

# PETROLEUM DEVELOPMENT CORP Weld County CO

## Well Name: Maxey 24P-402

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

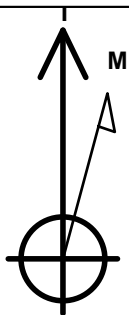
Ground Elevation: 4637.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1383922.10	3247656.08	40.383860	-104.610980	

RKB - 15' WELL @ 4652.0ft (RKB - 15')

## WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape Point
BHL 1428'FSL & 2140'FWL, Sec.19	6912.0	-943.1	4663.7	Point



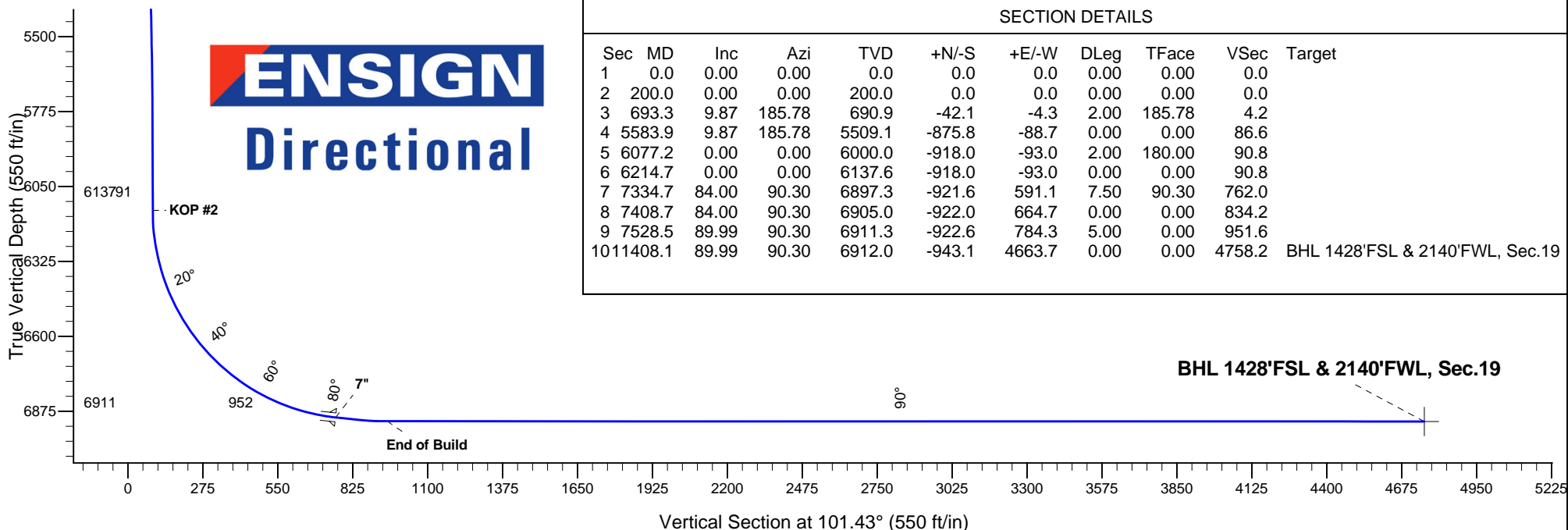
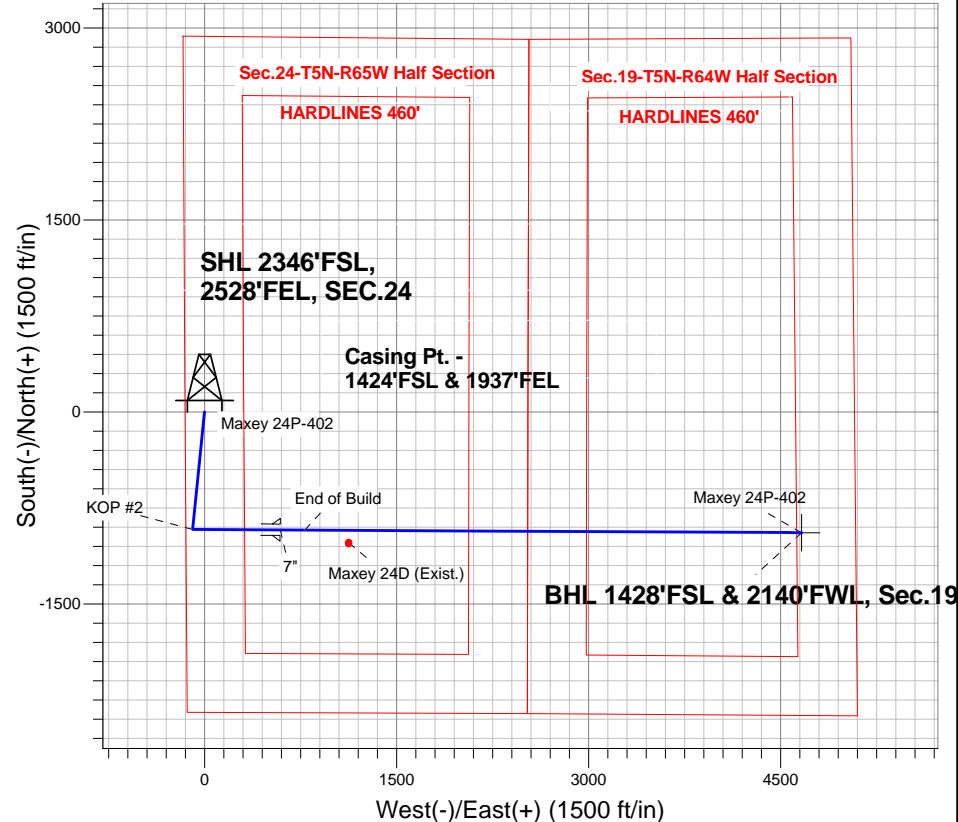
Azimuths to True North  
Magnetic North: 8.55°

Magnetic Field  
Strength: 52959.4nT  
Dip Angle: 67.00°  
Date: 3/5/2013  
Model: IGRF2010

## ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
6137.5	6214.7	KOP #2
6911.3	7528.5	End of Build

Maxey 24O-HZ Pad Sec.24-T5N-R65W  
Maxey 24P-402  
Plan #1 (3-5-13)





## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24P-402**

**Wellbore #1**

**Plan: Plan #1 (3-5-13)**

## **Standard Planning Report**

**11 March, 2013**

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

<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

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

Well	Maxey 24P-402					
Well Position	+N-S	0.0 ft	Northing:	1,383,922.10 ft	Latitude:	40.383860
	+E-W	0.0 ft	Easting:	3,247,656.08 ft	Longitude:	-104.610980
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,637.0 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	3/5/2013	8.55	67.00	52,959

<b>Design</b>	Plan #1 (3-5-13)			
<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	101.43

<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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
693.3	9.87	185.78	690.9	-42.1	-4.3	2.00	2.00	0.00	185.78	
5,583.9	9.87	185.78	5,509.1	-875.8	-88.7	0.00	0.00	0.00	0.00	
6,077.2	0.00	0.00	6,000.0	-918.0	-93.0	2.00	-2.00	0.00	180.00	
6,214.7	0.00	0.00	6,137.6	-918.0	-93.0	0.00	0.00	0.00	0.00	
7,334.7	84.00	90.30	6,897.3	-921.6	591.1	7.50	7.50	0.00	90.30	
7,408.7	84.00	90.30	6,905.0	-922.0	664.7	0.00	0.00	0.00	0.00	
7,528.5	89.99	90.30	6,911.3	-922.6	784.3	5.00	5.00	0.00	0.00	
11,408.1	89.99	90.30	6,912.0	-943.1	4,663.7	0.00	0.00	0.00	0.00	BHL 1428'FSL & 21

