

# PETROLEUM DEVELOPMENT CORP Weld County CO

## Well Name: Maxey 24Q-302

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

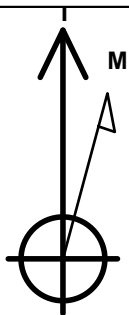
Ground Elevation: 4635.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1381916.22	3247807.14	40.378350	-104.610510	

RKB - 15' WELL @ 4650.0ft (RKB - 15')

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
SHL 340'FSL, 2393'FEL, SEC.24	1.0	0.0	0.0	Point
BHL 78'FSL, 1800'FEL, SEC.19	6770.0	-294.4	5803.5	Point



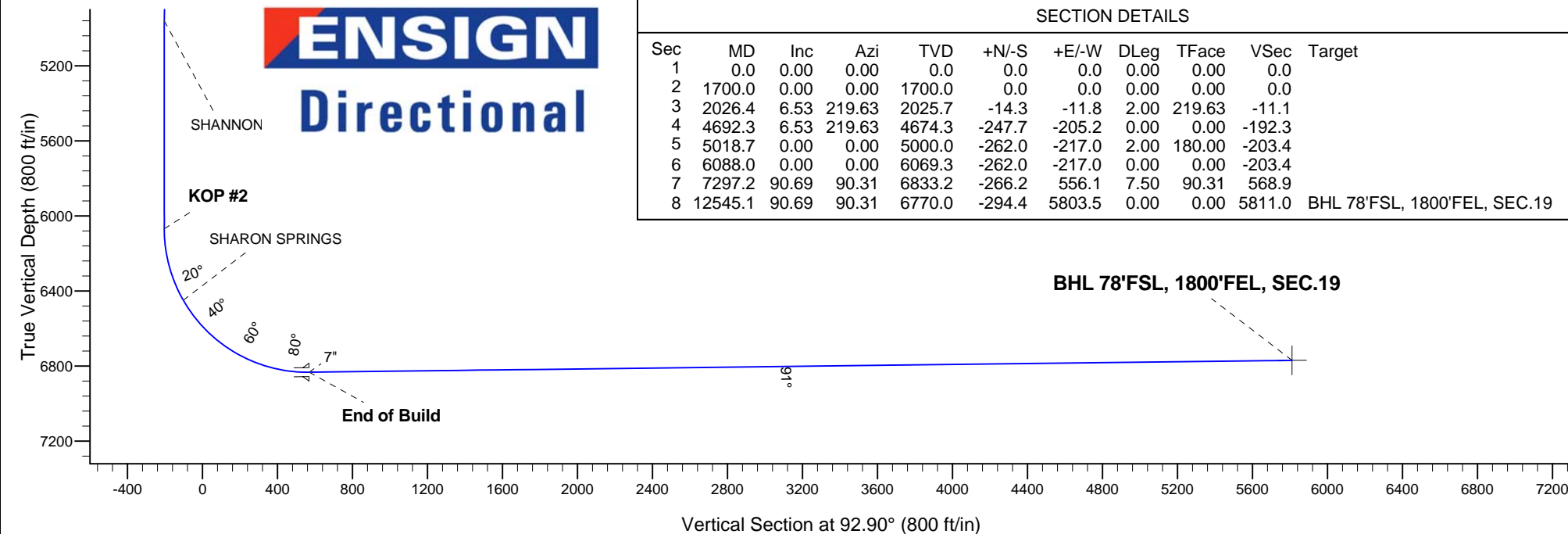
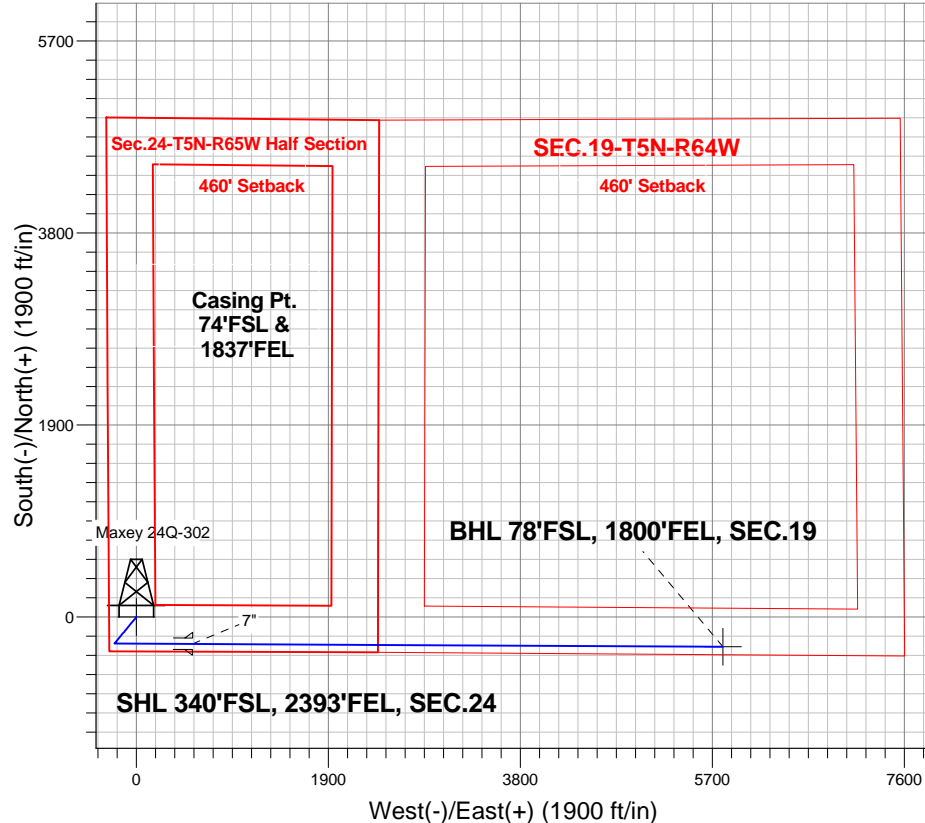
Azimuths to True North  
Magnetic North: 8.43°

Magnetic Field  
Strength: 52863.1nT  
Dip Angle: 66.97°  
Date: 1/22/2014  
Model: IGRF2010

## ANNOTATIONS

TVD	MD	Annotation
1700.0	1700.0	KOP #1
6069.3	6088.0	KOP #2
6833.2	7297.2	End of Build

Maxey 24Q-HZ Pad Sec.24-T5N-R65W  
Maxey 24Q-302  
Plan #3 (1-22-14)  
11:11, January 23 2014



## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1700.0	0.00	0.00	1700.0	0.0	0.0	0.00	0.00	0.0	
3	2026.4	6.53	219.63	2025.7	-14.3	-11.8	2.00	219.63	-11.1	
4	4692.3	6.53	219.63	4674.3	-247.7	-205.2	0.00	0.00	-192.3	
5	5018.7	0.00	0.00	5000.0	-262.0	-217.0	2.00	180.00	-203.4	
6	6088.0	0.00	0.00	6069.3	-262.0	-217.0	0.00	0.00	-203.4	
7	7297.2	90.69	90.31	6833.2	-266.2	556.1	7.50	90.31	568.9	
8	12545.1	90.69	90.31	6770.0	-294.4	5803.5	0.00	0.00	5811.0	BHL 78'FSL, 1800'FEL, SEC.19



# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24Q-302**

**Wellbore #1**

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

## **Standard Planning Report**

**23 January, 2014**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

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

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

Well	Maxey 24Q-302					
Well Position	+N/-S	0.0 ft	Northing:	1,381,916.22 ft	Latitude:	40.378350
	+E/-W	61.3 ft	Easting:	3,247,807.14 ft	Longitude:	-104.610510
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,635.0 ft

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

<b>Design</b>	Plan #3 (1-22-14)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	92.90

<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	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,026.4	6.53	219.63	2,025.7	-14.3	-11.8	2.00	2.00	0.00	219.63	
4,692.3	6.53	219.63	4,674.3	-247.7	-205.2	0.00	0.00	0.00	0.00	
5,018.7	0.00	0.00	5,000.0	-262.0	-217.0	2.00	-2.00	0.00	180.00	
6,088.0	0.00	0.00	6,069.3	-262.0	-217.0	0.00	0.00	0.00	0.00	
7,297.2	90.69	90.31	6,833.2	-266.2	556.1	7.50	7.50	0.00	90.31	
12,545.1	90.69	90.31	6,770.0	-294.4	5,803.5	0.00	0.00	0.00	0.00	BHL 78'FSL, 1800'

