338.8	290.1	48.71	6.956	
7,400.0	6,743.2	7,506.2	6,819.6	27.3	28.5	102.85	-623.4	806.9	338.8	285.6	53.20	6.368	
7,500.0	6,742.8	7,606.2	6,819.0	29.7	30.8	102.83	-623.9	906.9	338.8	280.9	57.87	5.855	
7,600.0	6,742.3	7,706.2	6,818.5	32.1	33.2	102.81	-624.5	1,006.9	338.8	276.2	62.67	5.407	
7,700.0	6,741.9	7,806.2	6,817.9	34.6	35.7	102.80	-625.0	1,106.9	338.8	271.3	67.58	5.014	
7,800.0	6,741.4	7,906.2	6,817.4	37.2	38.2	102.78	-625.6	1,206.9	338.8	266.3	72.57	4.669	
7,900.0	6,741.0	8,006.2	6,816.8	39.8	40.7	102.77	-626.1	1,306.9	338.9	261.2	77.63	4.365	
8,000.0	6,740.5	8,106.2	6,816.3	42.4	43.3	102.75	-626.7	1,406.9	338.9	256.1	82.75	4.095	
8,100.0	6,740.1	8,206.2	6,815.8	45.0	45.9	102.74	-627.2	1,506.9	338.9	251.0	87.91	3.855	
8,200.0	6,739.6	8,306.2	6,815.2	47.7	48.5	102.72	-627.8	1,606.9	338.9	245.8	93.11	3.640	
8,300.0	6,739.1	8,406.2	6,814.7	50.4	51.2	102.71	-628.3	1,706.9	338.9	240.6	98.35	3.446	
8,400.0	6,738.7	8,506.2	6,814.1	53.0	53.8	102.69	-628.9	1,806.9	338.9	235.3	103.61	3.271	
8,500.0	6,738.2	8,606.2	6,813.6	55.7	56.5	102.67	-629.5	1,906.9	338.9	230.0	108.90	3.112	
8,600.0	6,737.8	8,706.2	6,813.1	58.5	59.2	102.66	-630.0	2,006.9	338.9	224.7	114.20	2.968	
8,700.0	6,737.3	8,806.2	6,812.5	61.2	61.9	102.64	-630.6	2,106.9	338.9	219.4	119.53	2.836	
8,800.0	6,736.9	8,906.2	6,812.0	63.9	64.6	102.63	-631.1	2,206.9	339.0	214.1	124.87	2.715	
8,900.0	6,736.4	9,006.2	6,811.4	66.6	67.3	102.61	-631.7	2,306.9	339.0	208.7	130.22	2.603	
9,000.0	6,736.0	9,106.2	6,810.9	69.4	70.0	102.60	-632.2	2,406.9	339.0	203.4	135.59	2.500	
9,100.0	6,735.5	9,206.2	6,810.4	72.1	72.8	102.58	-632.8	2,506.9	339.0	198.0	140.97	2.405	
9,200.0	6,735.1	9,306.2	6,809.8	74.9	75.5	102.57	-633.3	2,606.9	339.0	192.6	146.36	2.316	
9,300.0	6,734.6	9,406.2	6,809.3	77.6	78.3	102.55	-633.9	2,706.9	339.0	187.3	151.75	2.234	
9,400.0	6,734.2	9,506.2	6,808.7	80.4	81.0	102.53	-634.4	2,806.9	339.0	181.9	157.16	2.157	
9,500.0	6,733.7	9,606.2	6,808.2	83.1	83.8	102.52	-635.0	2,906.9	339.0	176.5	162.57	2.085	
9,600.0	6,733.2	9,706.2	6,807.6	85.9	86.5	102.50	-635.5	3,006.9	339.1	171.1	167.99	2.018	
9,700.0	6,732.8	9,806.2	6,807.1	88.7	89.3	102.49	-636.1	3,106.9	339.1	165.6	173.41	1.955	
9,800.0	6,732.3	9,906.2	6,806.6	91.4	92.0	102.47	-636.6	3,206.9	339.1	160.2	178.85	1.896	
9,900.0	6,731.9	10,006.2	6,806.0	94.2	94.8	102.46	-637.2	3,306.8	339.1	154.8	184.28	1.840	

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		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)	Offset Wellbore Centre +E/-W (ft)				Between Centres (ft)	Between Ellipses (ft)
10,000.0	6,731.4	10,106.2	6,805.5	97.0	97.6	102.44	-637.8	3,406.8	339.1	149.4	189.72	1.787	
10,100.0	6,731.0	10,206.2	6,804.9	99.8	100.3	102.43	-638.3	3,506.8	339.1	143.9	195.17	1.738	
10,200.0	6,730.5	10,306.2	6,804.4	102.5	103.1	102.41	-638.9	3,606.8	339.1	138.5	200.61	1.690	
10,300.0	6,730.1	10,406.2	6,803.9	105.3	105.9	102.39	-639.4	3,706.8	339.1	133.1	206.07	1.646	
10,400.0	6,729.6	10,506.2	6,803.3	108.1	108.6	102.38	-640.0	3,806.8	339.1	127.6	211.52	1.603	
10,500.0	6,729.2	10,606.2	6,802.8	110.9	111.4	102.36	-640.5	3,906.8	339.2	122.2	216.98	1.563	
10,600.0	6,728.7	10,706.2	6,802.2	113.7	114.2	102.35	-641.1	4,006.8	339.2	116.7	222.45	1.525	
10,700.0	6,728.3	10,806.2	6,801.7	116.5	117.0	102.33	-641.6	4,106.8	339.2	111.3	227.91	1.488 Level 3	
10,800.0	6,727.8	10,906.2	6,801.2	119.2	119.8	102.32	-642.2	4,206.8	339.2	105.8	233.38	1.453 Level 3	
10,900.0	6,727.3	11,006.2	6,800.6	122.0	122.5	102.30	-642.7	4,306.8	339.2	100.4	238.85	1.420 Level 3	
11,000.0	6,726.9	11,106.2	6,800.1	124.8	125.3	102.29	-643.3	4,406.8	339.2	94.9	244.32	1.388 Level 3	
11,100.0	6,726.4	11,206.2	6,799.5	127.6	128.1	102.27	-643.8	4,506.8	339.2	89.4	249.80	1.358 Level 3	