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

## 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
<b>KOP #1</b>									
240.0	0.80	185.78	240.0	-0.3	0.0	0.0	2.00	2.00	0.00
280.0	1.60	185.78	280.0	-1.1	-0.1	0.1	2.00	2.00	0.00
320.0	2.40	185.78	320.0	-2.5	-0.3	0.2	2.00	2.00	0.00
360.0	3.20	185.78	359.9	-4.4	-0.5	0.4	2.00	2.00	0.00
400.0	4.00	185.78	399.8	-6.9	-0.7	0.7	2.00	2.00	0.00
440.0	4.80	185.78	439.7	-10.0	-1.0	1.0	2.00	2.00	0.00
480.0	5.60	185.78	479.6	-13.6	-1.4	1.3	2.00	2.00	0.00
520.0	6.40	185.78	519.3	-17.8	-1.8	1.8	2.00	2.00	0.00
560.0	7.20	185.78	559.1	-22.5	-2.3	2.2	2.00	2.00	0.00
600.0	8.00	185.78	598.7	-27.7	-2.8	2.7	2.00	2.00	0.00
640.0	8.80	185.78	638.3	-33.6	-3.4	3.3	2.00	2.00	0.00
680.0	9.60	185.78	677.8	-39.9	-4.0	3.9	2.00	2.00	0.00
693.3	9.87	185.78	690.9	-42.1	-4.3	4.2	2.00	2.00	0.00
720.0	9.87	185.78	717.2	-46.7	-4.7	4.6	0.00	0.00	0.00
760.0	9.87	185.78	756.6	-53.5	-5.4	5.3	0.00	0.00	0.00
800.0	9.87	185.78	796.0	-60.3	-6.1	6.0	0.00	0.00	0.00
840.0	9.87	185.78	835.4	-67.2	-6.8	6.6	0.00	0.00	0.00
880.0	9.87	185.78	874.8	-74.0	-7.5	7.3	0.00	0.00	0.00
920.0	9.87	185.78	914.2	-80.8	-8.2	8.0	0.00	0.00	0.00
960.0	9.87	185.78	953.6	-87.6	-8.9	8.7	0.00	0.00	0.00
1,000.0	9.87	185.78	993.0	-94.4	-9.6	9.3	0.00	0.00	0.00
1,040.0	9.87	185.78	1,032.4	-101.3	-10.3	10.0	0.00	0.00	0.00
1,080.0	9.87	185.78	1,071.8	-108.1	-10.9	10.7	0.00	0.00	0.00
1,120.0	9.87	185.78	1,111.3	-114.9	-11.6	11.4	0.00	0.00	0.00
1,160.0	9.87	185.78	1,150.7	-121.7	-12.3	12.0	0.00	0.00	0.00
1,200.0	9.87	185.78	1,190.1	-128.5	-13.0	12.7	0.00	0.00	0.00
1,240.0	9.87	185.78	1,229.5	-135.3	-13.7	13.4	0.00	0.00	0.00
1,280.0	9.87	185.78	1,268.9	-142.2	-14.4	14.1	0.00	0.00	0.00
1,320.0	9.87	185.78	1,308.3	-149.0	-15.1	14.7	0.00	0.00	0.00
1,360.0	9.87	185.78	1,347.7	-155.8	-15.8	15.4	0.00	0.00	0.00
1,400.0	9.87	185.78	1,387.1	-162.6	-16.5	16.1	0.00	0.00	0.00
1,440.0	9.87	185.78	1,426.5	-169.4	-17.2	16.8	0.00	0.00	0.00
1,480.0	9.87	185.78	1,465.9	-176.3	-17.9	17.4	0.00	0.00	0.00
1,520.0	9.87	185.78	1,505.3	-183.1	-18.5	18.1	0.00	0.00	0.00
1,560.0	9.87	185.78	1,544.7	-189.9	-19.2	18.8	0.00	0.00	0.00
1,600.0	9.87	185.78	1,584.2	-196.7	-19.9	19.5	0.00	0.00	0.00
1,640.0	9.87	185.78	1,623.6	-203.5	-20.6	20.1	0.00	0.00	0.00
1,680.0	9.87	185.78	1,663.0	-210.4	-21.3	20.8	0.00	0.00	0.00
1,720.0	9.87	185.78	1,702.4	-217.2	-22.0	21.5	0.00	0.00	0.00
1,760.0	9.87	185.78	1,741.8	-224.0	-22.7	22.2	0.00	0.00	0.00
1,800.0	9.87	185.78	1,781.2	-230.8	-23.4	22.8	0.00	0.00	0.00
1,840.0	9.87	185.78	1,820.6	-237.6	-24.1	23.5	0.00	0.00	0.00
1,880.0	9.87	185.78	1,860.0	-244.4	-24.8	24.2	0.00	0.00	0.00
1,920.0	9.87	185.78	1,899.4	-251.3	-25.5	24.9	0.00	0.00	0.00
1,960.0	9.87	185.78	1,938.8	-258.1	-26.1	25.5	0.00	0.00	0.00
2,000.0	9.87	185.78	1,978.2	-264.9	-26.8	26.2	0.00	0.00	0.00

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<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

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)
2,040.0	9.87	185.78	2,017.7	-271.7	-27.5	26.9	0.00	0.00	0.00
2,080.0	9.87	185.78	2,057.1	-278.5	-28.2	27.6	0.00	0.00	0.00
2,120.0	9.87	185.78	2,096.5	-285.4	-28.9	28.2	0.00	0.00	0.00
2,160.0	9.87	185.78	2,135.9	-292.2	-29.6	28.9	0.00	0.00	0.00
2,200.0	9.87	185.78	2,175.3	-299.0	-30.3	29.6	0.00	0.00	0.00
2,240.0	9.87	185.78	2,214.7	-305.8	-31.0	30.2	0.00	0.00	0.00
2,280.0	9.87	185.78	2,254.1	-312.6	-31.7	30.9	0.00	0.00	0.00
2,320.0	9.87	185.78	2,293.5	-319.5	-32.4	31.6	0.00	0.00	0.00
2,360.0	9.87	185.78	2,332.9	-326.3	-33.1	32.3	0.00	0.00	0.00
2,400.0	9.87	185.78	2,372.3	-333.1	-33.7	32.9	0.00	0.00	0.00
2,440.0	9.87	185.78	2,411.7	-339.9	-34.4	33.6	0.00	0.00	0.00
2,480.0	9.87	185.78	2,451.1	-346.7	-35.1	34.3	0.00	0.00	0.00
2,520.0	9.87	185.78	2,490.6	-353.5	-35.8	35.0	0.00	0.00	0.00
2,560.0	9.87	185.78	2,530.0	-360.4	-36.5	35.6	0.00	0.00	0.00
2,600.0	9.87	185.78	2,569.4	-367.2	-37.2	36.3	0.00	0.00	0.00
2,640.0	9.87	185.78	2,608.8	-374.0	-37.9	37.0	0.00	0.00	0.00
2,680.0	9.87	185.78	2,648.2	-380.8	-38.6	37.7	0.00	0.00	0.00
2,720.0	9.87	185.78	2,687.6	-387.6	-39.3	38.3	0.00	0.00	0.00
2,760.0	9.87	185.78	2,727.0	-394.5	-40.0	39.0	0.00	0.00	0.00
2,800.0	9.87	185.78	2,766.4	-401.3	-40.7	39.7	0.00	0.00	0.00
2,840.0	9.87	185.78	2,805.8	-408.1	-41.3	40.4	0.00	0.00	0.00
2,880.0	9.87	185.78	2,845.2	-414.9	-42.0	41.0	0.00	0.00	0.00
2,920.0	9.87	185.78	2,884.6	-421.7	-42.7	41.7	0.00	0.00	0.00
2,960.0	9.87	185.78	2,924.0	-428.6	-43.4	42.4	0.00	0.00	0.00
3,000.0	9.87	185.78	2,963.5	-435.4	-44.1	43.1	0.00	0.00	0.00
3,040.0	9.87	185.78	3,002.9	-442.2	-44.8	43.7	0.00	0.00	0.00
3,080.0	9.87	185.78	3,042.3	-449.0	-45.5	44.4	0.00	0.00	0.00
3,120.0	9.87	185.78	3,081.7	-455.8	-46.2	45.1	0.00	0.00	0.00
3,160.0	9.87	185.78	3,121.1	-462.6	-46.9	45.8	0.00	0.00	0.00
3,200.0	9.87	185.78	3,160.5	-469.5	-47.6	46.4	0.00	0.00	0.00
3,240.0	9.87	185.78	3,199.9	-476.3	-48.3	47.1	0.00	0.00	0.00
3,280.0	9.87	185.78	3,239.3	-483.1	-48.9	47.8	0.00	0.00	0.00
3,320.0	9.87	185.78	3,278.7	-489.9	-49.6	48.5	0.00	0.00	0.00
3,360.0	9.87	185.78	3,318.1	-496.7	-50.3	49.1	0.00	0.00	0.00
3,400.0	9.87	185.78	3,357.5	-503.6	-51.0	49.8	0.00	0.00	0.00
3,440.0	9.87	185.78	3,396.9	-510.4	-51.7	50.5	0.00	0.00	0.00
3,480.0	9.87	185.78	3,436.4	-517.2	-52.4	51.2	0.00	0.00	0.00
3,520.0	9.87	185.78	3,475.8	-524.0	-53.1	51.8	0.00	0.00	0.00
3,560.0	9.87	185.78	3,515.2	-530.8	-53.8	52.5	0.00	0.00	0.00
3,600.0	9.87	185.78	3,554.6	-537.7	-54.5	53.2	0.00	0.00	0.00
3,640.0	9.87	185.78	3,594.0	-544.5	-55.2	53.9	0.00	0.00	0.00
3,680.0	9.87	185.78	3,633.4	-551.3	-55.8	54.5	0.00	0.00	0.00
3,720.0	9.87	185.78	3,672.8	-558.1	-56.5	55.2	0.00	0.00	0.00
3,760.0	9.87	185.78	3,712.2	-564.9	-57.2	55.9	0.00	0.00	0.00
3,800.0	9.87	185.78	3,751.6	-571.7	-57.9	56.6	0.00	0.00	0.00
3,840.0	9.87	185.78	3,791.0	-578.6	-58.6	57.2	0.00	0.00	0.00
3,880.0	9.87	185.78	3,830.4	-585.4	-59.3	57.9	0.00	0.00	0.00
3,920.0	9.87	185.78	3,869.8	-592.2	-60.0	58.6	0.00	0.00	0.00
3,960.0	9.87	185.78	3,909.3	-599.0	-60.7	59.3	0.00	0.00	0.00
4,000.0	9.87	185.78	3,948.7	-605.8	-61.4	59.9	0.00	0.00	0.00
4,040.0	9.87	185.78	3,988.1	-612.7	-62.1	60.6	0.00	0.00	0.00
4,080.0	9.87	185.78	4,027.5	-619.5	-62.8	61.3	0.00	0.00	0.00
4,120.0	9.87	185.78	4,066.9	-626.3	-63.4	61.9	0.00	0.00	0.00

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<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