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>SHL 340'FSL, 2393'FEL, SEC.24</b>									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP #1</b>									
1,800.0	2.00	219.63	1,800.0	-1.3	-1.1	-1.0	2.00	2.00	0.00
1,900.0	4.00	219.63	1,899.8	-5.4	-4.5	-4.2	2.00	2.00	0.00
2,000.0	6.00	219.63	1,999.5	-12.1	-10.0	-9.4	2.00	2.00	0.00
2,026.4	6.53	219.63	2,025.7	-14.3	-11.8	-11.1	2.00	2.00	0.00
2,100.0	6.53	219.63	2,098.8	-20.7	-17.2	-16.1	0.00	0.00	0.00
2,200.0	6.53	219.63	2,198.2	-29.5	-24.4	-22.9	0.00	0.00	0.00
2,300.0	6.53	219.63	2,297.5	-38.3	-31.7	-29.7	0.00	0.00	0.00
2,400.0	6.53	219.63	2,396.9	-47.0	-38.9	-36.5	0.00	0.00	0.00
2,500.0	6.53	219.63	2,496.2	-55.8	-46.2	-43.3	0.00	0.00	0.00
2,600.0	6.53	219.63	2,595.6	-64.5	-53.4	-50.1	0.00	0.00	0.00
2,700.0	6.53	219.63	2,694.9	-73.3	-60.7	-56.9	0.00	0.00	0.00
2,800.0	6.53	219.63	2,794.3	-82.0	-67.9	-63.7	0.00	0.00	0.00
2,900.0	6.53	219.63	2,893.6	-90.8	-75.2	-70.5	0.00	0.00	0.00
3,000.0	6.53	219.63	2,993.0	-99.5	-82.4	-77.3	0.00	0.00	0.00
3,100.0	6.53	219.63	3,092.3	-108.3	-89.7	-84.1	0.00	0.00	0.00
3,200.0	6.53	219.63	3,191.7	-117.0	-96.9	-90.9	0.00	0.00	0.00
3,300.0	6.53	219.63	3,291.0	-125.8	-104.2	-97.7	0.00	0.00	0.00
3,400.0	6.53	219.63	3,390.4	-134.6	-111.4	-104.5	0.00	0.00	0.00
3,500.0	6.53	219.63	3,489.7	-143.3	-118.7	-111.3	0.00	0.00	0.00
3,530.5	6.53	219.63	3,520.0	-146.0	-120.9	-113.4	0.00	0.00	0.00
<b>PARKMAN</b>									
3,600.0	6.53	219.63	3,589.1	-152.1	-125.9	-118.1	0.00	0.00	0.00
3,700.0	6.53	219.63	3,688.4	-160.8	-133.2	-124.9	0.00	0.00	0.00
3,800.0	6.53	219.63	3,787.8	-169.6	-140.5	-131.7	0.00	0.00	0.00
3,900.0	6.53	219.63	3,887.1	-178.3	-147.7	-138.5	0.00	0.00	0.00
4,000.0	6.53	219.63	3,986.5	-187.1	-155.0	-145.3	0.00	0.00	0.00
4,100.0	6.53	219.63	4,085.9	-195.8	-162.2	-152.1	0.00	0.00	0.00
4,200.0	6.53	219.63	4,185.2	-204.6	-169.5	-158.9	0.00	0.00	0.00
4,265.2	6.53	219.63	4,250.0	-210.3	-174.2	-163.3	0.00	0.00	0.00
<b>SUSSEX</b>									
4,300.0	6.53	219.63	4,284.6	-213.4	-176.7	-165.7	0.00	0.00	0.00
4,400.0	6.53	219.63	4,383.9	-222.1	-184.0	-172.5	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
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<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.0	6.53	219.63	4,483.3	-230.9	-191.2	-179.3	0.00	0.00	0.00
4,600.0	6.53	219.63	4,582.6	-239.6	-198.5	-186.1	0.00	0.00	0.00
4,692.3	6.53	219.63	4,674.3	-247.7	-205.2	-192.3	0.00	0.00	0.00
4,700.0	6.37	219.63	4,682.0	-248.4	-205.7	-192.9	2.00	-2.00	0.00
4,800.0	4.37	219.63	4,781.5	-255.6	-211.7	-198.5	2.00	-2.00	0.00
4,900.0	2.37	219.63	4,881.3	-260.1	-215.4	-202.0	2.00	-2.00	0.00
4,978.7	0.80	219.63	4,960.0	-261.8	-216.8	-203.3	2.00	-2.00	0.00
<b>SHANNON</b>									
5,000.0	0.37	219.63	4,981.3	-262.0	-217.0	-203.4	2.00	-2.00	0.00
5,018.7	0.00	0.00	5,000.0	-262.0	-217.0	-203.4	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,081.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,200.0	0.00	0.00	5,181.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,300.0	0.00	0.00	5,281.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,381.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,481.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,581.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,681.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,781.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
5,900.0	0.00	0.00	5,881.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,981.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
6,088.0	0.00	0.00	6,069.3	-262.0	-217.0	-203.4	0.00	0.00	0.00
<b>KOP #2</b>									
6,100.0	0.90	90.31	6,081.3	-262.0	-216.9	-203.4	7.50	7.50	0.00
6,200.0	8.40	90.31	6,180.9	-262.0	-208.8	-195.3	7.50	7.50	0.00
6,300.0	15.90	90.31	6,278.6	-262.2	-187.8	-174.3	7.50	7.50	0.00
6,400.0	23.40	90.31	6,372.7	-262.3	-154.2	-140.7	7.50	7.50	0.00
6,486.5	29.89	90.31	6,450.0	-262.5	-115.4	-101.9	7.50	7.50	0.00
<b>SHARON SPRINGS</b>									
6,500.0	30.90	90.31	6,461.6	-262.6	-108.6	-95.1	7.50	7.50	0.00
6,600.0	38.40	90.31	6,543.8	-262.9	-51.8	-38.4	7.50	7.50	0.00
6,700.0	45.90	90.31	6,617.9	-263.2	15.3	28.6	7.50	7.50	0.00
6,800.0	53.40	90.31	6,682.6	-263.7	91.5	104.7	7.50	7.50	0.00
6,900.0	60.90	90.31	6,736.8	-264.1	175.4	188.6	7.50	7.50	0.00
7,000.0	68.40	90.31	6,779.6	-264.6	265.7	278.8	7.50	7.50	0.00
7,100.0	75.90	90.31	6,810.2	-265.1	360.8	373.8	7.50	7.50	0.00
7,200.0	83.40	90.31	6,828.2	-265.6	459.1	472.0	7.50	7.50	0.00
7,297.2	90.69	90.31	6,833.2	-266.2	556.1	568.9	7.50	7.50	0.00
<b>End of Build - 7"</b>									
7,300.0	90.69	90.31	6,833.2	-266.2	558.9	571.7	0.00	0.00	0.00
7,400.0	90.69	90.31	6,832.0	-266.7	658.9	671.6	0.00	0.00	0.00
7,500.0	90.69	90.31	6,830.8	-267.2	758.9	771.5	0.00	0.00	0.00
7,600.0	90.69	90.31	6,829.6	-267.8	858.9	871.4	0.00	0.00	0.00
7,700.0	90.69	90.31	6,828.3	-268.3	958.9	971.3	0.00	0.00	0.00
7,800.0	90.69	90.31	6,827.1	-268.9	1,058.9	1,071.1	0.00	0.00	0.00
7,900.0	90.69	90.31	6,825.9	-269.4	1,158.9	1,171.0	0.00	0.00	0.00
8,000.0	90.69	90.31	6,824.7	-269.9	1,258.9	1,270.9	0.00	0.00	0.00
8,100.0	90.69	90.31	6,823.5	-270.5	1,358.9	1,370.8	0.00	0.00	0.00
8,200.0	90.69	90.31	6,822.3	-271.0	1,458.9	1,470.7	0.00	0.00	0.00
8,300.0	90.69	90.31	6,821.1	-271.5	1,558.8	1,570.6	0.00	0.00	0.00
8,400.0	90.69	90.31	6,819.9	-272.1	1,658.8	1,670.5	0.00	0.00	0.00
8,500.0	90.69	90.31	6,818.7	-272.6	1,758.8	1,770.4	0.00	0.00	0.00
8,600.0	90.69	90.31	6,817.5	-273.2	1,858.8	1,870.3	0.00	0.00	0.00