11,196.9	6,726.0	11,303.1	6,799.0	130.3	130.8	102.26	-644.4	4,603.7	339.2	84.1	255.11	1.330 Level 3, SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)													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	1.0	1.0	0.0	0.0	-90.00	-90.00	0.0	-61.3	61.3	61.3	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-90.00	-90.00	0.0	-61.3	61.3	61.1	0.23	269.981	
166.3	166.3	167.3	167.3	0.3	0.3	-90.00	-90.00	0.0	-61.3	61.3	60.8	0.53	116.700 CC	
200.0	200.0	201.0	201.0	0.3	0.3	-90.00	-90.00	0.0	-61.3	61.3	60.6	0.68	90.624	
300.0	300.0	300.7	300.7	0.6	0.5	-91.65	-91.65	-1.8	-61.5	61.5	60.4	1.10	55.783 ES	
400.0	400.0	400.2	400.1	0.8	0.8	-96.41	-96.41	-7.0	-62.0	62.4	60.9	1.53	40.659	
500.0	500.0	499.3	498.7	1.0	1.0	-103.89	-103.89	-15.5	-62.9	64.8	62.8	1.99	32.533	
600.0	600.0	597.6	596.3	1.2	1.3	-113.16	-113.16	-27.4	-64.1	69.8	67.4	2.46	28.380	
700.0	700.0	695.0	692.5	1.5	1.6	-122.90	-122.90	-42.4	-65.6	78.6	75.7	2.93	26.814	
800.0	800.0	793.5	789.6	1.7	2.0	-131.36	-131.36	-59.2	-67.3	90.4	87.0	3.38	26.705	
900.0	900.0	892.0	886.6	1.9	2.3	-137.78	-137.78	-76.0	-69.0	103.7	99.8	3.83	27.059	
1,000.0	1,000.0	990.5	983.7	2.1	2.7	-142.71	-142.71	-92.8	-70.7	118.0	113.7	4.28	27.530	
1,100.0	1,100.0	1,089.1	1,080.8	2.4	3.1	-146.56	-146.56	-109.6	-72.4	132.9	128.2	4.75	28.005	
1,200.0	1,200.0	1,187.6	1,177.8	2.6	3.5	-149.62	-149.62	-126.4	-74.1	148.3	143.1	5.22	28.442	
1,300.0	1,300.0	1,286.1	1,274.9	2.8	3.9	-152.11	-152.11	-143.2	-75.8	164.1	158.4	5.69	28.831	
1,400.0	1,400.0	1,384.6	1,372.0	3.0	4.2	-154.16	-154.16	-160.0	-77.5	180.1	174.0	6.17	29.173	
1,500.0	1,500.0	1,483.1	1,469.0	3.3	4.6	-155.87	-155.87	-176.8	-79.2	196.3	189.7	6.66	29.473	
1,600.0	1,600.0	1,581.9	1,566.3	3.5	5.0	-6.09	-6.09	-193.6	-80.9	211.0	203.8	7.20	29.315	
1,700.0	1,699.8	1,681.1	1,664.1	3.6	5.4	-7.49	-7.49	-210.5	-82.6	222.3	214.7	7.61	29.209	
1,800.0	1,799.5	1,780.6	1,762.1	3.8	5.8	-8.88	-8.88	-227.5	-84.3	230.3	222.3	8.03	28.701	
1,900.0	1,898.9	1,880.3	1,860.3	4.0	6.2	-10.29	-10.29	-244.5	-86.1	236.3	227.9	8.45	27.965	
2,000.0	1,998.3	1,979.9	1,958.5	4.2	6.6	-11.64	-11.64	-261.5	-87.8	242.4	233.5	8.88	27.289	
2,100.0	2,097.7	2,079.6	2,056.7	4.5	7.0	-12.92	-12.92	-278.5	-89.5	248.7	239.3	9.32	26.674	
2,200.0	2,197.1	2,179.3	2,154.8	4.7	7.4	-14.13	-14.13	-295.5	-91.2	255.0	245.2	9.77	26.111	
2,300.0	2,296.5	2,278.9	2,253.0	4.9	7.8	-15.29	-15.29	-312.5	-92.9	261.5	251.2	10.22	25.594	
2,400.0	2,395.9	2,378.6	2,351.2	5.2	8.2	-16.39	-16.39	-329.4	-94.7	268.0	257.3	10.67	25.117	
2,500.0	2,495.3	2,478.2	2,449.4	5.5	8.6	-17.44	-17.44	-346.4	-96.4	274.7	263.5	11.13	24.677	
2,600.0	2,594.7	2,577.9	2,547.6	5.7	9.0	-18.44	-18.44	-363.4	-98.1	281.4	269.8	11.60	24.268	
2,700.0	2,694.1	2,677.5	2,645.8	6.0	9.4	-19.39	-19.39	-380.4	-99.8	288.2	276.1	12.06	23.888	
2,800.0	2,793.5	2,777.2	2,743.9	6.3	9.8	-20.29	-20.29	-397.4	-101.5	295.1	282.6	12.54	23.534	
2,900.0	2,892.9	2,876.8	2,842.1	6.5	10.2	-21.16	-21.16	-414.4	-103.3	302.1	289.0	13.02	23.202	
3,000.0	2,992.3	2,976.5	2,940.3	6.8	10.6	-21.99	-21.99	-431.4	-105.0	309.1	295.6	13.50	22.892	
3,100.0	3,091.7	3,076.2	3,038.5	7.1	11.0	-22.78	-22.78	-448.4	-106.7	316.2	302.2	13.99	22.600	
3,200.0	3,191.1	3,175.8	3,136.7	7.4	11.4	-23.53	-23.53	-465.3	-108.4	323.3	308.9	14.48	22.326	
3,300.0	3,290.5	3,275.5	3,234.8	7.7	11.8	-24.25	-24.25	-482.3	-110.2	330.5	315.6	14.98	22.067	
3,400.0	3,389.9	3,375.1	3,333.0	7.9	12.2	-24.94	-24.94	-499.3	-111.9	337.8	322.3	15.48	21.823	
3,500.0	3,489.3	3,474.8	3,431.2	8.2	12.6	-25.61	-25.61	-516.3	-113.6	345.1	329.1	15.98	21.593	
3,600.0	3,588.7	3,574.4	3,529.4	8.5	13.0	-26.24	-26.24	-533.3	-115.3	352.4	335.9	16.49	21.374	
3,700.0	3,688.1	3,674.1	3,627.6	8.8	13.4	-26.85	-26.85	-550.3	-117.0	359.8	342.8	17.00	21.167	
3,800.0	3,787.5	3,773.7	3,725.8	9.1	13.7	-27.44	-27.44	-567.3	-118.8	367.2	349.7	17.51	20.971	