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)
4,160.0	9.87	185.78	4,106.3	-633.1	-64.1	62.6	0.00	0.00	0.00
4,200.0	9.87	185.78	4,145.7	-639.9	-64.8	63.3	0.00	0.00	0.00
4,240.0	9.87	185.78	4,185.1	-646.8	-65.5	64.0	0.00	0.00	0.00
4,280.0	9.87	185.78	4,224.5	-653.6	-66.2	64.6	0.00	0.00	0.00
4,320.0	9.87	185.78	4,263.9	-660.4	-66.9	65.3	0.00	0.00	0.00
4,360.0	9.87	185.78	4,303.3	-667.2	-67.6	66.0	0.00	0.00	0.00
4,400.0	9.87	185.78	4,342.8	-674.0	-68.3	66.7	0.00	0.00	0.00
4,440.0	9.87	185.78	4,382.2	-680.8	-69.0	67.3	0.00	0.00	0.00
4,480.0	9.87	185.78	4,421.6	-687.7	-69.7	68.0	0.00	0.00	0.00
4,520.0	9.87	185.78	4,461.0	-694.5	-70.4	68.7	0.00	0.00	0.00
4,560.0	9.87	185.78	4,500.4	-701.3	-71.0	69.4	0.00	0.00	0.00
4,600.0	9.87	185.78	4,539.8	-708.1	-71.7	70.0	0.00	0.00	0.00
4,640.0	9.87	185.78	4,579.2	-714.9	-72.4	70.7	0.00	0.00	0.00
4,680.0	9.87	185.78	4,618.6	-721.8	-73.1	71.4	0.00	0.00	0.00
4,720.0	9.87	185.78	4,658.0	-728.6	-73.8	72.1	0.00	0.00	0.00
4,760.0	9.87	185.78	4,697.4	-735.4	-74.5	72.7	0.00	0.00	0.00
4,800.0	9.87	185.78	4,736.8	-742.2	-75.2	73.4	0.00	0.00	0.00
4,840.0	9.87	185.78	4,776.2	-749.0	-75.9	74.1	0.00	0.00	0.00
4,880.0	9.87	185.78	4,815.7	-755.8	-76.6	74.8	0.00	0.00	0.00
4,920.0	9.87	185.78	4,855.1	-762.7	-77.3	75.4	0.00	0.00	0.00
4,960.0	9.87	185.78	4,894.5	-769.5	-78.0	76.1	0.00	0.00	0.00
5,000.0	9.87	185.78	4,933.9	-776.3	-78.6	76.8	0.00	0.00	0.00
5,040.0	9.87	185.78	4,973.3	-783.1	-79.3	77.5	0.00	0.00	0.00
5,080.0	9.87	185.78	5,012.7	-789.9	-80.0	78.1	0.00	0.00	0.00
5,120.0	9.87	185.78	5,052.1	-796.8	-80.7	78.8	0.00	0.00	0.00
5,160.0	9.87	185.78	5,091.5	-803.6	-81.4	79.5	0.00	0.00	0.00
5,200.0	9.87	185.78	5,130.9	-810.4	-82.1	80.2	0.00	0.00	0.00
5,240.0	9.87	185.78	5,170.3	-817.2	-82.8	80.8	0.00	0.00	0.00
5,280.0	9.87	185.78	5,209.7	-824.0	-83.5	81.5	0.00	0.00	0.00
5,320.0	9.87	185.78	5,249.1	-830.9	-84.2	82.2	0.00	0.00	0.00
5,360.0	9.87	185.78	5,288.6	-837.7	-84.9	82.9	0.00	0.00	0.00
5,400.0	9.87	185.78	5,328.0	-844.5	-85.6	83.5	0.00	0.00	0.00
5,440.0	9.87	185.78	5,367.4	-851.3	-86.2	84.2	0.00	0.00	0.00
5,480.0	9.87	185.78	5,406.8	-858.1	-86.9	84.9	0.00	0.00	0.00
5,520.0	9.87	185.78	5,446.2	-864.9	-87.6	85.6	0.00	0.00	0.00
5,560.0	9.87	185.78	5,485.6	-871.8	-88.3	86.2	0.00	0.00	0.00
5,583.9	9.87	185.78	5,509.1	-875.8	-88.7	86.6	0.00	0.00	0.00
5,600.0	9.54	185.78	5,525.0	-878.5	-89.0	86.9	2.00	-2.00	0.00
5,640.0	8.74	185.78	5,564.5	-884.9	-89.6	87.5	2.00	-2.00	0.00
5,680.0	7.94	185.78	5,604.1	-890.6	-90.2	88.1	2.00	-2.00	0.00
5,720.0	7.14	185.78	5,643.7	-895.9	-90.8	88.6	2.00	-2.00	0.00
5,760.0	6.34	185.78	5,683.5	-900.5	-91.2	89.1	2.00	-2.00	0.00
5,800.0	5.54	185.78	5,723.2	-904.7	-91.6	89.5	2.00	-2.00	0.00
5,840.0	4.74	185.78	5,763.1	-908.2	-92.0	89.8	2.00	-2.00	0.00
5,880.0	3.94	185.78	5,803.0	-911.2	-92.3	90.1	2.00	-2.00	0.00
5,920.0	3.14	185.78	5,842.9	-913.7	-92.6	90.4	2.00	-2.00	0.00
5,960.0	2.34	185.78	5,882.8	-915.6	-92.8	90.6	2.00	-2.00	0.00
6,000.0	1.54	185.78	5,922.8	-917.0	-92.9	90.7	2.00	-2.00	0.00
6,040.0	0.74	185.78	5,962.8	-917.8	-93.0	90.8	2.00	-2.00	0.00
6,077.2	0.00	0.00	6,000.0	-918.0	-93.0	90.8	2.00	-2.00	0.00
6,080.0	0.00	0.00	6,002.8	-918.0	-93.0	90.8	0.00	0.00	0.00
6,120.0	0.00	0.00	6,042.8	-918.0	-93.0	90.8	0.00	0.00	0.00
6,160.0	0.00	0.00	6,082.8	-918.0	-93.0	90.8	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

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)
6,200.0	0.00	0.00	6,122.8	-918.0	-93.0	90.8	0.00	0.00	0.00
6,214.7	0.00	0.00	6,137.5	-918.0	-93.0	90.8	0.00	0.00	0.00
<b>KOP #2</b>									
6,240.0	1.89	90.30	6,162.8	-918.0	-92.6	91.2	7.49	7.49	0.00
6,280.0	4.89	90.30	6,202.7	-918.0	-90.2	93.5	7.50	7.50	0.00
6,320.0	7.89	90.30	6,242.5	-918.0	-85.8	97.9	7.50	7.50	0.00
6,360.0	10.89	90.30	6,281.9	-918.1	-79.2	104.3	7.50	7.50	0.00
6,400.0	13.89	90.30	6,321.0	-918.1	-70.6	112.7	7.50	7.50	0.00
6,440.0	16.89	90.30	6,359.6	-918.2	-60.0	123.2	7.50	7.50	0.00
6,480.0	19.89	90.30	6,397.5	-918.2	-47.4	135.5	7.50	7.50	0.00
6,520.0	22.89	90.30	6,434.8	-918.3	-32.8	149.8	7.50	7.50	0.00
6,560.0	25.89	90.30	6,471.2	-918.4	-16.3	166.1	7.50	7.50	0.00
6,600.0	28.89	90.30	6,506.7	-918.5	2.1	184.1	7.50	7.50	0.00
6,640.0	31.89	90.30	6,541.2	-918.6	22.3	204.0	7.50	7.50	0.00
6,680.0	34.89	90.30	6,574.6	-918.7	44.3	225.6	7.50	7.50	0.00
6,720.0	37.89	90.30	6,606.8	-918.8	68.1	248.9	7.50	7.50	0.00
6,760.0	40.89	90.30	6,637.7	-919.0	93.5	273.8	7.50	7.50	0.00
6,800.0	43.89	90.30	6,667.2	-919.1	120.4	300.2	7.50	7.50	0.00
6,840.0	46.89	90.30	6,695.3	-919.3	148.9	328.2	7.50	7.50	0.00
6,880.0	49.89	90.30	6,721.9	-919.4	178.8	357.5	7.50	7.50	0.00
6,920.0	52.89	90.30	6,746.8	-919.6	210.1	388.2	7.50	7.50	0.00
6,960.0	55.89	90.30	6,770.1	-919.8	242.6	420.1	7.50	7.50	0.00
7,000.0	58.89	90.30	6,791.7	-919.9	276.3	453.1	7.50	7.50	0.00
7,040.0	61.89	90.30	6,811.4	-920.1	311.0	487.3	7.50	7.50	0.00
7,080.0	64.89	90.30	6,829.3	-920.3	346.8	522.3	7.50	7.50	0.00
7,120.0	67.89	90.30	6,845.3	-920.5	383.5	558.3	7.50	7.50	0.00
7,160.0	70.89	90.30	6,859.4	-920.7	420.9	595.0	7.50	7.50	0.00
7,200.0	73.89	90.30	6,871.5	-920.9	459.0	632.4	7.50	7.50	0.00
7,240.0	76.89	90.30	6,881.6	-921.1	497.7	670.4	7.50	7.50	0.00
7,280.0	79.89	90.30	6,889.6	-921.3	536.9	708.9	7.50	7.50	0.00
7,320.0	82.89	90.30	6,895.6	-921.5	576.4	747.7	7.50	7.50	0.00
7,334.7	84.00	90.30	6,897.3	-921.6	591.0	762.0	7.50	7.50	0.00
<b>7"</b>									
7,360.0	84.00	90.30	6,900.0	-921.7	616.2	786.7	0.01	0.01	0.00
7,400.0	84.00	90.30	6,904.1	-921.9	656.0	825.7	0.00	0.00	0.00
7,408.7	84.00	90.30	6,905.0	-922.0	664.7	834.2	0.00	0.00	0.00
7,440.0	85.56	90.30	6,907.9	-922.2	695.8	864.8	5.00	5.00	0.00
7,480.0	87.56	90.30	6,910.3	-922.4	735.7	904.0	5.00	5.00	0.00
7,520.0	89.56	90.30	6,911.3	-922.6	775.7	943.2	5.00	5.00	0.00
7,528.5	89.99	90.30	6,911.3	-922.6	784.2	951.5	5.00	5.00	0.00
<b>End of Build</b>									
7,560.0	89.99	90.30	6,911.3	-922.8	815.7	982.4	0.01	0.01	0.00
7,600.0	89.99	90.30	6,911.3	-923.0	855.7	1,021.7	0.00	0.00	0.00
7,640.0	89.99	90.30	6,911.3	-923.2	895.7	1,060.9	0.00	0.00	0.00
7,680.0	89.99	90.30	6,911.3	-923.4	935.7	1,100.2	0.00	0.00	0.00
7,720.0	89.99	90.30	6,911.4	-923.6	975.7	1,139.4	0.00	0.00	0.00
7,760.0	89.99	90.30	6,911.4	-923.8	1,015.7	1,178.7	0.00	0.00	0.00
7,800.0	89.99	90.30	6,911.4	-924.1	1,055.7	1,217.9	0.00	0.00	0.00
7,840.0	89.99	90.30	6,911.4	-924.3	1,095.7	1,257.2	0.00	0.00	0.00
7,880.0	89.99	90.30	6,911.4	-924.5	1,135.7	1,296.4	0.00	0.00	0.00
7,920.0	89.99	90.30	6,911.4	-924.7	1,175.7	1,335.7	0.00	0.00	0.00
7,960.0	89.99	90.30	6,911.4	-924.9	1,215.7	1,374.9	0.00	0.00	0.00
8,000.0	89.99	90.30	6,911.4	-925.1	1,255.7	1,414.2	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