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<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,700.0	90.69	90.31	6,816.3	-273.7	1,958.8	1,970.2	0.00	0.00	0.00
8,800.0	90.69	90.31	6,815.1	-274.2	2,058.8	2,070.1	0.00	0.00	0.00
8,900.0	90.69	90.31	6,813.9	-274.8	2,158.8	2,169.9	0.00	0.00	0.00
9,000.0	90.69	90.31	6,812.7	-275.3	2,258.8	2,269.8	0.00	0.00	0.00
9,100.0	90.69	90.31	6,811.5	-275.8	2,358.8	2,369.7	0.00	0.00	0.00
9,200.0	90.69	90.31	6,810.3	-276.4	2,458.8	2,469.6	0.00	0.00	0.00
9,300.0	90.69	90.31	6,809.1	-276.9	2,558.8	2,569.5	0.00	0.00	0.00
9,400.0	90.69	90.31	6,807.9	-277.5	2,658.7	2,669.4	0.00	0.00	0.00
9,500.0	90.69	90.31	6,806.7	-278.0	2,758.7	2,769.3	0.00	0.00	0.00
9,600.0	90.69	90.31	6,805.5	-278.5	2,858.7	2,869.2	0.00	0.00	0.00
9,700.0	90.69	90.31	6,804.3	-279.1	2,958.7	2,969.1	0.00	0.00	0.00
9,800.0	90.69	90.31	6,803.1	-279.6	3,058.7	3,069.0	0.00	0.00	0.00
9,900.0	90.69	90.31	6,801.9	-280.1	3,158.7	3,168.8	0.00	0.00	0.00
10,000.0	90.69	90.31	6,800.6	-280.7	3,258.7	3,268.7	0.00	0.00	0.00
10,100.0	90.69	90.31	6,799.4	-281.2	3,358.7	3,368.6	0.00	0.00	0.00
10,200.0	90.69	90.31	6,798.2	-281.8	3,458.7	3,468.5	0.00	0.00	0.00
10,300.0	90.69	90.31	6,797.0	-282.3	3,558.7	3,568.4	0.00	0.00	0.00
10,400.0	90.69	90.31	6,795.8	-282.8	3,658.7	3,668.3	0.00	0.00	0.00
10,500.0	90.69	90.31	6,794.6	-283.4	3,758.7	3,768.2	0.00	0.00	0.00
10,600.0	90.69	90.31	6,793.4	-283.9	3,858.6	3,868.1	0.00	0.00	0.00
10,700.0	90.69	90.31	6,792.2	-284.5	3,958.6	3,968.0	0.00	0.00	0.00
10,800.0	90.69	90.31	6,791.0	-285.0	4,058.6	4,067.9	0.00	0.00	0.00
10,900.0	90.69	90.31	6,789.8	-285.5	4,158.6	4,167.7	0.00	0.00	0.00
11,000.0	90.69	90.31	6,788.6	-286.1	4,258.6	4,267.6	0.00	0.00	0.00
11,100.0	90.69	90.31	6,787.4	-286.6	4,358.6	4,367.5	0.00	0.00	0.00
11,200.0	90.69	90.31	6,786.2	-287.1	4,458.6	4,467.4	0.00	0.00	0.00
11,300.0	90.69	90.31	6,785.0	-287.7	4,558.6	4,567.3	0.00	0.00	0.00
11,400.0	90.69	90.31	6,783.8	-288.2	4,658.6	4,667.2	0.00	0.00	0.00
11,500.0	90.69	90.31	6,782.6	-288.8	4,758.6	4,767.1	0.00	0.00	0.00
11,600.0	90.69	90.31	6,781.4	-289.3	4,858.6	4,867.0	0.00	0.00	0.00
11,700.0	90.69	90.31	6,780.2	-289.8	4,958.5	4,966.9	0.00	0.00	0.00
11,800.0	90.69	90.31	6,779.0	-290.4	5,058.5	5,066.8	0.00	0.00	0.00
11,900.0	90.69	90.31	6,777.8	-290.9	5,158.5	5,166.6	0.00	0.00	0.00
12,000.0	90.69	90.31	6,776.6	-291.4	5,258.5	5,266.5	0.00	0.00	0.00
12,100.0	90.69	90.31	6,775.4	-292.0	5,358.5	5,366.4	0.00	0.00	0.00
12,200.0	90.69	90.31	6,774.2	-292.5	5,458.5	5,466.3	0.00	0.00	0.00
12,300.0	90.69	90.31	6,773.0	-293.1	5,558.5	5,566.2	0.00	0.00	0.00
12,400.0	90.69	90.31	6,771.7	-293.6	5,658.5	5,666.1	0.00	0.00	0.00
12,500.0	90.69	90.31	6,770.5	-294.1	5,758.5	5,766.0	0.00	0.00	0.00
12,545.1	90.69	90.31	6,770.0	-294.4	5,803.5	5,811.0	0.00	0.00	0.00
BHL 78'FSL, 1800'FEL, SEC.19									

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,297.2	6,833.2	7"	7	7-1/2

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #3 (1-22-14)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,530.5	3,520.0	PARKMAN				
4,265.2	4,250.0	SUSSEX				
4,978.7	4,960.0	SHANNON				
6,486.5	6,450.0	SHARON SPRINGS				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,700.0	1,700.0	0.0	0.0	KOP #1	
6,088.0	6,069.3	-262.0	-217.0	KOP #2	
7,297.2	6,833.2	-266.2	556.1	End of Build	



# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24Q-302**

**Wellbore #1**

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

## **Anticollision Report**

**23 January, 2014**





<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-232 - Wellbore #1 - Plan #3 (1-22-14)												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance					Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation		Separation Factor
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
2,000.0	1,999.5	1,974.8	1,956.6	4.3	6.2	112.88	239.3	-135.5	284.2	275.2	9.03	31.486	
2,100.0	2,098.8	2,071.8	2,052.4	4.5	6.5	115.55	254.3	-138.2	304.0	294.6	9.43	32.256	
2,200.0	2,198.2	2,168.8	2,148.1	4.7	6.9	118.00	269.2	-141.0	324.5	314.7	9.84	32.978	
2,300.0	2,297.5	2,265.8	2,243.9	4.9	7.3	120.16	284.2	-143.7	345.6	335.3	10.27	33.647	
2,400.0	2,396.9	2,362.8	2,339.7	5.2	7.6	122.08	299.2	-146.4	367.0	356.3	10.71	34.267	
2,500.0	2,496.2	2,459.7	2,435.4	5.4	8.0	123.78	314.2	-149.1	388.8	377.6	11.16	34.840	
2,600.0	2,595.6	2,556.7	2,531.2	5.7	8.3	125.31	329.1	-151.9	410.9	399.2	11.62	35.371	
2,700.0	2,694.9	2,653.7	2,627.0	5.9	8.7	126.68	344.1	-154.6	433.2	421.1	12.08	35.863	
2,800.0	2,794.3	2,750.6	2,722.8	6.2	9.0	127.91	359.1	-157.3	455.7	443.2	12.55	36.320	
2,900.0	2,893.6	2,847.6	2,818.5	6.4	9.4	129.03	374.1	-160.0	478.5	465.5	13.02	36.744	
3,000.0	2,993.0	2,944.6	2,914.3	6.7	9.7	130.05	389.0	-162.8	501.4	487.9	13.50	37.139	
3,100.0	3,092.3	3,041.6	3,010.1	7.0	10.1	130.98	404.0	-165.5	524.4	510.4	13.98	37.508	
3,200.0	3,191.7	3,138.5	3,105.8	7.3	10.4	131.83	419.0	-168.2	547.5	533.1	14.46	37.853	
3,300.0	3,291.0	3,235.5	3,201.6	7.6	10.8	132.62	434.0	-171.0	570.8	555.8	14.95	38.176	
3,400.0	3,390.4	3,332.5	3,297.4	7.8	11.1	133.34	449.0	-173.7	594.1	578.7	15.44	38.479	
3,500.0	3,489.7	3,429.4	3,393.1	8.1	11.5	134.01	463.9	-176.4	617.6	601.6	15.93	38.764	
3,600.0	3,589.1	3,526.4	3,488.9	8.4	11.9	134.63	478.9	-179.1	641.1	624.7	16.42	39.032	
3,700.0	3,688.4	3,623.4	3,584.7	8.7	12.2	135.20	493.9	-181.9	664.7	647.7	16.92	39.284	
3,800.0	3,787.8	3,720.4	3,680.5	9.0	12.6	135.74	508.9	-184.6	688.3	670.9	17.41	39.523	
3,900.0	3,887.1	3,817.3	3,776.2	9.3	12.9	136.24	523.8	-187.3	712.0	694.1	17.91	39.748	
4,000.0	3,986.5	3,914.3	3,872.0	9.6	13.3	136.71	538.8	-190.0	735.7	717.3	18.41	39.962	
4,100.0	4,085.9	4,011.3	3,967.8	9.9	13.6	137.15	553.8	-192.8	759.5	740.6	18.91	40.164	
4,200.0	4,185.2	4,108.3	4,063.5	10.2	14.0	137.56	568.8	-195.5	783.3	763.9	19.41	40.356	
4,300.0	4,284.6	4,205.2	4,159.3	10.5	14.3	137.95	583.7	-198.2	807.1	787.2	19.91	40.538	
4,400.0	4,383.9	4,302.2	4,255.1	10.8	14.7	138.31	598.7	-200.9	831.0	810.6	20.41	40.712	
4,500.0	4,483.3	4,399.2	4,350.8	11.1	15.0	138.66	613.7	-203.7	855.0	834.0	20.92	40.877	
4,600.0	4,582.6	4,496.1	4,446.6	11.4	15.4	138.99	628.7	-206.4	878.9	857.5	21.42	41.035	
4,700.0	4,682.0	4,593.1	4,542.4	11.7	15.8	139.32	643.6	-209.1	902.9	880.9	21.93	41.178	
4,800.0	4,781.5	4,690.5	4,638.6	11.9	16.1	139.83	658.7	-211.9	925.4	902.9	22.45	41.218	
4,900.0	4,881.3	4,788.5	4,735.3	12.1	16.5	140.16	673.8	-214.6	945.3	922.3	22.95	41.183	
5,000.0	4,981.3	4,887.0	4,832.6	12.3	16.8	140.30	689.0	-217.4	962.5	939.1	23.43	41.080	
5,100.0	5,081.3	4,985.7	4,930.1	12.5	17.2	-0.19	704.3	-220.2	978.0	949.1	28.88	33.862	
5,200.0	5,181.3	5,084.5	5,027.7	12.7	17.5	-0.35	719.5	-222.9	993.5	964.1	29.42	33.766	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWDD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	-89.98	0.0	-61.3	61.3				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	-89.98	0.0	-61.3	61.3	61.1	0.22	272.703	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	-89.98	0.0	-61.3	61.3	60.6	0.67	90.901	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	-89.98	0.0	-61.3	61.3	60.2	1.12	54.541	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	-89.98	0.0	-61.3	61.3	59.7	1.57	38.958	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	-89.98	0.0	-61.3	61.3	59.3	2.02	30.300	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	-89.98	0.0	-61.3	61.3	58.8	2.47	24.791	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	-89.98	0.0	-61.3	61.3	58.4	2.92	20.977	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	-89.98	0.0	-61.3	61.3	57.9	3.37	18.180	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	-89.98	0.0	-61.3	61.3	57.5	3.82	16.041	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	-89.98	0.0	-61.3	61.3	57.0	4.27	14.353 CC, ES	
1,100.0	1,100.0	1,099.2	1,099.1	2.4	2.4	-88.51	-88.51	1.6	-61.9	62.0	57.3	4.72	13.137	
1,200.0	1,200.0	1,198.1	1,197.9	2.6	2.6	-84.32	-84.32	6.4	-63.9	64.2	59.1	5.16	12.439	
1,300.0	1,300.0	1,296.6	1,296.1	2.8	2.8	-78.03	-78.03	14.2	-67.1	68.7	63.1	5.61	12.231	
1,400.0	1,400.0	1,396.1	1,395.0	3.0	3.0	-71.60	-71.60	23.6	-70.9	74.9	68.8	6.08	12.317	
1,500.0	1,500.0	1,495.6	1,494.0	3.3	3.3	-66.20	-66.20	32.9	-74.7	81.9	75.3	6.55	12.499	
1,600.0	1,600.0	1,595.1	1,593.0	3.5	3.5	-61.68	-61.68	42.3	-78.5	89.5	82.4	7.02	12.735	
1,700.0	1,700.0	1,694.5	1,691.9	3.7	3.8	-57.89	-57.89	51.7	-82.3	97.5	90.0	7.50	12.999	
1,800.0	1,800.0	1,793.9	1,790.8	3.9	4.1	86.46	86.46	61.0	-86.1	105.8	98.0	7.87	13.451	
1,900.0	1,899.8	1,893.0	1,889.4	4.1	4.3	91.53	91.53	70.3	-89.9	114.7	106.4	8.27	13.863	
2,000.0	1,999.5	1,991.7	1,987.6	4.3	4.6	97.37	97.37	79.6	-93.7	124.7	116.0	8.68	14.370	
2,100.0	2,098.8	2,090.0	2,085.4	4.5	4.9	103.43	103.43	88.9	-97.5	136.5	127.4	9.10	15.007	
2,200.0	2,198.2	2,188.3	2,183.1	4.7	5.1	108.59	108.59	98.1	-101.2	149.7	140.2	9.53	15.708	
2,300.0	2,297.5	2,286.6	2,280.9	4.9	5.4	112.90	112.90	107.4	-105.0	163.9	153.9	9.97	16.433	
2,400.0	2,396.9	2,384.9	2,378.7	5.2	5.7	116.51	116.51	116.6	-108.8	178.8	168.4	10.42	17.157	
2,500.0	2,496.2	2,483.2	2,476.5	5.4	6.0	119.56	119.56	125.9	-112.5	194.4	183.5	10.88	17.864	
2,600.0	2,595.6	2,581.5	2,574.3	5.7	6.2	122.16	122.16	135.1	-116.3	210.4	199.0	11.34	18.547	
2,700.0	2,694.9	2,679.7	2,672.1	5.9	6.5	124.39	124.39	144.4	-120.0	226.7	214.9	11.81	19.200	
2,800.0	2,794.3	2,778.0	2,769.8	6.2	6.8	126.32	126.32	153.6	-123.8	243.4	231.1	12.28	19.821	
2,900.0	2,893.6	2,876.3	2,867.6	6.4	7.1	128.00	128.00	162.9	-127.6	260.3	247.5	12.75	20.410	
3,000.0	2,993.0	2,974.6	2,965.4	6.7	7.3	129.48	129.48	172.1	-131.3	277.4	264.2	13.23	20.967	
3,100.0	3,092.3	3,072.9	3,063.2	7.0	7.6	130.78	130.78	181.3	-135.1	294.6	280.9	13.71	21.493	
3,200.0	3,191.7	3,171.2	3,161.0	7.3	7.9	131.94	131.94	190.6	-138.9	312.0	297.8	14.19	21.990	
3,300.0	3,291.0	3,269.5	3,258.8	7.6	8.2	132.98	132.98	199.8	-142.6	329.5	314.8	14.67	22.459	
3,400.0	3,390.4	3,367.8	3,356.5	7.8	8.5	133.91	133.91	209.1	-146.4	347.1	331.9	15.15	22.902	
3,500.0	3,489.7	3,466.1	3,454.3	8.1	8.8	134.76	134.76	218.3	-150.2	364.7	349.1	15.64	23.321	
3,600.0	3,589.1	3,564.4	3,552.1	8.4	9.0	135.52	135.52	227.6	-153.9	382.5	366.4	16.13	23.717	
3,700.0	3,688.4	3,662.7	3,649.9	8.7	9.3	136.22	136.22	236.8	-157.7	400.3	383.7	16.61	24.091	
3,800.0	3,787.8	3,761.0	3,747.7	9.0	9.6	136.86	136.86	246.1	-161.5	418.1	401.0	17.10	24.446	
3,900.0	3,887.1	3,859.2	3,845.5	9.3	9.9	137.44	137.44	255.3	-165.2	436.0	418.4	17.59	24.783	
4,000.0	3,986.5	3,957.5	3,943.2	9.6	10.2	137.98	137.98	264.6	-169.0	454.0	435.9	18.08	25.102	
4,100.0	4,085.9	4,055.8	4,041.0	9.9	10.4	138.48	138.48	273.8	-172.7	471.9	453.3	18.58	25.405	
4,200.0	4,185.2	4,154.1	4,138.8	10.2	10.7	138.95	138.95	283.1	-176.5	489.9	470.9	19.07	25.693	
4,300.0	4,284.6	4,252.4	4,236.6	10.5	11.0	139.38	139.38	292.3	-180.3	508.0	488.4	19.56	25.968	
4,400.0	4,383.9	4,350.7	4,334.4	10.8	11.3	139.78	139.78	301.6	-184.0	526.0	506.0	20.05	26.229	
4,500.0	4,483.3	4,449.0	4,432.2	11.1	11.6	140.15	140.15	310.8	-187.8	544.1	523.5	20.55	26.478	
4,600.0	4,582.6	4,547.3	4,529.9	11.4	11.9	140.50	140.50	320.1	-191.6	562.2	541.2	21.04	26.716	
4,700.0	4,682.0	4,645.6	4,627.7	11.7	12.1	140.84	140.84	329.3	-195.3	580.3	558.8	21.54	26.940	
4,800.0	4,781.5	4,744.2	4,725.8	11.9	12.4	141.24	141.24	338.6	-199.1	596.9	574.9	22.04	27.088	
4,900.0	4,881.3	4,843.2	4,824.3	12.1	12.7	141.38	141.38	347.9	-202.9	610.8	588.3	22.51	27.136	
5,000.0	4,981.3	4,942.5	4,923.1	12.3	13.0	141.29	141.29	357.3	-206.7	622.0	599.1	22.96	27.093	