3,900.0	3,886.9	3,873.4	3,823.9	9.4	14.1	-28.00	-28.00	-584.3	-120.5	374.7	356.7	18.03	20.784	
4,000.0	3,986.3	3,973.1	3,922.1	9.7	14.5	-28.54	-28.54	-601.2	-122.2	382.2	363.6	18.55	20.607	
4,100.0	4,085.7	4,072.7	4,020.3	10.0	14.9	-29.05	-29.05	-618.2	-123.9	389.7	370.6	19.07	20.438	
4,200.0	4,185.1	4,172.4	4,118.5	10.3	15.3	-29.55	-29.55	-635.2	-125.6	397.3	377.7	19.59	20.276	
4,300.0	4,284.5	4,272.0	4,216.7	10.6	15.7	-30.03	-30.03	-652.2	-127.4	404.8	384.7	20.12	20.123	
4,400.0	4,383.9	4,371.7	4,314.8	10.9	16.1	-30.50	-30.50	-669.2	-129.1	412.5	391.8	20.65	19.976	
4,500.0	4,483.3	4,471.3	4,413.0	11.2	16.5	-30.94	-30.94	-686.2	-130.8	420.1	398.9	21.18	19.835	
4,600.0	4,582.8	4,570.9	4,511.1	11.4	16.9	-31.35	-31.35	-703.2	-132.5	429.1	407.5	21.67	19.803	
4,700.0	4,682.6	4,670.2	4,608.9	11.6	17.3	-31.54	-31.54	-720.1	-134.2	441.2	419.0	22.10	19.957	
4,800.0	4,782.6	4,769.0	4,706.3	11.8	17.7	-31.53	-31.53	-736.9	-135.9	456.1	433.6	22.50	20.273	
4,900.0	4,882.6	4,867.5	4,803.4	12.0	18.1	-177.50	-177.50	-753.7	-137.6	473.0	443.4	29.59	15.984	

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)													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
5,000.0	4,982.6	4,966.1	4,900.4	12.2	18.5	177.79	-770.5	-139.3	490.0	459.8	30.18	16.238		
5,100.0	5,082.6	5,064.6	4,997.5	12.3	18.9	178.06	-787.3	-141.1	507.0	476.2	30.76	16.484		
5,200.0	5,182.6	5,163.1	5,094.6	12.5	19.3	178.31	-804.1	-142.8	524.0	492.6	31.34	16.720		
5,300.0	5,282.6	5,261.6	5,191.6	12.7	19.7	178.54	-820.9	-144.5	541.0	509.0	31.92	16.948		
5,400.0	5,382.6	5,360.2	5,288.7	12.9	20.1	178.77	-837.7	-146.2	558.0	525.5	32.50	17.167		
5,500.0	5,482.6	5,458.7	5,385.8	13.0	20.5	178.97	-854.5	-147.9	575.0	541.9	33.09	17.378		
5,600.0	5,582.6	5,557.2	5,482.8	13.2	20.9	179.17	-871.3	-149.6	592.0	558.3	33.67	17.582		
5,700.0	5,682.6	5,674.9	5,599.1	13.4	21.2	179.38	-889.9	-151.4	607.9	573.7	34.21	17.769		
5,800.0	5,782.6	5,801.1	5,724.3	13.6	21.5	179.53	-904.8	-152.9	619.6	585.0	34.68	17.866		
5,900.0	5,882.6	5,928.4	5,851.2	13.8	21.7	179.62	-914.2	-153.9	627.0	591.9	35.09	17.867		
6,000.0	5,982.6	6,056.2	5,979.0	14.0	21.9	89.36	-917.9	-154.3	629.9	602.3	27.65	22.785		
6,100.0	6,082.3	6,160.5	6,083.3	14.1	22.0	89.99	-918.0	-154.3	630.0	602.0	27.96	22.535		
6,101.1	6,083.4	6,161.6	6,084.4	14.1	22.0	90.00	-918.0	-154.3	630.0	602.0	27.96	22.533		
6,200.0	6,180.3	6,259.5	6,182.3	14.2	22.1	91.64	-918.0	-153.0	630.2	602.1	28.16	22.381		
6,300.0	6,274.8	6,361.2	6,283.2	14.3	22.2	93.45	-918.1	-140.3	631.2	602.8	28.35	22.260		
6,400.0	6,364.3	6,465.9	6,384.2	14.4	22.3	95.23	-918.2	-113.4	632.7	604.1	28.59	22.130		
6,500.0	6,447.2	6,573.7	6,483.5	14.5	22.4	96.93	-918.4	-71.5	634.8	605.8	28.96	21.922		
6,600.0	6,522.1	6,684.8	6,578.5	14.6	22.6	98.53	-918.7	-14.2	637.2	607.7	29.56	21.561		
6,700.0	6,587.7	6,799.0	6,666.5	15.0	22.7	99.99	-919.1	58.4	639.9	609.4	30.54	20.950		
6,800.0	6,643.0	6,916.4	6,744.6	15.9	23.0	101.27	-919.6	145.9	642.6	610.5	32.07	20.034		
6,900.0	6,686.9	7,036.5	6,809.8	17.2	23.4	102.33	-920.1	246.7	645.0	610.8	34.25	18.833		
7,000.0	6,718.7	7,159.1	6,859.1	18.9	24.1	103.15	-920.7	358.8	647.1	609.9	37.13	17.427		
7,100.0	6,737.9	7,283.5	6,890.2	20.7	25.2	103.69	-921.3	479.0	648.5	607.8	40.67	15.945		
7,200.0	6,744.1	7,393.7	6,903.5	22.8	26.7	104.10	-921.9	588.4	649.8	605.4	44.39	14.639		
7,300.0	6,743.7	7,507.5	6,911.1	25.0	28.6	104.80	-922.5	701.9	651.6	603.0	48.68	13.385		
7,400.0	6,743.2	7,610.6	6,911.3	27.3	30.6	104.85	-923.1	805.0	651.8	598.7	53.15	12.264		
7,500.0	6,742.8	7,710.6	6,911.4	29.7	32.6	104.89	-923.6	905.0	651.9	594.2	57.72	11.295		
7,600.0	6,742.3	7,810.6	6,911.4	32.1	34.9	104.93	-924.1	1,005.0	652.1	589.6	62.43	10.445		
7,700.0	6,741.9	7,910.6	6,911.4	34.6	37.2	104.97	-924.6	1,105.0	652.2	584.9	67.25	9.698		