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)
8,040.0	89.99	90.30	6,911.4	-925.3	1,295.7	1,453.4	0.00	0.00	0.00
8,080.0	89.99	90.30	6,911.4	-925.5	1,335.7	1,492.7	0.00	0.00	0.00
8,120.0	89.99	90.30	6,911.4	-925.7	1,375.7	1,531.9	0.00	0.00	0.00
8,160.0	89.99	90.30	6,911.4	-926.0	1,415.7	1,571.1	0.00	0.00	0.00
8,200.0	89.99	90.30	6,911.4	-926.2	1,455.7	1,610.4	0.00	0.00	0.00
8,240.0	89.99	90.30	6,911.4	-926.4	1,495.7	1,649.6	0.00	0.00	0.00
8,280.0	89.99	90.30	6,911.5	-926.6	1,535.7	1,688.9	0.00	0.00	0.00
8,320.0	89.99	90.30	6,911.5	-926.8	1,575.7	1,728.1	0.00	0.00	0.00
8,360.0	89.99	90.30	6,911.5	-927.0	1,615.7	1,767.4	0.00	0.00	0.00
8,400.0	89.99	90.30	6,911.5	-927.2	1,655.7	1,806.6	0.00	0.00	0.00
8,440.0	89.99	90.30	6,911.5	-927.4	1,695.7	1,845.9	0.00	0.00	0.00
8,480.0	89.99	90.30	6,911.5	-927.6	1,735.7	1,885.1	0.00	0.00	0.00
8,520.0	89.99	90.30	6,911.5	-927.9	1,775.7	1,924.4	0.00	0.00	0.00
8,560.0	89.99	90.30	6,911.5	-928.1	1,815.7	1,963.6	0.00	0.00	0.00
8,600.0	89.99	90.30	6,911.5	-928.3	1,855.7	2,002.9	0.00	0.00	0.00
8,640.0	89.99	90.30	6,911.5	-928.5	1,895.7	2,042.1	0.00	0.00	0.00
8,680.0	89.99	90.30	6,911.5	-928.7	1,935.7	2,081.4	0.00	0.00	0.00
8,720.0	89.99	90.30	6,911.5	-928.9	1,975.7	2,120.6	0.00	0.00	0.00
8,760.0	89.99	90.30	6,911.5	-929.1	2,015.7	2,159.9	0.00	0.00	0.00
8,800.0	89.99	90.30	6,911.5	-929.3	2,055.7	2,199.1	0.00	0.00	0.00
8,840.0	89.99	90.30	6,911.6	-929.6	2,095.7	2,238.4	0.00	0.00	0.00
8,880.0	89.99	90.30	6,911.6	-929.8	2,135.7	2,277.6	0.00	0.00	0.00
8,920.0	89.99	90.30	6,911.6	-930.0	2,175.7	2,316.9	0.00	0.00	0.00
8,960.0	89.99	90.30	6,911.6	-930.2	2,215.7	2,356.1	0.00	0.00	0.00
9,000.0	89.99	90.30	6,911.6	-930.4	2,255.7	2,395.4	0.00	0.00	0.00
9,040.0	89.99	90.30	6,911.6	-930.6	2,295.7	2,434.6	0.00	0.00	0.00
9,080.0	89.99	90.30	6,911.6	-930.8	2,335.7	2,473.8	0.00	0.00	0.00
9,120.0	89.99	90.30	6,911.6	-931.0	2,375.7	2,513.1	0.00	0.00	0.00
9,160.0	89.99	90.30	6,911.6	-931.2	2,415.7	2,552.3	0.00	0.00	0.00
9,200.0	89.99	90.30	6,911.6	-931.5	2,455.7	2,591.6	0.00	0.00	0.00
9,240.0	89.99	90.30	6,911.6	-931.7	2,495.7	2,630.8	0.00	0.00	0.00
9,280.0	89.99	90.30	6,911.6	-931.9	2,535.7	2,670.1	0.00	0.00	0.00
9,320.0	89.99	90.30	6,911.6	-932.1	2,575.7	2,709.3	0.00	0.00	0.00
9,360.0	89.99	90.30	6,911.6	-932.3	2,615.7	2,748.6	0.00	0.00	0.00
9,400.0	89.99	90.30	6,911.6	-932.5	2,655.7	2,787.8	0.00	0.00	0.00
9,440.0	89.99	90.30	6,911.7	-932.7	2,695.7	2,827.1	0.00	0.00	0.00
9,480.0	89.99	90.30	6,911.7	-932.9	2,735.7	2,866.3	0.00	0.00	0.00
9,520.0	89.99	90.30	6,911.7	-933.1	2,775.7	2,905.6	0.00	0.00	0.00
9,560.0	89.99	90.30	6,911.7	-933.4	2,815.7	2,944.8	0.00	0.00	0.00
9,600.0	89.99	90.30	6,911.7	-933.6	2,855.7	2,984.1	0.00	0.00	0.00
9,640.0	89.99	90.30	6,911.7	-933.8	2,895.7	3,023.3	0.00	0.00	0.00
9,680.0	89.99	90.30	6,911.7	-934.0	2,935.7	3,062.6	0.00	0.00	0.00
9,720.0	89.99	90.30	6,911.7	-934.2	2,975.7	3,101.8	0.00	0.00	0.00
9,760.0	89.99	90.30	6,911.7	-934.4	3,015.7	3,141.1	0.00	0.00	0.00
9,800.0	89.99	90.30	6,911.7	-934.6	3,055.7	3,180.3	0.00	0.00	0.00
9,840.0	89.99	90.30	6,911.7	-934.8	3,095.7	3,219.6	0.00	0.00	0.00
9,880.0	89.99	90.30	6,911.7	-935.0	3,135.7	3,258.8	0.00	0.00	0.00
9,920.0	89.99	90.30	6,911.7	-935.3	3,175.7	3,298.0	0.00	0.00	0.00
9,960.0	89.99	90.30	6,911.7	-935.5	3,215.7	3,337.3	0.00	0.00	0.00
10,000.0	89.99	90.30	6,911.8	-935.7	3,255.7	3,376.5	0.00	0.00	0.00
10,040.0	89.99	90.30	6,911.8	-935.9	3,295.7	3,415.8	0.00	0.00	0.00
10,080.0	89.99	90.30	6,911.8	-936.1	3,335.7	3,455.0	0.00	0.00	0.00
10,120.0	89.99	90.30	6,911.8	-936.3	3,375.7	3,494.3	0.00	0.00	0.00

<b>Database:</b>	Landmark	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Project:</b>	SEC.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>North Reference:</b>	True
<b>Well:</b>	Maxey 24P-402	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (3-5-13)		