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

Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance		Between		Minimum	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Centres (ft)	Ellipses (ft)	Separation (ft)	Factor		
5,100.0	5,081.3	5,042.0	5,022.1	12.5	13.3	0.59	366.6	-210.5	631.4	606.6	24.86	25.404		
5,200.0	5,181.3	5,141.5	5,121.1	12.7	13.6	0.24	376.0	-214.3	640.8	615.5	25.32	25.313		
5,300.0	5,281.3	5,243.9	5,223.0	12.8	13.9	-0.11	385.6	-218.2	650.2	624.4	25.78	25.220		
5,400.0	5,381.3	5,370.5	5,349.2	13.0	14.1	-0.42	394.3	-221.8	657.1	630.9	26.24	25.045		
5,500.0	5,481.3	5,497.6	5,476.2	13.2	14.4	-0.54	397.9	-223.3	660.0	633.3	26.65	24.768		
5,600.0	5,581.3	5,602.7	5,581.3	13.4	14.5	-0.55	398.0	-223.3	660.0	633.0	27.01	24.437		
5,700.0	5,681.3	5,702.7	5,681.3	13.6	14.7	-0.55	398.0	-223.3	660.0	632.7	27.39	24.100		
5,800.0	5,781.3	5,802.7	5,781.3	13.7	14.9	-0.55	398.0	-223.3	660.0	632.3	27.77	23.771		
5,900.0	5,881.3	5,902.7	5,881.3	13.9	15.1	-0.55	398.0	-223.3	660.0	631.9	28.15	23.448		
6,000.0	5,981.3	6,002.7	5,981.3	14.1	15.3	-0.55	398.0	-223.3	660.0	631.5	28.53	23.133		
6,100.0	6,081.3	6,102.8	6,081.5	14.3	15.5	-90.85	398.0	-223.2	660.0	632.5	27.54	23.968		
6,200.0	6,180.9	6,204.2	6,182.4	14.4	15.6	-90.85	398.0	-214.9	660.0	632.2	27.85	23.698		
6,300.0	6,278.6	6,305.4	6,281.2	14.5	15.7	-90.82	397.9	-193.3	660.0	631.9	28.09	23.495		
6,400.0	6,372.7	6,406.7	6,376.4	14.6	15.8	-90.78	397.7	-158.9	660.0	631.7	28.31	23.315		
6,500.0	6,461.6	6,507.8	6,466.0	14.6	15.9	-90.73	397.4	-112.2	660.0	631.4	28.59	23.089		
6,600.0	6,543.8	6,608.9	6,548.7	14.7	16.0	-90.67	397.1	-54.2	660.0	631.0	29.05	22.723		
6,700.0	6,617.9	6,709.9	6,622.9	14.8	16.1	-90.59	396.7	14.2	660.0	630.1	29.84	22.116		
6,800.0	6,682.6	6,810.7	6,687.4	15.1	16.4	-90.51	396.3	91.6	660.0	628.8	31.13	21.199		
6,900.0	6,736.8	6,911.4	6,741.0	16.0	17.3	-90.41	395.8	176.7	660.0	626.9	33.03	19.980		
7,000.0	6,779.6	7,011.9	6,783.0	17.3	18.6	-90.31	395.3	268.0	659.9	624.3	35.59	18.544		
7,100.0	6,810.2	7,112.3	6,812.5	18.9	20.2	-90.20	394.8	363.9	659.9	621.2	38.76	17.026		
7,200.0	6,828.2	7,212.5	6,829.3	20.7	22.0	-90.09	394.3	462.6	659.9	617.5	42.44	15.549		
7,300.0	6,833.2	7,312.6	6,833.1	22.8	24.0	-89.99	393.7	562.5	659.9	613.4	46.48	14.196		
7,400.0	6,832.0	7,412.6	6,831.8	24.9	26.2	-89.99	393.2	662.5	659.9	609.1	50.79	12.991		
7,500.0	6,830.8	7,512.6	6,830.6	27.2	28.4	-89.99	392.6	762.5	659.9	604.5	55.34	11.924		
7,600.0	6,829.6	7,612.6	6,829.4	29.6	30.8	-89.99	392.1	862.5	659.9	599.8	60.07	10.985		
7,700.0	6,828.3	7,712.6	6,828.2	32.0	33.2	-89.99	391.5	962.5	659.9	594.9	64.94	10.161		
7,800.0	6,827.1	7,812.6	6,827.0	34.5	35.7	-89.99	391.0	1,062.5	659.8	589.9	69.92	9.437		
7,900.0	6,825.9	7,912.6	6,825.8	37.1	38.2	-89.99	390.4	1,162.5	659.8	584.8	75.00	8.798		
8,000.0	6,824.7	8,012.6	6,824.6	39.6	40.7	-89.99	389.9	1,262.5	659.8	579.7	80.14	8.233		
8,100.0	6,823.5	8,112.6	6,823.4	42.2	43.3	-89.99	389.3	1,362.5	659.8	574.5	85.35	7.731		
8,200.0	6,822.3	8,212.6	6,822.2	44.9	45.9	-89.99	388.8	1,462.5	659.8	569.2	90.60	7.282		
8,300.0	6,821.1	8,312.6	6,821.0	47.5	48.6	-89.99	388.2	1,562.5	659.8	563.9	95.90	6.880		
8,400.0	6,819.9	8,412.6	6,819.8	50.2	51.2	-89.99	387.7	1,662.4	659.8	558.6	101.23	6.518		
8,500.0	6,818.7	8,512.6	6,818.6	52.9	53.9	-89.99	387.1	1,762.4	659.8	553.2	106.59	6.190		
8,600.0	6,817.5	8,612.6	6,817.4	55.6	56.6	-89.99	386.6	1,862.4	659.8	547.8	111.98	5.892		
8,700.0	6,816.3	8,712.6	6,816.2	58.3	59.3	-89.99	386.0	1,962.4	659.8	542.4	117.39	5.620		
8,800.0	6,815.1	8,812.6	6,815.0	61.0	62.0	-89.99	385.5	2,062.4	659.7	536.9	122.81	5.372		
8,900.0	6,813.9	8,912.6	6,813.8	63.7	64.7	-89.99	385.0	2,162.4	659.7	531.5	128.25	5.144		
9,000.0	6,812.7	9,012.6	6,812.6	66.4	67.4	-89.99	384.4	2,262.4	659.7	526.0	133.71	4.934		
9,100.0	6,811.5	9,112.6	6,811.4	69.2	70.1	-89.99	383.9	2,362.4	659.7	520.5	139.18	4.740		
9,200.0	6,810.3	9,212.6	6,810.2	71.9	72.9	-89.99	383.3	2,462.4	659.7	515.0	144.67	4.560		
9,300.0	6,809.1	9,312.6	6,809.0	74.7	75.6	-89.99	382.8	2,562.4	659.7	509.5	150.16	4.393		
9,400.0	6,807.9	9,412.6	6,807.8	77.4	78.4	-89.99	382.2	2,662.4	659.7	504.0	155.66	4.238		
9,500.0	6,806.7	9,512.6	6,806.6	80.2	81.1	-89.99	381.7	2,762.4	659.7	498.5	161.17	4.093		
9,600.0	6,805.5	9,612.6	6,805.4	82.9	83.9	-89.99	381.1	2,862.3	659.7	493.0	166.68	3.958		
9,700.0	6,804.3	9,712.6	6,804.1	85.7	86.6	-89.99	380.6	2,962.3	659.7	487.5	172.21	3.831		
9,800.0	6,803.1	9,812.6	6,802.9	88.5	89.4	-89.99	380.0	3,062.3	659.6	481.9	177.74	3.711		
9,900.0	6,801.9	9,912.6	6,801.7	91.2	92.1	-89.99	379.5	3,162.3	659.6	476.4	183.27	3.599		
10,000.0	6,800.6	10,012.6	6,800.5	94.0	94.9	-89.99	378.9	3,262.3	659.6	470.8	188.81	3.494		
10,100.0	6,799.4	10,112.6	6,799.3	96.8	97.7	-89.99	378.4	3,362.3	659.6	465.3	194.35	3.394		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,200.0	6,798.2	10,212.6	6,798.1	99.6	100.5	-89.99	-89.99	377.8	3,462.3	659.6	459.7	199.90	3.300	
10,300.0	6,797.0	10,312.6	6,796.9	102.3	103.2	-89.99	-89.99	377.3	3,562.3	659.6	454.1	205.45	3.210	
10,400.0	6,795.8	10,412.6	6,795.7	105.1	106.0	-89.99	-89.99	376.7	3,662.3	659.6	448.6	211.01	3.126	
10,500.0	6,794.6	10,512.6	6,794.5	107.9	108.8	-89.99	-89.99	376.2	3,762.3	659.6	443.0	216.57	3.046	
10,600.0	6,793.4	10,612.6	6,793.3	110.7	111.6	-89.99	-89.99	375.6	3,862.3	659.6	437.4	222.13	2.969	
10,700.0	6,792.2	10,712.6	6,792.1	113.5	114.3	-89.99	-89.99	375.1	3,962.2	659.6	431.9	227.70	2.897	
10,800.0	6,791.0	10,812.6	6,790.9	116.2	117.1	-89.99	-89.99	374.6	4,062.2	659.5	426.3	233.26	2.827	
10,900.0	6,789.8	10,912.6	6,789.7	119.0	119.9	-89.99	-89.99	374.0	4,162.2	659.5	420.7	238.83	2.762	
11,000.0	6,788.6	11,012.6	6,788.5	121.8	122.7	-89.99	-89.99	373.5	4,262.2	659.5	415.1	244.40	2.699	
11,100.0	6,787.4	11,112.6	6,787.3	124.6	125.5	-89.99	-89.99	372.9	4,362.2	659.5	409.5	249.98	2.638	
11,200.0	6,786.2	11,212.6	6,786.1	127.4	128.3	-89.99	-89.99	372.4	4,462.2	659.5	404.0	255.55	2.581	
11,300.0	6,785.0	11,312.6	6,784.9	130.2	131.0	-89.99	-89.99	371.8	4,562.2	659.5	398.4	261.13	2.526	