7,800.0	6,741.4	8,010.6	6,911.4	37.2	39.6	105.01	-925.2	1,205.0	652.3	580.2	72.15	9.041		
7,900.0	6,741.0	8,110.6	6,911.4	39.8	42.0	105.05	-925.7	1,305.0	652.4	575.3	77.12	8.460		
8,000.0	6,740.5	8,210.6	6,911.4	42.4	44.5	105.09	-926.2	1,405.0	652.6	570.4	82.15	7.943		
8,100.0	6,740.1	8,310.6	6,911.5	45.0	47.0	105.13	-926.8	1,505.0	652.7	565.5	87.23	7.483		
8,200.0	6,739.6	8,410.6	6,911.5	47.7	49.6	105.17	-927.3	1,605.0	652.8	560.5	92.34	7.070		
8,300.0	6,739.1	8,510.6	6,911.5	50.4	52.2	105.21	-927.8	1,705.0	653.0	555.5	97.48	6.698		
8,400.0	6,738.7	8,610.6	6,911.5	53.0	54.8	105.25	-928.3	1,805.0	653.1	550.4	102.66	6.362		
8,500.0	6,738.2	8,710.6	6,911.5	55.7	57.4	105.29	-928.9	1,905.0	653.2	545.4	107.85	6.057		
8,600.0	6,737.8	8,810.6	6,911.5	58.5	60.1	105.33	-929.4	2,005.0	653.4	540.3	113.06	5.779		
8,700.0	6,737.3	8,910.6	6,911.6	61.2	62.7	105.37	-929.9	2,105.0	653.5	535.2	118.29	5.524		
8,800.0	6,736.9	9,010.6	6,911.6	63.9	65.4	105.41	-930.5	2,205.0	653.6	530.1	123.53	5.291		
8,900.0	6,736.4	9,110.6	6,911.6	66.6	68.1	105.45	-931.0	2,305.0	653.7	525.0	128.79	5.076		
9,000.0	6,736.0	9,210.6	6,911.6	69.4	70.8	105.49	-931.5	2,404.9	653.9	519.8	134.05	4.878		
9,100.0	6,735.5	9,310.6	6,911.6	72.1	73.5	105.53	-932.0	2,504.9	654.0	514.7	139.33	4.694		
9,200.0	6,735.1	9,410.5	6,911.7	74.9	76.2	105.57	-932.6	2,604.9	654.1	509.5	144.61	4.523		
9,300.0	6,734.6	9,510.5	6,911.7	77.6	78.9	105.61	-933.1	2,704.9	654.3	504.4	149.90	4.365		
9,400.0	6,734.2	9,610.5	6,911.7	80.4	81.7	105.65	-933.6	2,804.9	654.4	499.2	155.19	4.217		
9,500.0	6,733.7	9,710.5	6,911.7	83.1	84.4	105.69	-934.2	2,904.9	654.5	494.0	160.49	4.078		
9,600.0	6,733.2	9,810.5	6,911.7	85.9	87.1	105.73	-934.7	3,004.9	654.7	488.9	165.80	3.949		
9,700.0	6,732.8	9,910.5	6,911.7	88.7	89.9	105.77	-935.2	3,104.9	654.8	483.7	171.10	3.827		
9,800.0	6,732.3	10,010.5	6,911.8	91.4	92.6	105.81	-935.7	3,204.9	654.9	478.5	176.42	3.712		
9,900.0	6,731.9	10,110.5	6,911.8	94.2	95.4	105.85	-936.3	3,304.9	655.1	473.3	181.73	3.605		

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #1 (3-5-13)												<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Reference	Offset	Reference	Offset	Reference	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,000.0	6,731.4	10,210.5	6,911.8	97.0	98.1	105.89	-936.8	3,404.9	655.2	468.2	187.05	3.503	
10,100.0	6,731.0	10,310.5	6,911.8	99.8	100.9	105.93	-937.3	3,504.9	655.3	463.0	192.36	3.407	
10,200.0	6,730.5	10,410.5	6,911.8	102.5	103.6	105.97	-937.8	3,604.9	655.5	457.8	197.68	3.316	
10,300.0	6,730.1	10,510.5	6,911.8	105.3	106.4	106.01	-938.4	3,704.9	655.6	452.6	203.00	3.230	
10,400.0	6,729.6	10,610.5	6,911.9	108.1	109.1	106.04	-938.9	3,804.9	655.7	447.4	208.33	3.148	
10,500.0	6,729.2	10,710.5	6,911.9	110.9	111.9	106.08	-939.4	3,904.9	655.9	442.2	213.65	3.070	
10,600.0	6,728.7	10,810.5	6,911.9	113.7	114.7	106.12	-940.0	4,004.9	656.0	437.0	218.97	2.996	
10,700.0	6,728.3	10,910.5	6,911.9	116.5	117.5	106.16	-940.5	4,104.9	656.2	431.9	224.30	2.925	
10,800.0	6,727.8	11,010.5	6,911.9	119.2	120.2	106.20	-941.0	4,204.9	656.3	426.7	229.62	2.858	
10,900.0	6,727.3	11,110.5	6,911.9	122.0	123.0	106.24	-941.5	4,304.9	656.4	421.5	234.95	2.794	
11,000.0	6,726.9	11,210.5	6,912.0	124.8	125.8	106.28	-942.1	4,404.9	656.6	416.3	240.27	2.733	
11,100.0	6,726.4	11,310.5	6,912.0	127.6	128.5	106.32	-942.6	4,504.9	656.7	411.1	245.60	2.674	
11,196.9	6,726.0	11,407.4	6,912.0	130.3	131.2	106.36	-943.1	4,601.8	656.8	406.1	250.75	2.619 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<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 1 (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
10,200.0	6,730.5	6,707.5	6,707.5	102.5	7.5	91.27	-502.3	4,532.7	944.7	834.7	110.01	8.588	
10,300.0	6,730.1	6,707.1	6,707.1	105.3	7.5	91.13	-502.3	4,532.7	847.0	734.2	112.79	7.509	