## 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)
10,160.0	89.99	90.30	6,911.8	-936.5	3,415.7	3,533.5	0.00	0.00	0.00
10,200.0	89.99	90.30	6,911.8	-936.7	3,455.7	3,572.8	0.00	0.00	0.00
10,240.0	89.99	90.30	6,911.8	-936.9	3,495.7	3,612.0	0.00	0.00	0.00
10,280.0	89.99	90.30	6,911.8	-937.2	3,535.7	3,651.3	0.00	0.00	0.00
10,320.0	89.99	90.30	6,911.8	-937.4	3,575.7	3,690.5	0.00	0.00	0.00
10,360.0	89.99	90.30	6,911.8	-937.6	3,615.7	3,729.8	0.00	0.00	0.00
10,400.0	89.99	90.30	6,911.8	-937.8	3,655.7	3,769.0	0.00	0.00	0.00
10,440.0	89.99	90.30	6,911.8	-938.0	3,695.7	3,808.3	0.00	0.00	0.00
10,480.0	89.99	90.30	6,911.8	-938.2	3,735.7	3,847.5	0.00	0.00	0.00
10,520.0	89.99	90.30	6,911.8	-938.4	3,775.7	3,886.8	0.00	0.00	0.00
10,560.0	89.99	90.30	6,911.9	-938.6	3,815.7	3,926.0	0.00	0.00	0.00
10,600.0	89.99	90.30	6,911.9	-938.8	3,855.7	3,965.3	0.00	0.00	0.00
10,640.0	89.99	90.30	6,911.9	-939.1	3,895.7	4,004.5	0.00	0.00	0.00
10,680.0	89.99	90.30	6,911.9	-939.3	3,935.7	4,043.8	0.00	0.00	0.00
10,720.0	89.99	90.30	6,911.9	-939.5	3,975.7	4,083.0	0.00	0.00	0.00
10,760.0	89.99	90.30	6,911.9	-939.7	4,015.7	4,122.2	0.00	0.00	0.00
10,800.0	89.99	90.30	6,911.9	-939.9	4,055.7	4,161.5	0.00	0.00	0.00
10,840.0	89.99	90.30	6,911.9	-940.1	4,095.7	4,200.7	0.00	0.00	0.00
10,880.0	89.99	90.30	6,911.9	-940.3	4,135.7	4,240.0	0.00	0.00	0.00
10,920.0	89.99	90.30	6,911.9	-940.5	4,175.7	4,279.2	0.00	0.00	0.00
10,960.0	89.99	90.30	6,911.9	-940.7	4,215.7	4,318.5	0.00	0.00	0.00
11,000.0	89.99	90.30	6,911.9	-941.0	4,255.7	4,357.7	0.00	0.00	0.00
11,040.0	89.99	90.30	6,911.9	-941.2	4,295.7	4,397.0	0.00	0.00	0.00
11,080.0	89.99	90.30	6,911.9	-941.4	4,335.7	4,436.2	0.00	0.00	0.00
11,120.0	89.99	90.30	6,911.9	-941.6	4,375.7	4,475.5	0.00	0.00	0.00
11,160.0	89.99	90.30	6,912.0	-941.8	4,415.7	4,514.7	0.00	0.00	0.00
11,200.0	89.99	90.30	6,912.0	-942.0	4,455.7	4,554.0	0.00	0.00	0.00
11,240.0	89.99	90.30	6,912.0	-942.2	4,495.7	4,593.2	0.00	0.00	0.00
11,280.0	89.99	90.30	6,912.0	-942.4	4,535.7	4,632.5	0.00	0.00	0.00
11,320.0	89.99	90.30	6,912.0	-942.6	4,575.7	4,671.7	0.00	0.00	0.00
11,360.0	89.99	90.30	6,912.0	-942.9	4,615.7	4,711.0	0.00	0.00	0.00
11,400.0	89.99	90.30	6,912.0	-943.1	4,655.7	4,750.2	0.00	0.00	0.00
11,408.1	89.99	90.30	6,912.0	-943.1	4,663.7	4,758.2	0.00	0.00	0.00

## Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,334.7	6,897.3	7"	7	7-1/2

## Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP #1
6,214.7	6,137.5	-918.0	-93.0	KOP #2
7,528.5	6,911.3	-922.6	784.2	End of Build



## **Directional**

# **PETROLEUM DEVELOPMENT CORP Weld County CO**

**SEC.24-T5N-R65W**

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

**Maxey 24P-402**

**Wellbore #1**

**Plan #1 (3-5-13)**

## **Anticollision Report**

**11 March, 2013**



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1 (3-5-13)
<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 10,000.0ft
<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	11,408.1	Plan #1 (3-5-13) (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-232 - Wellbore #1 - Plan #1 (3-7-13)	200.0	199.0	61.3	60.6	91.198	CC
Maxey 24O-232 - Wellbore #1 - Plan #1 (3-7-13)	300.0	299.0	61.5	60.4	56.016	ES
Maxey 24O-232 - Wellbore #1 - Plan #1 (3-7-13)	11,408.1	11,196.7	656.8	406.1	2.619	SF
Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)	200.0	199.0	89.2	88.6	132.762	CC
Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)	300.0	299.0	89.3	88.2	81.397	ES
Maxey 24O-402 - Wellbore #1 - Plan #1 (3-7-13)	11,408.1	11,354.5	976.3	715.1	3.737	SF
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	200.0	200.0	30.6	30.0	45.447	CC
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	300.0	300.0	30.9	29.8	28.063	ES
Maxey 24P-312 - Wellbore #1 - Plan #1 (3-5-13)	11,408.1	11,302.9	319.4	74.5	1.304	Level 3, SF
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1	7,870.3	6,909.4	95.6	53.2	2.256	CC, ES, SF

<b>Offset Design</b> Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-232 - Wellbore #1 - Plan #1 (3-7-13)												
Survey Program: 0-MWD												
<b>Reference</b>	<b>Offset</b>	<b>Semi Major Axis</b>		<b>Distance</b>		<b>Minimum Separation</b>		<b>Warning</b>				
<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Measured Depth (ft)</b>	<b>Vertical Depth (ft)</b>	<b>Reference (ft)</b>	<b>Offset (ft)</b>	<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre +N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Between Centres (ft)</b>	<b>Between Ellipses (ft)</b>	<b>Minimum Separation (ft)</b>	<b>Separation Factor</b>
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	61.3	61.3			
100.0	100.0	99.0	99.0	0.1	0.1	90.00	0.0	61.3	61.3	61.1	0.22	274.049
200.0	200.0	199.0	199.0	0.3	0.3	90.00	0.0	61.3	61.3	60.6	0.67	91.198 CC
300.0	300.0	299.0	299.0	0.5	0.6	-97.40	0.0	61.3	61.5	60.4	1.10	56.016 ES
400.0	399.8	398.8	398.8	0.8	0.8	-102.15	0.0	61.3	62.4	60.9	1.53	40.785
500.0	499.5	498.5	498.5	1.0	1.0	-109.64	0.0	61.3	64.8	62.8	2.00	32.456
600.0	598.7	597.7	597.7	1.3	1.2	-118.95	0.0	61.3	69.8	67.4	2.49	28.035
700.0	697.5	696.5	696.5	1.6	1.5	-128.76	0.0	61.3	78.7	75.7	3.00	26.218
800.0	796.0	795.0	795.0	2.0	1.7	-137.20	0.0	61.3	90.5	87.0	3.49	25.889
900.0	894.5	893.5	893.5	2.4	1.9	-143.61	0.0	61.3	103.8	99.8	3.97	26.122
1,000.0	993.0	992.0	992.0	2.7	2.1	-148.53	0.0	61.3	118.1	113.6	4.44	26.584
1,100.0	1,091.6	1,090.6	1,090.6	3.1	2.3	-152.37	0.0	61.3	133.0	128.1	4.90	27.122
1,200.0	1,190.1	1,189.1	1,189.1	3.5	2.6	-155.43	0.0	61.3	148.5	143.1	5.37	27.664
1,300.0	1,288.6	1,287.6	1,287.6	3.9	2.8	-157.91	0.0	61.3	164.2	158.4	5.83	28.182
1,400.0	1,387.1	1,386.1	1,386.1	4.3	3.0	-159.96	0.0	61.3	180.3	174.0	6.29	28.661