11,400.0	6,783.8	11,412.6	6,783.7	133.0	133.8	-89.99	-89.99	371.3	4,662.2	659.5	392.8	266.71	2.473	
11,500.0	6,782.6	11,512.6	6,782.5	135.8	136.6	-89.99	-89.99	370.7	4,762.2	659.5	387.2	272.29	2.422	
11,600.0	6,781.4	11,612.6	6,781.3	138.5	139.4	-89.99	-89.99	370.2	4,862.2	659.5	381.6	277.87	2.373	
11,700.0	6,780.2	11,712.6	6,780.1	141.3	142.2	-89.99	-89.99	369.6	4,962.2	659.5	376.0	283.46	2.326	
11,800.0	6,779.0	11,812.6	6,778.9	144.1	145.0	-89.99	-89.99	369.1	5,062.1	659.4	370.4	289.04	2.281	
11,900.0	6,777.8	11,912.6	6,777.7	146.9	147.8	-89.99	-89.99	368.5	5,162.1	659.4	364.8	294.63	2.238	
12,000.0	6,776.6	12,012.6	6,776.5	149.7	150.6	-89.99	-89.99	368.0	5,262.1	659.4	359.2	300.22	2.196	
12,100.0	6,775.4	12,112.6	6,775.2	152.5	153.4	-89.99	-89.99	367.4	5,362.1	659.4	353.6	305.81	2.156	
12,200.0	6,774.2	12,212.6	6,774.0	155.3	156.2	-89.99	-89.99	366.9	5,462.1	659.4	348.0	311.40	2.118	
12,300.0	6,773.0	12,312.6	6,772.8	158.1	159.0	-89.99	-89.99	366.3	5,562.1	659.4	342.4	316.99	2.080	
12,400.0	6,771.7	12,412.6	6,771.6	160.9	161.7	-89.99	-89.99	365.8	5,662.1	659.4	336.8	322.58	2.044	
12,500.0	6,770.5	12,512.6	6,770.4	163.7	164.4	-89.99	-89.99	365.2	5,762.1	659.4	331.3	328.05	2.010	
12,531.3	6,770.2	12,543.9	6,770.1	164.6	165.0	-89.99	-89.99	365.1	5,793.4	659.4	329.9	329.49	2.001	
12,545.1	6,770.0	12,548.3	6,770.0	165.0	165.1	-89.99	-89.99	365.0	5,797.8	659.4	329.5	329.95	1.999 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	-89.98	0.0	-30.6	30.6				
100.0	100.0	100.0	100.0	0.1	0.1	-89.98	-89.98	0.0	-30.6	30.6	30.4	0.22	136.352	
200.0	200.0	200.0	200.0	0.3	0.3	-89.98	-89.98	0.0	-30.6	30.6	30.0	0.67	45.451	
300.0	300.0	300.0	300.0	0.6	0.6	-89.98	-89.98	0.0	-30.6	30.6	29.5	1.12	27.270	
400.0	400.0	400.0	400.0	0.8	0.8	-89.98	-89.98	0.0	-30.6	30.6	29.1	1.57	19.479	
500.0	500.0	500.0	500.0	1.0	1.0	-89.98	-89.98	0.0	-30.6	30.6	28.6	2.02	15.150	
600.0	600.0	600.0	600.0	1.2	1.2	-89.98	-89.98	0.0	-30.6	30.6	28.2	2.47	12.396	
700.0	700.0	700.0	700.0	1.5	1.5	-89.98	-89.98	0.0	-30.6	30.6	27.7	2.92	10.489	
800.0	800.0	800.0	800.0	1.7	1.7	-89.98	-89.98	0.0	-30.6	30.6	27.3	3.37	9.090	
900.0	900.0	900.0	900.0	1.9	1.9	-89.98	-89.98	0.0	-30.6	30.6	26.8	3.82	8.021	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	-89.98	-89.98	0.0	-30.6	30.6	26.4	4.27	7.176	
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	-89.98	-89.98	0.0	-30.6	30.6	25.9	4.72	6.493	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	-89.98	-89.98	0.0	-30.6	30.6	25.5	5.17	5.928	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-89.98	-89.98	0.0	-30.6	30.6	25.0	5.62	5.454	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	-89.98	-89.98	0.0	-30.6	30.6	24.6	6.07	5.050	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	-89.98	-89.98	0.0	-30.6	30.6	24.1	6.52	4.702 CC, ES	
1,600.0	1,600.0	1,599.0	1,598.9	3.5	3.5	-88.94	-88.94	0.6	-32.3	32.3	25.3	6.96	4.640	
1,700.0	1,700.0	1,697.7	1,697.5	3.7	3.7	-86.38	-86.38	2.3	-37.1	37.2	29.8	7.39	5.036	
1,800.0	1,800.0	1,796.0	1,795.5	3.9	3.9	58.73	58.73	5.2	-45.0	44.6	36.8	7.79	5.724	
1,900.0	1,899.8	1,895.1	1,894.0	4.1	4.1	65.77	65.77	9.0	-55.3	53.1	44.9	8.18	6.493	
2,000.0	1,999.5	1,994.4	1,992.7	4.3	4.4	73.86	73.86	12.7	-65.6	61.3	52.7	8.58	7.140	
2,100.0	2,098.8	2,093.6	2,091.2	4.5	4.6	82.06	82.06	16.5	-76.0	70.0	61.0	9.01	7.769	
2,200.0	2,198.2	2,192.7	2,189.8	4.7	4.9	88.49	88.49	20.3	-86.3	79.9	70.4	9.46	8.442	
2,300.0	2,297.5	2,291.9	2,288.3	4.9	5.1	93.46	93.46	24.0	-96.7	90.5	80.6	9.92	9.118	
2,400.0	2,396.9	2,391.1	2,386.9	5.2	5.4	97.37	97.37	27.8	-107.0	101.6	91.2	10.40	9.773	
2,500.0	2,496.2	2,490.2	2,485.4	5.4	5.7	100.50	100.50	31.5	-117.4	113.2	102.3	10.89	10.394	
2,600.0	2,595.6	2,589.4	2,584.0	5.7	5.9	103.04	103.04	35.3	-127.7	125.0	113.6	11.39	10.977	
2,700.0	2,694.9	2,688.6	2,682.5	5.9	6.2	105.14	105.14	39.1	-138.1	137.0	125.1	11.89	11.520	
2,800.0	2,794.3	2,787.7	2,781.1	6.2	6.5	106.91	106.91	42.8	-148.4	149.1	136.7	12.40	12.025	
2,900.0	2,893.6	2,886.9	2,879.6	6.4	6.8	108.40	108.40	46.6	-158.8	161.4	148.5	12.92	12.494	
3,000.0	2,993.0	2,986.0	2,978.2	6.7	7.1	109.69	109.69	50.4	-169.1	173.8	160.3	13.44	12.928	
3,100.0	3,092.3	3,085.2	3,076.7	7.0	7.3	110.80	110.80	54.1	-179.5	186.2	172.3	13.97	13.331	
3,200.0	3,191.7	3,184.4	3,175.3	7.3	7.6	111.77	111.77	57.9	-189.8	198.7	184.2	14.50	13.706	
3,300.0	3,291.0	3,283.5	3,273.8	7.6	7.9	112.63	112.63	61.6	-200.1	211.3	196.3	15.03	14.054	
3,400.0	3,390.4	3,388.1	3,377.9	7.8	8.2	113.72	113.72	65.1	-209.5	222.8	207.2	15.53	14.349	
3,500.0	3,489.7	3,493.5	3,483.1	8.1	8.4	115.38	115.38	67.2	-215.4	231.8	215.8	16.00	14.480	
3,600.0	3,589.1	3,598.9	3,588.4	8.4	8.6	117.58	117.58	68.0	-217.6	238.4	221.9	16.47	14.473	
3,700.0	3,688.4	3,698.9	3,688.4	8.7	8.7	119.95	119.95	68.0	-217.6	243.9	227.0	16.93	14.404	
3,800.0	3,787.8	3,798.2	3,787.8	9.0	8.9	122.20	122.20	68.0	-217.6	249.8	232.4	17.41	14.350	
3,900.0	3,887.1	3,897.6	3,887.1	9.3	9.1	124.34	124.34	68.0	-217.6	256.1	238.2	17.88	14.323	
4,000.0	3,986.5	3,996.9	3,986.5	9.6	9.3	126.38	126.38	68.0	-217.6	262.7	244.3	18.34	14.321	
4,100.0	4,085.9	4,096.3	4,085.9	9.9	9.5	128.32	128.32	68.0	-217.6	269.6	250.8	18.80	14.338	
4,200.0	4,185.2	4,195.6	4,185.2	10.2	9.7	130.16	130.16	68.0	-217.6	276.8	257.6	19.26	14.373	
4,300.0	4,284.6	4,295.0	4,284.6	10.5	9.9	131.90	131.90	68.0	-217.6	284.3	264.6	19.71	14.423	
4,400.0	4,383.9	4,394.3	4,383.9	10.8	10.2	133.56	133.56	68.0	-217.6	292.1	271.9	20.16	14.485	
4,500.0	4,483.3	4,493.7	4,483.3	11.1	10.4	135.13	135.13	68.0	-217.6	300.0	279.4	20.61	14.558	
4,600.0	4,582.6	4,593.0	4,582.6	11.4	10.6	136.61	136.61	68.0	-217.6	308.2	287.2	21.06	14.639	
4,700.0	4,682.0	4,692.4	4,682.0	11.7	10.8	138.03	138.03	68.0	-217.6	316.6	295.1	21.50	14.726	
4,800.0	4,781.5	4,791.9	4,781.5	11.9	11.0	139.23	139.23	68.0	-217.6	323.6	301.7	21.92	14.761	
4,900.0	4,881.3	4,891.8	4,881.3	12.1	11.2	139.96	139.96	68.0	-217.6	328.1	305.8	22.34	14.690	
5,000.0	4,981.3	4,991.7	4,981.3	12.3	11.4	140.25	140.25	68.0	-217.6	330.0	307.2	22.73	14.514	