10,400.0	6,729.6	6,706.6	6,706.6	108.1	7.5	90.99	-502.3	4,532.7	749.9	634.3	115.58	6.488	
10,500.0	6,729.2	6,706.2	6,706.2	110.9	7.5	90.86	-502.3	4,532.7	653.6	535.3	118.37	5.522	
10,600.0	6,728.7	6,705.7	6,705.7	113.7	7.5	90.72	-502.3	4,532.7	558.7	437.5	121.15	4.611	
10,700.0	6,728.3	6,705.3	6,705.3	116.5	7.5	90.58	-502.3	4,532.7	465.9	341.9	123.94	3.759	
10,800.0	6,727.8	6,704.8	6,704.8	119.2	7.5	90.45	-502.3	4,532.7	376.8	250.0	126.73	2.973	
10,900.0	6,727.3	6,704.3	6,704.3	122.0	7.5	90.31	-502.3	4,532.7	294.7	165.2	129.52	2.276	
11,000.0	6,726.9	6,703.9	6,703.9	124.8	7.5	90.17	-502.3	4,532.7	227.6	95.2	132.31	1.720	
11,100.0	6,726.4	6,703.4	6,703.4	127.6	7.5	90.03	-502.3	4,532.7	191.5	56.4	135.10	1.418 Level 3	
11,125.5	6,726.3	6,703.3	6,703.3	128.3	7.5	90.00	-502.3	4,532.7	189.8	54.0	135.81	1.398 Level 3, CC, ES, SF	
11,196.9	6,726.0	6,703.0	6,703.0	130.3	7.5	89.90	-502.3	4,532.7	202.8	65.0	137.81	1.472 Level 3	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 1 (P & A) - 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)					
7,500.0	6,742.8	6,724.8	6,724.8	29.7	7.6	97.26	-331.5	1,835.9	928.4	891.5	36.82	25.211	
7,600.0	6,742.3	6,724.3	6,724.3	32.1	7.6	96.49	-331.5	1,835.9	828.4	789.1	39.32	21.068	
7,700.0	6,741.9	6,723.9	6,723.9	34.6	7.6	95.71	-331.5	1,835.9	728.5	686.6	41.88	17.397	
7,800.0	6,741.4	6,723.4	6,723.4	37.2	7.6	94.93	-331.5	1,835.9	628.6	584.2	44.47	14.136	
7,900.0	6,741.0	6,723.0	6,723.0	39.8	7.6	94.15	-331.5	1,835.9	528.8	481.7	47.10	11.227	
8,000.0	6,740.5	6,722.5	6,722.5	42.4	7.6	93.36	-331.5	1,835.9	429.0	379.3	49.76	8.623	
8,100.0	6,740.1	6,722.1	6,722.1	45.0	7.6	92.58	-331.5	1,835.9	329.4	277.0	52.43	6.283	
8,200.0	6,739.6	6,721.6	6,721.6	47.7	7.6	91.79	-331.5	1,835.9	230.2	175.0	55.12	4.175	
8,300.0	6,739.1	6,721.1	6,721.1	50.4	7.6	91.01	-331.5	1,835.9	132.0	74.2	57.82	2.283	
8,400.0	6,738.7	6,720.7	6,720.7	53.0	7.6	90.22	-331.5	1,835.9	43.2	-17.4	60.53	0.713 Level 1	
8,427.8	6,738.6	6,720.6	6,720.6	53.8	7.6	90.00	-331.5	1,835.9	33.0	-28.2	61.28	0.539 Level 1, CC, ES, SF	
8,500.0	6,738.2	6,720.2	6,720.2	55.7	7.6	89.43	-331.5	1,835.9	79.4	16.2	63.23	1.256 Level 3	
8,600.0	6,737.8	6,719.8	6,719.8	58.5	7.6	88.65	-331.5	1,835.9	175.4	109.4	65.94	2.659	
8,700.0	6,737.3	6,719.3	6,719.3	61.2	7.6	87.86	-331.5	1,835.9	274.2	205.6	68.64	3.995	
8,800.0	6,736.9	6,718.9	6,718.9	63.9	7.6	87.07	-331.5	1,835.9	373.7	302.3	71.34	5.238	
8,900.0	6,736.4	6,718.4	6,718.4	66.6	7.6	86.29	-331.5	1,835.9	473.4	399.3	74.03	6.394	
9,000.0	6,736.0	6,718.0	6,718.0	69.4	7.5	85.51	-331.5	1,835.9	573.2	496.5	76.71	7.472	
9,100.0	6,735.5	6,717.5	6,717.5	72.1	7.5	84.73	-331.5	1,835.9	673.0	593.7	79.38	8.479	
9,200.0	6,735.1	6,717.1	6,717.1	74.9	7.5	83.95	-331.5	1,835.9	772.9	690.9	82.03	9.422	
9,300.0	6,734.6	6,716.6	6,716.6	77.6	7.5	83.17	-331.5	1,835.9	872.8	788.2	84.67	10.309	
9,400.0	6,734.2	6,716.2	6,716.2	80.4	7.5	82.40	-331.5	1,835.9	972.8	885.5	87.29	11.144	



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<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		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	129.39	-393.5	479.2	620.2				
100.0	100.0	85.0	85.0	0.1	0.1	129.39	-393.5	479.2	620.0	619.8	0.21	2,979.314	
200.0	200.0	185.0	185.0	0.3	0.2	129.39	-393.5	479.2	620.0	619.5	0.55	1,137.113	
300.0	300.0	285.0	285.0	0.6	0.3	129.39	-393.5	479.2	620.0	619.1	0.88	702.646	
400.0	400.0	385.0	385.0	0.8	0.4	129.39	-393.5	479.2	620.0	618.8	1.22	508.398	
500.0	500.0	485.0	485.0	1.0	0.5	129.39	-393.5	479.2	620.0	618.5	1.56	398.290	
600.0	600.0	585.0	585.0	1.2	0.7	129.39	-393.5	479.2	620.0	618.1	1.89	327.385	
700.0	700.0	685.0	685.0	1.5	0.8	129.39	-393.5	479.2	620.0	617.8	2.23	277.911	
800.0	800.0	785.0	785.0	1.7	0.9	129.39	-393.5	479.2	620.0	617.4	2.57	241.426	