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-232 - 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
1,500.0	1,485.6	1,484.6	1,484.6	4.7	3.2	-161.67		0.0	61.3	196.5	189.7	6.75	29.100	
1,600.0	1,584.2	1,589.8	1,589.7	5.1	3.4	-163.25		-1.2	60.6	211.5	204.3	7.20	29.378	
1,700.0	1,682.7	1,697.0	1,696.9	5.5	3.6	-164.77		-5.9	58.0	223.1	215.5	7.62	29.262	
1,800.0	1,781.2	1,805.0	1,804.4	5.9	3.8	-166.29		-14.2	53.5	231.1	223.0	8.05	28.693	
1,900.0	1,879.7	1,905.4	1,904.2	6.3	4.0	-167.71		-23.8	48.2	237.1	228.6	8.48	27.955	
2,000.0	1,978.2	2,005.0	2,003.3	6.7	4.2	-169.05		-33.4	43.0	243.2	234.3	8.91	27.283	
2,100.0	2,076.8	2,104.7	2,102.3	7.1	4.5	-170.32		-42.9	37.7	249.5	240.1	9.35	26.671	
2,200.0	2,175.3	2,204.4	2,201.4	7.5	4.7	-171.53		-52.5	32.5	255.8	246.0	9.80	26.110	
2,300.0	2,273.8	2,304.0	2,300.4	7.9	5.0	-172.68		-62.0	27.2	262.3	252.0	10.25	25.595	
2,400.0	2,372.3	2,403.7	2,399.5	8.3	5.2	-173.77		-71.6	22.0	268.8	258.1	10.70	25.120	
2,500.0	2,470.8	2,503.3	2,498.6	8.7	5.5	-174.81		-81.2	16.8	275.5	264.3	11.16	24.681	
2,600.0	2,569.4	2,603.0	2,597.6	9.1	5.7	-175.80		-90.7	11.5	282.2	270.6	11.63	24.273	
2,700.0	2,667.9	2,702.6	2,696.7	9.5	6.0	-176.75		-100.3	6.3	289.1	277.0	12.10	23.894	
2,800.0	2,766.4	2,802.3	2,795.7	9.9	6.3	-177.65		-109.8	1.0	296.0	283.4	12.57	23.540	
2,900.0	2,864.9	2,901.9	2,894.8	10.3	6.5	-178.51		-119.4	-4.2	302.9	289.9	13.05	23.209	
3,000.0	2,963.5	3,001.6	2,993.8	10.7	6.8	-179.33		-128.9	-9.4	310.0	296.4	13.54	22.898	
3,100.0	3,062.0	3,101.3	3,092.9	11.1	7.1	179.88		-138.5	-14.7	317.1	303.1	14.03	22.607	
3,200.0	3,160.5	3,200.9	3,192.0	11.5	7.4	179.13		-148.0	-19.9	324.2	309.7	14.52	22.332	
3,300.0	3,259.0	3,300.6	3,291.0	11.9	7.7	178.41		-157.6	-25.2	331.4	316.4	15.02	22.074	
3,400.0	3,357.5	3,400.2	3,390.1	12.3	7.9	177.72		-167.2	-30.4	338.7	323.2	15.52	21.830	
3,500.0	3,456.1	3,499.9	3,489.1	12.7	8.2	177.07		-176.7	-35.7	346.0	330.0	16.02	21.599	
3,600.0	3,554.6	3,599.5	3,588.2	13.1	8.5	176.43		-186.3	-40.9	353.3	336.8	16.53	21.380	
3,700.0	3,653.1	3,699.2	3,687.3	13.5	8.8	175.83		-195.8	-46.1	360.7	343.7	17.04	21.173	
3,800.0	3,751.6	3,798.8	3,786.3	13.9	9.1	175.25		-205.4	-51.4	368.2	350.6	17.55	20.977	
3,900.0	3,850.1	3,898.5	3,885.4	14.3	9.4	174.69		-214.9	-56.6	375.6	357.6	18.07	20.790	
4,000.0	3,948.7	3,998.2	3,984.4	14.7	9.7	174.15		-224.5	-61.9	383.1	364.5	18.59	20.612	
4,100.0	4,047.2	4,097.8	4,083.5	15.1	10.0	173.64		-234.0	-67.1	390.7	371.5	19.11	20.443	
4,200.0	4,145.7	4,197.5	4,182.5	15.5	10.3	173.14		-243.6	-72.4	398.2	378.6	19.63	20.281	
4,300.0	4,244.2	4,297.1	4,281.6	15.9	10.6	172.66		-253.1	-77.6	405.8	385.6	20.16	20.127	
4,400.0	4,342.8	4,396.8	4,380.7	16.2	10.9	172.20		-262.7	-82.8	413.4	392.7	20.69	19.980	
4,500.0	4,441.3	4,496.4	4,479.7	16.6	11.2	171.76		-272.3	-88.1	421.1	399.8	21.22	19.840	
4,600.0	4,539.8	4,585.6	4,568.4	17.0	11.4	171.46		-279.8	-92.2	429.9	408.1	21.70	19.804	
4,700.0	4,638.3	4,673.5	4,656.2	17.4	11.6	171.36		-284.8	-95.0	441.3	419.1	22.15	19.920	
4,800.0	4,736.8	4,760.9	4,743.5	17.8	11.8	171.44		-287.5	-96.4	455.3	432.7	22.58	20.165	
4,900.0	4,835.4	4,851.7	4,834.4	18.2	11.9	171.69		-288.0	-96.7	471.7	448.7	23.00	20.511	
5,000.0	4,933.9	4,950.3	4,932.9	18.6	12.1	171.98		-288.0	-96.7	488.6	465.2	23.42	20.861	
5,100.0	5,032.4	5,048.8	5,031.4	19.0	12.3	172.25		-288.0	-96.7	505.6	481.8	23.85	21.198	
5,200.0	5,130.9	5,147.3	5,129.9	19.4	12.4	172.50		-288.0	-96.7	522.6	498.3	24.28	21.522	
5,300.0	5,229.4	5,245.8	5,228.4	19.8	12.6	172.74		-288.0	-96.7	539.6	514.9	24.71	21.833	
5,400.0	5,328.0	5,344.3	5,327.0	20.2	12.8	172.96		-288.0	-96.7	556.6	531.5	25.15	22.132	
5,500.0	5,426.5	5,442.9	5,425.5	20.6	12.9	173.17		-288.0	-96.7	573.6	548.0	25.59	22.419	
5,600.0	5,525.0	5,541.4	5,524.0	21.0	13.1	173.38		-288.0	-96.7	590.6	564.6	26.03	22.692	
5,700.0	5,623.9	5,640.3	5,622.9	21.3	13.3	173.57		-288.0	-96.7	605.4	578.9	26.44	22.898	
5,800.0	5,723.2	5,739.6	5,722.2	21.5	13.5	173.72		-288.0	-96.7	616.7	589.9	26.82	22.995	
5,900.0	5,822.9	5,839.3	5,821.9	21.7	13.7	173.81		-288.0	-96.7	624.6	597.4	27.17	22.990	
6,000.0	5,922.8	5,939.2	5,921.8	21.8	13.8	173.87		-288.0	-96.7	629.0	601.5	27.48	22.887	
6,100.0	6,022.8	6,039.5	6,022.1	22.0	14.0	-0.23		-288.0	-95.6	630.0	594.4	35.59	17.700	
6,161.6	6,084.4	6,101.1	6,083.4	22.0	14.1	0.30		-288.0	-89.7	630.0	594.2	35.79	17.603	
6,200.0	6,122.8	6,138.9	6,120.7	22.1	14.2	0.85		-288.1	-83.7	630.0	594.1	35.91	17.541	
6,300.0	6,222.6	6,234.9	6,213.7	22.2	14.3	-87.68		-288.2	-60.2	630.5	602.3	28.25	22.318	
6,400.0	6,321.0	6,328.6	6,300.9	22.3	14.4	-85.95		-288.4	-26.1	631.6	603.1	28.46	22.192	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-232 - Wellbore #1 - Plan #1 (3-7-13)		Offset Site Error:		0.0 ft
Survey Program: 0-MWD														Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis				Distance								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)					