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



Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.0	5,081.3	5,091.7	5,081.3	12.5	11.6	-0.11	68.0	-217.6	330.0	307.1	22.92	14.398		
5,200.0	5,181.3	5,191.7	5,181.3	12.7	11.8	-0.11	68.0	-217.6	330.0	306.7	23.32	14.150		
5,300.0	5,281.3	5,291.7	5,281.3	12.8	12.0	-0.11	68.0	-217.6	330.0	306.3	23.73	13.910		
5,400.0	5,381.3	5,391.7	5,381.3	13.0	12.2	-0.11	68.0	-217.6	330.0	305.9	24.13	13.676		
5,500.0	5,481.3	5,491.7	5,481.3	13.2	12.5	-0.11	68.0	-217.6	330.0	305.5	24.54	13.450		
5,600.0	5,581.3	5,591.7	5,581.3	13.4	12.7	-0.11	68.0	-217.6	330.0	305.1	24.94	13.230		
5,700.0	5,681.3	5,691.7	5,681.3	13.6	12.9	-0.11	68.0	-217.6	330.0	304.7	25.35	13.017		
5,800.0	5,781.3	5,791.7	5,781.3	13.7	13.1	-0.11	68.0	-217.6	330.0	304.3	25.76	12.810		
5,900.0	5,881.3	5,891.8	5,881.3	13.9	13.3	-0.10	68.0	-217.6	330.0	303.8	26.17	12.609		
5,950.9	5,932.2	5,942.7	5,932.2	14.0	13.4	0.33	68.0	-215.1	330.0	303.6	26.38	12.511		
6,000.0	5,981.3	5,991.3	5,980.5	14.1	13.5	1.28	68.0	-209.6	330.0	303.5	26.58	12.417		
6,100.0	6,081.3	6,087.3	6,074.3	14.3	13.6	-85.59	67.9	-189.8	331.0	304.1	26.99	12.267		
6,200.0	6,180.9	6,179.5	6,161.5	14.4	13.7	-81.47	67.7	-159.8	333.9	306.7	27.16	12.292		
6,300.0	6,278.6	6,269.3	6,242.3	14.5	13.8	-77.58	67.5	-120.8	338.3	311.0	27.31	12.389		
6,400.0	6,372.7	6,356.9	6,316.2	14.6	14.0	-74.00	67.2	-73.8	343.9	316.4	27.45	12.528		
6,500.0	6,461.6	6,442.8	6,382.9	14.6	14.3	-70.78	66.9	-19.8	350.2	322.5	27.64	12.668		
6,600.0	6,543.8	6,527.1	6,442.1	14.7	14.7	-67.93	66.5	40.1	356.8	328.8	27.96	12.760		
6,700.0	6,617.9	6,610.1	6,493.6	14.8	15.4	-65.48	66.2	105.1	363.3	334.9	28.49	12.756		
6,800.0	6,682.6	6,691.9	6,537.3	15.1	16.2	-63.42	65.8	174.4	369.5	340.2	29.32	12.603		
6,900.0	6,736.8	6,773.0	6,572.9	16.0	17.2	-61.75	65.3	247.1	374.9	344.4	30.54	12.274		
7,000.0	6,779.6	6,850.0	6,599.4	17.3	18.4	-60.50	64.9	319.4	379.4	347.2	32.17	11.791		
7,100.0	6,810.2	6,933.1	6,619.8	18.9	19.9	-59.56	64.5	399.9	382.7	348.3	34.36	11.136		
7,200.0	6,828.2	7,012.6	6,630.9	20.7	21.4	-59.02	64.0	478.6	384.7	347.7	36.94	10.412		
7,300.0	6,833.2	7,093.6	6,633.8	22.8	23.1	-58.85	63.6	559.5	385.3	345.3	39.95	9.645		
7,400.0	6,832.0	7,193.6	6,633.2	24.9	25.3	-58.92	63.0	659.5	385.0	341.3	43.70	8.809		
7,500.0	6,830.8	7,293.6	6,632.6	27.2	27.5	-58.98	62.4	759.5	384.7	337.0	47.67	8.070		
7,600.0	6,829.6	7,393.6	6,631.9	29.6	29.9	-59.05	61.8	859.5	384.3	332.5	51.80	7.420		
7,700.0	6,828.3	7,493.6	6,631.3	32.0	32.4	-59.12	61.3	959.5	384.0	328.0	56.06	6.850		
7,800.0	6,827.1	7,593.6	6,630.6	34.5	34.9	-59.19	60.7	1,059.5	383.7	323.3	60.43	6.350		
7,900.0	6,825.9	7,693.6	6,630.0	37.1	37.4	-59.26	60.1	1,159.5	383.4	318.5	64.88	5.909		
8,000.0	6,824.7	7,793.6	6,629.3	39.6	40.0	-59.33	59.5	1,259.5	383.1	313.7	69.40	5.519		
8,100.0	6,823.5	7,893.6	6,628.7	42.2	42.6	-59.40	59.0	1,359.5	382.8	308.8	73.99	5.173		
8,200.0	6,822.3	7,993.6	6,628.0	44.9	45.3	-59.47	58.4	1,459.5	382.4	303.8	78.62	4.865		
8,300.0	6,821.1	8,093.6	6,627.4	47.5	47.9	-59.54	57.8	1,559.5	382.1	298.8	83.29	4.588		
8,400.0	6,819.9	8,193.6	6,626.7	50.2	50.6	-59.61	57.3	1,659.5	381.8	293.8	88.00	4.339		
8,500.0	6,818.7	8,293.6	6,626.1	52.9	53.3	-59.68	56.7	1,759.5	381.5	288.8	92.74	4.114		
8,600.0	6,817.5	8,393.6	6,625.5	55.6	56.0	-59.75	56.1	1,859.5	381.2	283.7	97.51	3.909		
8,700.0	6,816.3	8,493.6	6,624.8	58.3	58.7	-59.82	55.5	1,959.5	380.9	278.6	102.31	3.723		
8,800.0	6,815.1	8,593.6	6,624.2	61.0	61.4	-59.89	55.0	2,059.5	380.6	273.4	107.13	3.552		
8,900.0	6,813.9	8,693.6	6,623.5	63.7	64.1	-59.96	54.4	2,159.4	380.3	268.3	111.97	3.396		
9,000.0	6,812.7	8,793.6	6,622.9	66.4	66.9	-60.03	53.8	2,259.4	379.9	263.1	116.82	3.252		
9,100.0	6,811.5	8,893.6	6,622.2	69.2	69.6	-60.10	53.2	2,359.4	379.6	257.9	121.70	3.119		
9,200.0	6,810.3	8,993.6	6,621.6	71.9	72.3	-60.17	52.7	2,459.4	379.3	252.7	126.59	2.996		
9,300.0	6,809.1	9,093.6	6,620.9	74.7	75.1	-60.24	52.1	2,559.4	379.0	247.5	131.50	2.882		
9,400.0	6,807.9	9,193.6	6,620.3	77.4	77.8	-60.31	51.5	2,659.4	378.7	242.3	136.42	2.776		
9,500.0	6,806.7	9,293.6	6,619.6	80.2	80.6	-60.38	50.9	2,759.4	378.4	237.0	141.35	2.677		
9,600.0	6,805.5	9,393.6	6,619.0	82.9	83.4	-60.45	50.4	2,859.4	378.1	231.8	146.30	2.584		
9,700.0	6,804.3	9,493.6	6,618.3	85.7	86.1	-60.52	49.8	2,959.4	377.8	226.5	151.26	2.498		
9,800.0	6,803.1	9,593.6	6,617.7	88.5	88.9	-60.59	49.2	3,059.4	377.5	221.3	156.23	2.416		
9,900.0	6,801.9	9,693.6	6,617.1	91.2	91.7	-60.66	48.7	3,159.4	377.2	216.0	161.21	2.340		
10,000.0	6,800.6	9,793.6	6,616.4	94.0	94.4	-60.73	48.1	3,259.4	376.9	210.7	166.21	2.268		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