900.0	900.0	885.0	885.0	1.9	1.0	129.39	-393.5	479.2	620.0	617.1	2.91	213.410	
1,000.0	1,000.0	985.0	985.0	2.1	1.1	129.39	-393.5	479.2	620.0	616.8	3.24	191.219	
1,100.0	1,100.0	1,085.0	1,085.0	2.4	1.2	129.39	-393.5	479.2	620.0	616.4	3.58	173.209	
1,200.0	1,200.0	1,185.0	1,185.0	2.6	1.3	129.39	-393.5	479.2	620.0	616.1	3.92	158.299	
1,300.0	1,300.0	1,285.0	1,285.0	2.8	1.4	129.39	-393.5	479.2	620.0	615.8	4.25	145.753	
1,400.0	1,400.0	1,385.0	1,385.0	3.0	1.6	129.39	-393.5	479.2	620.0	615.4	4.59	135.050	
1,500.0	1,500.0	1,485.0	1,485.0	3.3	1.7	129.39	-393.5	479.2	620.0	615.1	4.93	125.811	
1,600.0	1,600.0	1,585.0	1,585.0	3.5	1.8	-79.53	-393.5	479.2	619.7	614.5	5.24	118.312	
1,700.0	1,699.8	1,684.8	1,684.8	3.6	1.9	-80.02	-393.5	479.2	618.8	613.2	5.53	111.981	
1,800.0	1,799.5	1,784.5	1,784.5	3.8	2.0	-80.84	-393.5	479.2	617.3	611.5	5.82	105.988	
1,900.0	1,898.9	1,883.9	1,883.9	4.0	2.1	-81.84	-393.5	479.2	615.7	609.5	6.14	100.299	
2,000.0	1,998.3	1,983.3	1,983.3	4.2	2.2	-82.85	-393.5	479.2	614.2	607.7	6.47	95.000	
2,100.0	2,097.7	2,082.7	2,082.7	4.5	2.3	-83.85	-393.5	479.2	612.9	606.1	6.80	90.091	
2,200.0	2,197.1	2,182.1	2,182.1	4.7	2.5	-84.87	-393.5	479.2	611.8	604.7	7.15	85.559	
2,300.0	2,296.5	2,281.5	2,281.5	4.9	2.6	-85.88	-393.5	479.2	611.0	603.4	7.51	81.384	
2,400.0	2,395.9	2,380.9	2,380.9	5.2	2.7	-86.90	-393.5	479.2	610.3	602.4	7.87	77.541	
2,500.0	2,495.3	2,480.3	2,480.3	5.5	2.8	-87.92	-393.5	479.2	609.8	601.5	8.24	74.006	
2,600.0	2,594.7	2,579.7	2,579.7	5.7	2.9	-88.94	-393.5	479.2	609.5	600.8	8.61	70.754	
2,700.0	2,694.1	2,679.1	2,679.1	6.0	3.0	-89.96	-393.5	479.2	609.4	600.4	8.99	67.762	
2,703.6	2,697.6	2,682.6	2,682.6	6.0	3.0	-90.00	-393.5	479.2	609.4	600.3	9.01	67.659	
2,800.0	2,793.5	2,778.5	2,778.5	6.3	3.1	-90.99	-393.5	479.2	609.4	600.1	9.38	65.006	
2,900.0	2,892.9	2,877.9	2,877.9	6.5	3.2	-92.01	-393.5	479.2	609.7	600.0	9.76	62.466	
3,000.0	2,992.3	2,977.3	2,977.3	6.8	3.3	-93.03	-393.5	479.2	610.2	600.1	10.15	60.123	
3,100.0	3,091.7	3,076.7	3,076.7	7.1	3.5	-94.05	-393.5	479.2	610.9	600.4	10.54	57.959	
3,200.0	3,191.1	3,176.1	3,176.1	7.4	3.6	-95.06	-393.5	479.2	611.8	600.8	10.93	55.958	
3,300.0	3,290.5	3,275.5	3,275.5	7.7	3.7	-96.07	-393.5	479.2	612.8	601.5	11.33	54.106	
3,400.0	3,389.9	3,374.9	3,374.9	7.9	3.8	-97.08	-393.5	479.2	614.1	602.4	11.72	52.390	
3,500.0	3,489.3	3,474.3	3,474.3	8.2	3.9	-98.09	-393.5	479.2	615.5	603.4	12.12	50.799	
3,600.0	3,588.7	3,573.7	3,573.7	8.5	4.0	-99.09	-393.5	479.2	617.2	604.7	12.51	49.321	
3,700.0	3,688.1	3,673.1	3,673.1	8.8	4.1	-100.08	-393.5	479.2	619.0	606.1	12.91	47.948	
3,800.0	3,787.5	3,772.5	3,772.5	9.1	4.2	-101.07	-393.5	479.2	621.0	607.7	13.31	46.670	
3,900.0	3,886.9	3,871.9	3,871.9	9.4	4.4	-102.05	-393.5	479.2	623.2	609.5	13.70	45.480	
4,000.0	3,986.3	3,971.3	3,971.3	9.7	4.5	-103.02	-393.5	479.2	625.6	611.5	14.10	44.371	
4,100.0	4,085.7	4,070.7	4,070.7	10.0	4.6	-103.99	-393.5	479.2	628.2	613.7	14.50	43.337	
4,200.0	4,185.1	4,170.1	4,170.1	10.3	4.7	-104.95	-393.5	479.2	630.9	616.1	14.89	42.371	
4,300.0	4,284.5	4,269.5	4,269.5	10.6	4.8	-105.90	-393.5	479.2	633.9	618.6	15.29	41.469	
4,400.0	4,383.9	4,368.9	4,368.9	10.9	4.9	-106.84	-393.5	479.2	637.0	621.3	15.68	40.625	
4,500.0	4,483.3	4,468.3	4,468.3	11.2	5.0	-107.77	-393.5	479.2	640.2	624.2	16.07	39.836	
4,600.0	4,582.8	4,567.8	4,567.8	11.4	5.1	-108.61	-393.5	479.2	643.2	626.7	16.43	39.156	
4,700.0	4,682.6	4,667.6	4,667.6	11.6	5.2	-109.14	-393.5	479.2	645.1	628.3	16.73	38.554	
4,800.0	4,782.6	4,767.6	4,767.6	11.8	5.4	-109.35	-393.5	479.2	645.8	628.8	17.02	37.947	
4,900.0	4,882.6	4,867.6	4,867.6	12.0	5.5	99.40	-393.5	479.2	645.8	629.7	16.12	40.066	

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 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<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		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Between Centres (ft)	Between Ellipses (ft)					