6,500.0	6,416.2	6,420.3	6,381.7	22.4	14.4	-84.31	-288.6	17.3	633.2	604.5	28.73	22.039				
6,600.0	6,506.7	6,510.2	6,455.2	22.5	14.5	-82.76	-288.9	68.9	635.2	606.1	29.13	21.807				
6,700.0	6,590.8	6,600.0	6,522.1	22.6	14.6	-81.33	-289.2	128.8	637.4	607.7	29.73	21.438				
6,800.0	6,667.2	6,685.7	6,579.0	22.7	14.9	-80.07	-289.5	192.8	639.7	609.1	30.62	20.890				
6,900.0	6,734.5	6,771.7	6,628.5	22.9	15.6	-78.96	-289.9	263.1	642.0	610.2	31.88	20.138				
7,000.0	6,791.7	6,856.7	6,669.4	23.2	16.6	-78.01	-290.3	337.6	644.2	610.6	33.55	19.199				
7,100.0	6,837.6	6,941.0	6,701.5	23.7	17.9	-77.24	-290.7	415.5	646.0	610.4	35.68	18.109				
7,200.0	6,871.5	7,024.8	6,724.7	24.4	19.3	-76.66	-291.1	495.9	647.5	609.3	38.23	16.937				
7,300.0	6,892.9	7,108.1	6,738.9	25.4	20.9	-76.27	-291.5	577.9	648.6	607.4	41.17	15.755				
7,400.0	6,904.1	7,191.0	6,744.1	26.8	22.6	-75.90	-292.0	660.6	649.8	605.2	44.58	14.574				
7,500.0	6,911.0	7,288.6	6,743.7	28.4	24.7	-75.23	-292.5	758.2	651.6	603.2	48.36	13.473				
7,600.0	6,911.3	7,388.6	6,743.3	30.3	27.0	-75.15	-293.0	858.2	651.8	599.1	52.67	12.376				
7,700.0	6,911.4	7,488.6	6,742.8	32.4	29.4	-75.11	-293.5	958.2	651.9	594.7	57.22	11.392				
7,800.0	6,911.4	7,588.6	6,742.4	34.6	31.8	-75.07	-294.0	1,058.2	652.1	590.1	61.92	10.530				
7,900.0	6,911.4	7,688.6	6,741.9	36.9	34.4	-75.03	-294.5	1,158.2	652.2	585.4	66.73	9.774				
8,000.0	6,911.4	7,788.6	6,741.5	39.3	36.9	-74.99	-295.1	1,258.2	652.3	580.7	71.62	9.107				
8,100.0	6,911.4	7,888.6	6,741.0	41.7	39.5	-74.95	-295.6	1,358.2	652.4	575.8	76.59	8.518				
8,200.0	6,911.4	7,988.6	6,740.6	44.2	42.1	-74.91	-296.1	1,458.2	652.6	570.9	81.61	7.996				
8,300.0	6,911.5	8,088.6	6,740.1	46.8	44.7	-74.87	-296.6	1,558.2	652.7	566.0	86.68	7.530				
8,400.0	6,911.5	8,188.6	6,739.7	49.3	47.4	-74.83	-297.2	1,658.2	652.8	561.0	91.79	7.112				
8,500.0	6,911.5	8,288.6	6,739.2	51.9	50.1	-74.79	-297.7	1,758.2	652.9	556.0	96.93	6.736				
8,600.0	6,911.5	8,388.6	6,738.7	54.5	52.7	-74.75	-298.2	1,858.2	653.1	551.0	102.10	6.396				
8,700.0	6,911.5	8,488.6	6,738.3	57.1	55.4	-74.71	-298.7	1,958.2	653.2	545.9	107.29	6.088				
8,800.0	6,911.5	8,588.6	6,737.8	59.8	58.1	-74.67	-299.2	2,058.2	653.3	540.8	112.50	5.807				
8,900.0	6,911.6	8,688.6	6,737.4	62.4	60.9	-74.63	-299.8	2,158.2	653.5	535.7	117.73	5.551				
9,000.0	6,911.6	8,788.6	6,736.9	65.1	63.6	-74.59	-300.3	2,258.2	653.6	530.6	122.97	5.315				
9,100.0	6,911.6	8,888.6	6,736.5	67.8	66.3	-74.55	-300.8	2,358.2	653.7	525.5	128.23	5.098				
9,200.0	6,911.6	8,988.6	6,736.0	70.5	69.1	-74.51	-301.3	2,458.2	653.9	520.4	133.49	4.898				
9,300.0	6,911.6	9,088.6	6,735.6	73.2	71.8	-74.47	-301.9	2,558.2	654.0	515.2	138.76	4.713				
9,400.0	6,911.6	9,188.6	6,735.1	75.9	74.6	-74.43	-302.4	2,658.2	654.1	510.1	144.05	4.541				
9,500.0	6,911.7	9,288.6	6,734.7	78.6	77.3	-74.39	-302.9	2,758.2	654.3	504.9	149.33	4.381				
9,600.0	6,911.7	9,388.6	6,734.2	81.4	80.1	-74.35	-303.4	2,858.2	654.4	499.8	154.63	4.232				
9,700.0	6,911.7	9,488.6	6,733.8	84.1	82.8	-74.31	-303.9	2,958.2	654.5	494.6	159.93	4.093				
9,800.0	6,911.7	9,588.6	6,733.3	86.8	85.6	-74.28	-304.5	3,058.2	654.7	489.4	165.23	3.962				
9,900.0	6,911.7	9,688.6	6,732.8	89.6	88.4	-74.24	-305.0	3,158.2	654.8	484.3	170.54	3.840				
10,000.0	6,911.8	9,788.6	6,732.4	92.3	91.1	-74.20	-305.5	3,258.2	654.9	479.1	175.85	3.724				
10,100.0	6,911.8	9,888.6	6,731.9	95.1	93.9	-74.16	-306.0	3,358.2	655.1	473.9	181.16	3.616				
10,200.0	6,911.8	9,988.6	6,731.5	97.8	96.7	-74.12	-306.6	3,458.2	655.2	468.7	186.48	3.513				
10,300.0	6,911.8	10,088.6	6,731.0	100.6	99.4	-74.08	-307.1	3,558.1	655.3	463.5	191.80	3.417				
10,400.0	6,911.8	10,188.6	6,730.6	103.3	102.2	-74.04	-307.6	3,658.1	655.5	458.3	197.12	3.325				
10,500.0	6,911.8	10,288.6	6,730.1	106.1	105.0	-74.00	-308.1	3,758.1	655.6	453.2	202.44	3.239				
10,600.0	6,911.9	10,388.6	6,729.7	108.9	107.8	-73.96	-308.6	3,858.1	655.7	448.0	207.76	3.156				
10,700.0	6,911.9	10,488.6	6,729.2	111.6	110.6	-73.92	-309.2	3,958.1	655.9	442.8	213.08	3.078				
10,800.0	6,911.9	10,588.6	6,728.8	114.4	113.3	-73.88	-309.7	4,058.1	656.0	437.6	218.41	3.004				
10,900.0	6,911.9	10,688.6	6,728.3	117.2	116.1	-73.84	-310.2	4,158.1	656.1	432.4	223.73	2.933				
11,000.0	6,911.9	10,788.6	6,727.9	119.9	118.9	-73.80	-310.7	4,258.1	656.3	427.2	229.06	2.865				
11,100.0	6,911.9	10,888.6	6,727.4	122.7	121.7	-73.76	-311.3	4,358.1	656.4	422.0	234.38	2.801				
11,200.0	6,912.0	10,988.6	6,726.9	125.5	124.5	-73.72	-311.8	4,458.1	656.6	416.9	239.70	2.739				
11,300.0	6,912.0	11,088.6	6,726.5	128.3	127.3	-73.68	-312.3	4,558.1	656.7	411.7	245.03	2.680				
11,400.0	6,912.0	11,188.6	6,726.0	131.0	130.1	-73.64	-312.8	4,658.1	656.8	406.5	250.35	2.624				
11,408.1	6,912.0	11,196.7	6,726.0	131.3	130.3	-73.64	-312.9	4,666.2	656.8	406.1	250.78	2.619 SF				