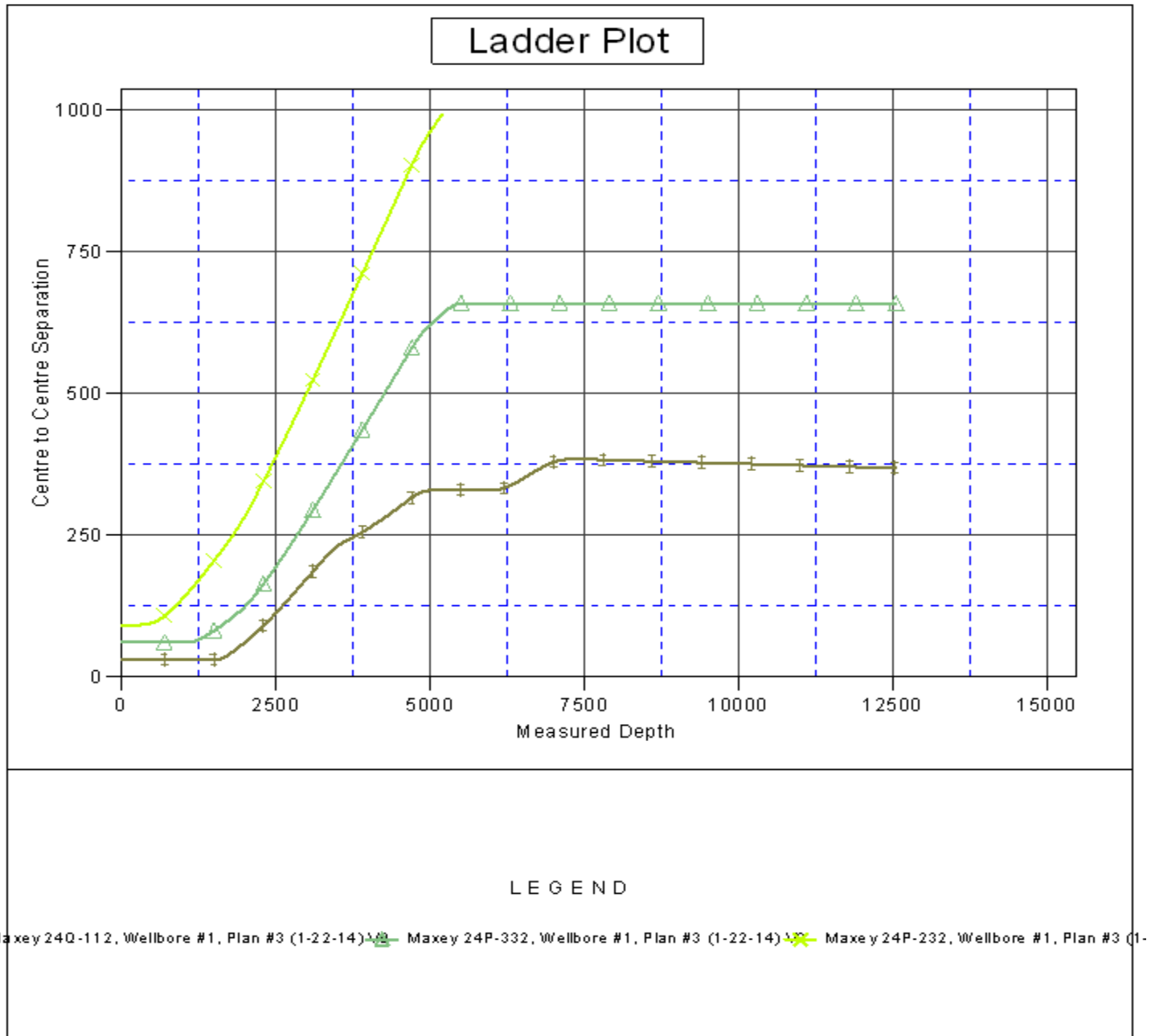
Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	6,799.4	9,893.6	6,615.8	96.8	97.2	-60.81	47.5	3,359.4	376.6	205.4	171.21	2.199		
10,200.0	6,798.2	9,993.6	6,615.1	99.6	100.0	-60.88	46.9	3,459.4	376.3	200.0	176.22	2.135		
10,300.0	6,797.0	10,093.6	6,614.5	102.3	102.8	-60.95	46.4	3,559.4	376.0	194.7	181.24	2.074		
10,400.0	6,795.8	10,193.6	6,613.8	105.1	105.5	-61.02	45.8	3,659.4	375.7	189.4	186.27	2.017		
10,500.0	6,794.6	10,293.6	6,613.2	107.9	108.3	-61.09	45.2	3,759.4	375.4	184.0	191.31	1.962		
10,600.0	6,793.4	10,393.6	6,612.5	110.7	111.1	-61.17	44.6	3,859.4	375.1	178.7	196.36	1.910		
10,700.0	6,792.2	10,493.6	6,611.9	113.5	113.9	-61.24	44.1	3,959.4	374.8	173.3	201.42	1.861		
10,800.0	6,791.0	10,593.6	6,611.2	116.2	116.7	-61.31	43.5	4,059.3	374.5	168.0	206.48	1.814		
10,900.0	6,789.8	10,693.6	6,610.6	119.0	119.5	-61.38	42.9	4,159.3	374.2	162.6	211.56	1.769		
11,000.0	6,788.6	10,793.6	6,610.0	121.8	122.2	-61.45	42.4	4,259.3	373.9	157.2	216.64	1.726		
11,100.0	6,787.4	10,893.6	6,609.3	124.6	125.0	-61.53	41.8	4,359.3	373.6	151.8	221.73	1.685		
11,200.0	6,786.2	10,993.6	6,608.7	127.4	127.8	-61.60	41.2	4,459.3	373.3	146.4	226.83	1.646		
11,300.0	6,785.0	11,093.6	6,608.0	130.2	130.6	-61.67	40.6	4,559.3	373.0	141.0	231.93	1.608		
11,400.0	6,783.8	11,193.6	6,607.4	133.0	133.4	-61.75	40.1	4,659.3	372.7	135.6	237.05	1.572		
11,500.0	6,782.6	11,293.6	6,606.7	135.8	136.2	-61.82	39.5	4,759.3	372.4	130.2	242.17	1.538		
11,600.0	6,781.4	11,393.6	6,606.1	138.5	139.0	-61.89	38.9	4,859.3	372.1	124.8	247.30	1.505		
11,700.0	6,780.2	11,493.6	6,605.4	141.3	141.8	-61.97	38.3	4,959.3	371.8	119.4	252.43	1.473 Level 3		
11,800.0	6,779.0	11,593.6	6,604.8	144.1	144.6	-62.04	37.8	5,059.3	371.5	113.9	257.57	1.442 Level 3		
11,900.0	6,777.8	11,693.6	6,604.1	146.9	147.4	-62.11	37.2	5,159.3	371.2	108.5	262.72	1.413 Level 3		
12,000.0	6,776.6	11,793.6	6,603.5	149.7	150.2	-62.19	36.6	5,259.3	370.9	103.0	267.88	1.385 Level 3		
12,100.0	6,775.4	11,893.6	6,602.9	152.5	153.0	-62.26	36.0	5,359.3	370.6	97.6	273.05	1.357 Level 3		
12,200.0	6,774.2	11,993.6	6,602.2	155.3	155.8	-62.33	35.5	5,459.3	370.3	92.1	278.22	1.331 Level 3		
12,300.0	6,773.0	12,093.6	6,601.6	158.1	158.5	-62.41	34.9	5,559.3	370.0	86.6	283.39	1.306 Level 3		
12,400.0	6,771.7	12,193.6	6,600.9	160.9	161.3	-62.48	34.3	5,659.3	369.7	81.2	288.58	1.281 Level 3		
12,500.0	6,770.5	12,293.6	6,600.3	163.7	164.1	-62.56	33.8	5,759.3	369.5	75.7	293.77	1.258 Level 3		
12,539.9	6,770.1	12,333.5	6,600.0	164.8	165.3	-62.59	33.5	5,799.2	369.3	73.5	295.84	1.248 Level 2		
12,545.1	6,770.0	12,335.0	6,600.0	165.0	165.3	-62.59	33.5	5,800.7	369.3	73.3	296.02	1.248 Level 2, SF		



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	Landmark
<b>Reference Design:</b>	Plan #3 (1-22-14)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4650.0ft (RKB - 15')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24Q-302  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.57°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24Q-302
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4650.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24Q-302	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
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