5,000.0	4,982.6	4,967.6	4,967.6	12.2	5.6	99.40	-393.5	479.2	645.8	629.4	16.43	39.319	
5,100.0	5,082.6	5,067.6	5,067.6	12.3	5.7	99.40	-393.5	479.2	645.8	629.1	16.73	38.595	
5,200.0	5,182.6	5,167.6	5,167.6	12.5	5.8	99.40	-393.5	479.2	645.8	628.8	17.04	37.896	
5,300.0	5,282.6	5,267.6	5,267.6	12.7	5.9	99.40	-393.5	479.2	645.8	628.5	17.35	37.219	
5,400.0	5,382.6	5,367.6	5,367.6	12.9	6.0	99.40	-393.5	479.2	645.8	628.2	17.66	36.564	
5,500.0	5,482.6	5,467.6	5,467.6	13.0	6.1	99.40	-393.5	479.2	645.8	627.9	17.98	35.930	
5,600.0	5,582.6	5,567.6	5,567.6	13.2	6.3	99.40	-393.5	479.2	645.8	627.6	18.29	35.315	
5,700.0	5,682.6	5,667.6	5,667.6	13.4	6.4	99.40	-393.5	479.2	645.8	627.2	18.60	34.720	
5,800.0	5,782.6	5,767.6	5,767.6	13.6	6.5	99.40	-393.5	479.2	645.8	626.9	18.92	34.143	
5,900.0	5,882.6	5,867.6	5,867.6	13.8	6.6	99.40	-393.5	479.2	645.8	626.6	19.23	33.583	
6,000.0	5,982.6	5,967.6	5,967.6	14.0	6.7	9.10	-393.5	479.2	645.8	625.3	20.52	31.480	
6,100.0	6,082.3	6,067.3	6,067.3	14.1	6.8	9.28	-393.5	479.2	639.1	618.4	20.68	30.905	
6,200.0	6,180.3	6,165.3	6,165.3	14.2	6.9	9.82	-393.5	479.2	619.5	598.9	20.64	30.009	
6,300.0	6,274.8	6,259.8	6,259.8	14.3	7.0	10.83	-393.5	479.2	587.6	567.2	20.42	28.768	
6,400.0	6,364.3	6,349.3	6,349.3	14.4	7.1	12.47	-393.5	479.2	543.8	523.8	20.05	27.130	
6,500.0	6,447.2	6,432.2	6,432.2	14.5	7.2	15.10	-393.5	479.2	489.2	469.6	19.56	25.003	
6,600.0	6,522.1	6,507.1	6,507.1	14.6	7.3	19.36	-393.5	479.2	424.7	405.6	19.11	22.228	
6,700.0	6,587.7	6,572.7	6,572.7	15.0	7.4	26.56	-393.5	479.2	352.1	333.0	19.01	18.520	
6,800.0	6,643.0	6,628.0	6,628.0	15.9	7.4	39.00	-393.5	479.2	273.4	253.4	20.05	13.638	
6,900.0	6,686.9	6,671.9	6,671.9	17.2	7.5	58.64	-393.5	479.2	193.1	170.2	22.95	8.415	
7,000.0	6,718.7	6,703.7	6,703.7	18.9	7.5	80.17	-393.5	479.2	123.3	97.2	26.09	4.727	
7,070.8	6,733.6	6,718.6	6,718.6	20.2	7.6	90.00	-393.5	479.2	102.1	74.5	27.60	3.700 CC, ES, SF	
7,100.0	6,737.9	6,722.9	6,722.9	20.7	7.6	92.06	-393.5	479.2	106.1	78.0	28.13	3.773	
7,200.0	6,744.1	6,729.1	6,729.1	22.8	7.6	89.77	-393.5	479.2	164.2	134.0	30.23	5.434	
7,300.0	6,743.7	6,728.7	6,728.7	25.0	7.6	89.42	-393.5	479.2	250.4	218.0	32.42	7.723	
7,400.0	6,743.2	6,728.2	6,728.2	27.3	7.6	89.16	-393.5	479.2	344.1	309.4	34.73	9.908	
7,500.0	6,742.8	6,727.8	6,727.8	29.7	7.6	88.91	-393.5	479.2	440.6	403.5	37.13	11.868	
7,600.0	6,742.3	6,727.3	6,727.3	32.1	7.6	88.65	-393.5	479.2	538.4	498.8	39.59	13.600	
7,700.0	6,741.9	6,726.9	6,726.9	34.6	7.6	88.40	-393.5	479.2	636.9	594.8	42.10	15.127	
7,800.0	6,741.4	6,726.4	6,726.4	37.2	7.6	88.15	-393.5	479.2	735.8	691.1	44.65	16.477	
7,900.0	6,741.0	6,726.0	6,726.0	39.8	7.6	87.89	-393.5	479.2	834.9	787.7	47.24	17.673	
8,000.0	6,740.5	6,725.5	6,725.5	42.4	7.6	87.64	-393.5	479.2	934.2	884.4	49.85	18.739	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 43-24 (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		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
7,400.0	6,743.2	6,727.2	6,727.2	27.3	7.6	95.78	-342.4	1,794.1	987.0	952.5	34.54	28.580	
7,500.0	6,742.8	6,726.8	6,726.8	29.7	7.6	95.20	-342.4	1,794.1	887.1	850.2	36.95	24.008	
7,600.0	6,742.3	6,726.3	6,726.3	32.1	7.6	94.61	-342.4	1,794.1	787.3	747.8	39.44	19.964	
7,700.0	6,741.9	6,725.9	6,725.9	34.6	7.6	94.03	-342.4	1,794.1	687.5	645.5	41.97	16.379	
7,800.0	6,741.4	6,725.4	6,725.4	37.2	7.6	93.44	-342.4	1,794.1	587.7	543.1	44.55	13.191	
7,900.0	6,741.0	6,725.0	6,725.0	39.8	7.6	92.86	-342.4	1,794.1	488.0	440.9	47.17	10.347	
8,000.0	6,740.5	6,724.5	6,724.5	42.4	7.6	92.27	-342.4	1,794.1	388.6	338.8	49.81	7.801	
8,100.0	6,740.1	6,724.1	6,724.1	45.0	7.6	91.68	-342.4	1,794.1	289.4	237.0	52.47	5.517	
8,200.0	6,739.6	6,723.6	6,723.6	47.7	7.6	91.09	-342.4	1,794.1	191.2	136.1	55.14	3.468	
8,300.0	6,739.1	6,723.1	6,723.1	50.4	7.6	90.51	-342.4	1,794.1	96.7	38.9	57.83	1.673	
8,386.0	6,738.8	6,722.8	6,722.8	52.7	7.6	90.00	-342.4	1,794.1	44.2	-16.0	60.15	0.735	Level 1, CC, ES, SF
8,400.0	6,738.7	6,722.7	6,722.7	53.0	7.6	89.92	-342.4	1,794.1	46.3	-14.2	60.53	0.766	Level 1
8,500.0	6,738.2	6,722.2	6,722.2	55.7	7.6	89.33	-342.4	1,794.1	122.2	59.0	63.24	1.933	
8,600.0	6,737.8	6,721.8	6,721.8	58.5	7.6	88.74	-342.4	1,794.1	218.5	152.5	65.94	3.313	
8,700.0	6,737.3	6,721.3	6,721.3	61.2	7.6	88.15	-342.4	1,794.1	317.0	248.4	68.65	4.618	
8,800.0	6,736.9	6,720.9	6,720.9	63.9	7.6	87.57	-342.4	1,794.1	416.3	344.9	71.36	5.834	
8,900.0	6,736.4	6,720.4	6,720.4	66.6	7.6	86.98	-342.4	1,794.1	515.8	441.8	74.07	6.964	
9,000.0	6,736.0	6,720.0	6,720.0	69.4	7.6	86.39	-342.4	1,794.1	615.5	538.8	76.78	8.017	
9,100.0	6,735.5	6,719.5	6,719.5	72.1	7.6	85.81	-342.4	1,794.1	715.3	635.8	79.47	9.001	
9,200.0	6,735.1	6,719.1	6,719.1	74.9	7.6	85.22	-342.4	1,794.1	815.1	733.0	82.17	9.920	
9,300.0	6,734.6	6,718.6	6,718.6	77.6	7.6	84.64	-342.4	1,794.1	915.0	830.2	84.85	10.783	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey Hoff 2 (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		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	6,736.0	6,716.0	6,716.0	69.4	7.5	90.81	-582.7	3,267.9	904.5	827.6	76.85	11.769	
9,100.0	6,735.5	6,715.5	6,715.5	72.1	7.5	90.71	-582.7	3,267.9	809.8	730.2	79.60	10.174	
9,200.0	6,735.1	6,715.1	6,715.1	74.9	7.5	90.62	-582.7	3,267.9	716.7	634.3	82.35	8.703	
9,300.0	6,734.6	6,714.6	6,714.6	77.6	7.5	90.53	-582.7	3,267.9	625.6	540.5	85.11	7.351	
9,400.0	6,734.2	6,714.2	6,714.2	80.4	7.5	90.43	-582.7	3,267.9	537.8	449.9	87.87	6.120	
9,500.0	6,733.7	6,713.7	6,713.7	83.1	7.5	90.34	-582.7	3,267.9	455.0	364.3	90.63	5.020	
9,600.0	6,733.2	6,713.2	6,713.2	85.9	7.5	90.25	-582.7	3,267.9	380.5	287.1	93.40	4.074	
9,700.0	6,732.8	6,712.8	6,712.8	88.7	7.5	90.15	-582.7	3,267.9	320.2	224.1	96.17	3.330	
9,800.0	6,732.3	6,712.3	6,712.3	91.4	7.5	90.06	-582.7	3,267.9	283.4	184.5	98.94	2.865	
9,861.1	6,732.1	6,712.1	6,712.1	93.1	7.5	90.00	-582.7	3,267.9	276.8	176.2	100.63	2.750 CC, ES	
9,900.0	6,731.9	6,711.9	6,711.9	94.2	7.5	89.96	-582.7	3,267.9	279.5	177.8	101.71	2.748 SF	
10,000.0	6,731.4	6,711.4	6,711.4	97.0	7.5	89.87	-582.7	3,267.9	309.7	205.2	104.49	2.964	
10,100.0	6,731.0	6,711.0	6,711.0	99.8	7.5	89.78	-582.7	3,267.9	365.6	258.4	107.27	3.409	
10,200.0	6,730.5	6,710.5	6,710.5	102.5	7.5	89.68	-582.7	3,267.9	437.6	327.5	110.04	3.976	
10,300.0	6,730.1	6,710.1	6,710.1	105.3	7.5	89.59	-582.7	3,267.9	518.9	406.1	112.82	4.599	
10,400.0	6,729.6	6,709.6	6,709.6	108.1	7.5	89.49	-582.7	3,267.9	605.8	490.2	115.60	5.241	
10,500.0	6,729.2	6,709.2	6,709.2	110.9	7.5	89.40	-582.7	3,267.9	696.3	577.9	118.39	5.882	
10,600.0	6,728.7	6,708.7	6,708.7	113.7	7.5	89.31	-582.7	3,267.9	789.1	667.9	121.17	6.512	
10,700.0	6,728.3	6,708.3	6,708.3	116.5	7.5	89.21	-582.7	3,267.9	883.4	759.4	123.95	7.127	
10,800.0	6,727.8	6,707.8	6,707.8	119.2	7.5	89.12	-582.7	3,267.9	978.9	852.1	126.74	7.724	

Reference Depths are relative to WELL @ 4651.0ft (RKB - 15')	Coordinates are relative to: Maxey 240-232
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 °	Grid Convergence at Surface is: 0.57°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24O-232
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4651.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24O-232	<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 #1 (3-7-13)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4651.0ft (RKB - 15')  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24O-232  
 Coordinate System is US State Plane 1983, Colorado Northern Zone  
 Grid Convergence at Surface is: 0.57°