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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)	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	92.34		-3.6	89.1	89.2				
100.0	100.0	99.0	99.0	0.1	0.1	92.34		-3.6	89.1	89.2	89.0	0.22	398.949	
200.0	200.0	199.0	199.0	0.3	0.3	92.34		-3.6	89.1	89.2	88.6	0.67	132.762 CC	
300.0	300.0	299.0	299.0	0.5	0.6	-94.56		-3.6	89.1	89.3	88.2	1.10	81.397 ES	
400.0	399.8	398.8	398.8	0.8	0.8	-97.87		-3.6	89.1	89.9	88.4	1.53	58.795	
500.0	499.5	498.5	498.5	1.0	1.0	-103.23		-3.6	89.1	91.5	89.5	2.00	45.835	
600.0	598.7	597.7	597.7	1.3	1.2	-110.29		-3.6	89.1	95.1	92.6	2.50	38.042	
700.0	697.5	696.5	696.5	1.6	1.5	-118.40		-3.6	89.1	101.6	98.6	3.03	33.559	
800.0	796.0	795.0	795.0	2.0	1.7	-126.14		-3.6	89.1	110.9	107.3	3.55	31.215	
900.0	894.5	893.5	893.5	2.4	1.9	-132.61		-3.6	89.1	121.8	117.8	4.06	30.030	
1,000.0	993.0	992.0	992.0	2.7	2.1	-137.97		-3.6	89.1	134.1	129.6	4.55	29.495	
1,100.0	1,091.6	1,090.6	1,090.6	3.1	2.3	-142.41		-3.6	89.1	147.4	142.3	5.03	29.324	
1,200.0	1,190.1	1,189.1	1,189.1	3.5	2.6	-146.10		-3.6	89.1	161.4	155.9	5.50	29.357	
1,300.0	1,288.6	1,287.6	1,287.6	3.9	2.8	-149.21		-3.6	89.1	175.9	169.9	5.96	29.502	
1,400.0	1,387.1	1,386.1	1,386.1	4.3	3.0	-151.83		-3.6	89.1	190.9	184.4	6.43	29.706	
1,500.0	1,485.6	1,484.6	1,484.6	4.7	3.2	-154.07		-3.6	89.1	206.2	199.3	6.89	29.938	
1,600.0	1,584.2	1,583.2	1,583.2	5.1	3.4	-156.01		-3.6	89.1	221.8	214.4	7.35	30.179	
1,700.0	1,682.7	1,681.7	1,681.7	5.5	3.7	-157.68		-3.6	89.1	237.5	229.7	7.81	30.419	
1,800.0	1,781.2	1,780.2	1,780.2	5.9	3.9	-159.15		-3.6	89.1	253.5	245.2	8.27	30.652	
1,900.0	1,879.7	1,878.7	1,878.7	6.3	4.1	-160.44		-3.6	89.1	269.6	260.9	8.73	30.876	
2,000.0	1,978.2	1,977.2	1,977.2	6.7	4.3	-161.59		-3.6	89.1	285.9	276.7	9.19	31.088	
2,100.0	2,076.8	2,076.5	2,076.5	7.1	4.5	-162.82		-3.3	88.2	302.1	292.4	9.65	31.312	
2,200.0	2,175.3	2,175.7	2,175.6	7.5	4.8	-164.53		-2.0	84.0	318.2	308.1	10.08	31.570	
2,300.0	2,273.8	2,274.2	2,273.8	7.9	5.0	-166.64		0.3	76.6	334.4	323.9	10.50	31.841	
2,400.0	2,372.3	2,371.9	2,370.9	8.3	5.2	-168.97		3.3	66.9	351.1	340.2	10.93	32.118	
2,500.0	2,470.8	2,469.5	2,468.0	8.7	5.4	-171.11		6.4	57.0	368.3	356.9	11.37	32.379	
2,600.0	2,569.4	2,567.1	2,565.0	9.1	5.7	-173.05		9.4	47.1	385.9	374.1	11.83	32.621	
2,700.0	2,667.9	2,664.7	2,662.1	9.5	5.9	-174.83		12.5	37.2	404.0	391.7	12.30	32.850	
2,800.0	2,766.4	2,762.3	2,759.1	9.9	6.1	-176.46		15.6	27.4	422.4	409.6	12.78	33.060	
2,900.0	2,864.9	2,859.9	2,856.2	10.3	6.4	-177.95		18.6	17.5	441.1	427.8	13.26	33.254	
3,000.0	2,963.5	2,957.5	2,953.2	10.7	6.6	-179.32		21.7	7.6	460.1	446.3	13.76	33.435	
3,100.0	3,062.0	3,055.1	3,050.3	11.1	6.9	179.42		24.8	-2.3	479.3	465.0	14.26	33.602	
3,200.0	3,160.5	3,152.7	3,147.4	11.5	7.1	178.25		27.9	-12.2	498.7	484.0	14.77	33.758	
3,300.0	3,259.0	3,250.3	3,244.4	11.9	7.4	177.17		30.9	-22.1	518.3	503.0	15.29	33.903	
3,400.0	3,357.5	3,347.9	3,341.5	12.3	7.7	176.17		34.0	-31.9	538.1	522.3	15.81	34.039	
3,500.0	3,456.1	3,445.5	3,438.5	12.7	7.9	175.24		37.1	-41.8	558.0	541.7	16.33	34.166	
3,600.0	3,554.6	3,543.1	3,535.6	13.1	8.2	174.38		40.1	-51.7	578.1	561.2	16.86	34.285	
3,700.0	3,653.1	3,640.7	3,632.6	13.5	8.5	173.57		43.2	-61.6	598.3	580.9	17.39	34.398	
3,800.0	3,751.6	3,738.3	3,729.7	13.9	8.7	172.81		46.3	-71.5	618.5	600.6	17.93	34.504	
3,900.0	3,850.1	3,835.9	3,826.7	14.3	9.0	172.10		49.4	-81.4	638.9	620.5	18.46	34.604	
4,000.0	3,948.7	3,935.9	3,926.2	14.7	9.3	171.44		52.5	-91.3	659.3	640.3	19.00	34.706	
4,100.0	4,047.2	4,042.5	4,032.4	15.1	9.5	171.01		54.9	-99.2	678.9	659.4	19.50	34.818	
4,200.0	4,145.7	4,149.7	4,139.6	15.5	9.7	170.91		56.2	-103.2	697.2	677.2	19.96	34.933	
4,300.0	4,244.2	4,253.4	4,243.2	15.9	9.9	171.09		56.4	-103.9	714.3	693.9	20.40	35.020	
4,400.0	4,342.8	4,351.9	4,341.8	16.2	10.1	171.30		56.4	-103.9	731.3	710.4	20.84	35.083	
4,500.0	4,441.3	4,450.4	4,440.3	16.6	10.3	171.50		56.4	-103.9	748.2	726.9	21.30	35.129	
4,600.0	4,539.8	4,549.0	4,538.8	17.0	10.5	171.69		56.4	-103.9	765.2	743.4	21.76	35.171	
4,700.0	4,638.3	4,647.5	4,637.3	17.4	10.7	171.87		56.4	-103.9	782.1	759.9	22.21	35.211	
4,800.0	4,736.8	4,746.0	4,735.8	17.8	10.9	172.04		56.4	-103.9	799.1	776.4	22.67	35.249	
4,900.0	4,835.4	4,844.5	4,834.4	18.2	11.1	172.21		56.4	-103.9	816.1	792.9	23.13	35.284	
5,000.0	4,933.9	4,943.1	4,932.9	18.6	11.3	172.37		56.4	-103.9	833.0	809.5	23.59	35.318	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,032.4	5,041.6	5,031.4	19.0	11.5	172.52		56.4	-103.9	850.0	826.0	24.05	35.350	
5,200.0	5,130.9	5,140.1	5,129.9	19.4	11.7	172.67		56.4	-103.9	867.0	842.5	24.51	35.379	
5,300.0	5,229.4	5,238.6	5,228.4	19.8	12.0	172.81		56.4	-103.9	884.0	859.1	24.97	35.408	
5,400.0	5,328.0	5,337.1	5,327.0	20.2	12.2	172.95		56.4	-103.9	901.0	875.6	25.43	35.434	
5,500.0	5,426.5	5,435.7	5,425.5	20.6	12.4	173.08		56.4	-103.9	918.1	892.2	25.89	35.460	
5,600.0	5,525.0	5,534.2	5,524.0	21.0	12.6	173.21		56.4	-103.9	935.0	908.7	26.36	35.473	
5,700.0	5,623.9	5,633.1	5,622.9	21.3	12.8	173.35		56.4	-103.9	949.8	923.0	26.82	35.417	
5,800.0	5,723.2	5,732.4	5,722.2	21.5	13.0	173.46		56.4	-103.9	961.1	933.9	27.24	35.280	
5,900.0	5,822.9	5,832.1	5,821.9	21.7	13.2	173.53		56.4	-103.9	969.0	941.3	27.63	35.067	
6,000.0	5,922.8	5,932.0	5,921.8	21.8	13.4	173.57		56.4	-103.9	973.4	945.4	27.99	34.781	
6,100.0	6,022.8	6,032.0	6,021.8	22.0	13.6	-0.64		56.4	-103.9	974.4	939.4	35.00	27.840	
6,200.0	6,122.8	6,132.0	6,121.8	22.1	13.9	-0.64		56.4	-103.9	974.4	939.1	35.32	27.587	
6,300.0	6,222.6	6,233.7	6,223.4	22.2	14.0	-90.94		56.3	-99.0	974.4	945.4	29.05	33.545	
6,400.0	6,321.0	6,335.8	6,323.7	22.3	14.2	-90.93		56.2	-80.8	974.4	945.1	29.33	33.228	
6,500.0	6,416.2	6,437.8	6,420.7	22.4	14.3	-90.90		56.1	-49.4	974.4	944.9	29.57	32.948	
6,600.0	6,506.7	6,539.8	6,512.6	22.5	14.4	-90.85		55.9	-5.4	974.4	944.6	29.87	32.625	
6,700.0	6,590.8	6,641.6	6,597.7	22.6	14.7	-90.79		55.6	50.3	974.4	944.1	30.32	32.143	
6,800.0	6,667.2	6,743.2	6,674.5	22.7	15.0	-90.71		55.3	116.7	974.5	943.4	31.06	31.372	
6,900.0	6,734.5	6,844.7	6,741.8	22.9	15.7	-90.63		54.9	192.6	974.5	942.2	32.26	30.210	
7,000.0	6,791.7	6,946.0	6,798.3	23.2	16.6	-90.53		54.5	276.6	974.5	940.5	34.03	28.637	
7,100.0	6,837.6	7,047.0	6,843.1	23.7	17.8	-90.42		54.1	367.1	974.5	938.1	36.44	26.743	
7,200.0	6,871.5	7,147.8	6,875.5	24.4	19.4	-90.31		53.6	462.4	974.5	935.1	39.47	24.689	
7,300.0	6,892.9	7,248.3	6,895.0	25.4	21.2	-90.19		53.1	560.9	974.6	931.5	43.04	22.645	
7,400.0	6,904.1	7,348.4	6,905.7	26.8	23.2	-90.16		52.7	660.5	974.6	927.6	47.00	20.735	
7,500.0	6,911.0	7,448.5	6,911.2	28.4	25.3	-90.08		52.2	760.4	974.7	923.4	51.25	19.016	
7,600.0	6,911.3	7,548.6	6,911.3	30.3	27.6	-90.06		51.7	860.4	974.7	919.0	55.74	17.488	
7,700.0	6,911.4	7,648.6	6,911.4	32.4	29.9	-90.06		51.2	960.4	974.7	914.3	60.40	16.139	
7,800.0	6,911.4	7,748.6	6,911.4	34.6	32.3	-90.06		50.7	1,060.4	974.8	909.6	65.21	14.948	
7,900.0	6,911.4	7,848.6	6,911.4	36.9	34.8	-90.06		50.2	1,160.4	974.8	904.7	70.14	13.897	
8,000.0	6,911.4	7,948.6	6,911.4	39.3	37.3	-90.06		49.7	1,260.4	974.9	899.7	75.17	12.968	
8,100.0	6,911.4	8,048.6	6,911.4	41.7	39.9	-90.06		49.3	1,360.4	974.9	894.6	80.28	12.144	
8,200.0	6,911.4	8,148.6	6,911.4	44.2	42.5	-90.06		48.8	1,460.4	975.0	889.5	85.45	11.409	
8,300.0	6,911.5	8,248.6	6,911.5	46.8	45.1	-90.06		48.3	1,560.4	975.0	884.3	90.68	10.752	
8,400.0	6,911.5	8,348.6	6,911.5	49.3	47.7	-90.06		47.8	1,660.4	975.0	879.1	95.95	10.162	
8,500.0	6,911.5	8,448.6	6,911.5	51.9	50.4	-90.06		47.3	1,760.4	975.1	873.8	101.26	9.630	
8,600.0	6,911.5	8,548.6	6,911.5	54.5	53.0	-90.06		46.8	1,860.4	975.1	868.5	106.59	9.148	
8,700.0	6,911.5	8,648.6	6,911.5	57.1	55.7	-90.06		46.3	1,960.4	975.2	863.2	111.96	8.710	
8,800.0	6,911.5	8,748.6	6,911.5	59.8	58.4	-90.06		45.9	2,060.4	975.2	857.9	117.35	8.310	
8,900.0	6,911.6	8,848.6	6,911.6	62.4	61.1	-90.06		45.4	2,160.4	975.3	852.5	122.76	7.944	
9,000.0	6,911.6	8,948.6	6,911.6	65.1	63.9	-90.06		44.9	2,260.4	975.3	847.1	128.19	7.608	
9,100.0	6,911.6	9,048.6	6,911.6	67.8	66.6	-90.06		44.4	2,360.4	975.3	841.7	133.63	7.299	
9,200.0	6,911.6	9,148.6	6,911.6	70.5	69.3	-90.06		43.9	2,460.4	975.4	836.3	139.09	7.013	
9,300.0	6,911.6	9,248.6	6,911.6	73.2	72.1	-90.06		43.4	2,560.4	975.4	830.9	144.56	6.747	
9,400.0	6,911.6	9,348.6	6,911.6	75.9	74.8	-90.06		43.0	2,660.4	975.5	825.4	150.04	6.501	
9,500.0	6,911.7	9,448.6	6,911.7	78.6	77.5	-90.06		42.5	2,760.4	975.5	820.0	155.53	6.272	
9,600.0	6,911.7	9,548.6	6,911.7	81.4	80.3	-90.06		42.0	2,860.4	975.6	814.5	161.03	6.058	
9,700.0	6,911.7	9,648.6	6,911.7	84.1	83.0	-90.06		41.5	2,960.4	975.6	809.1	166.54	5.858	
9,800.0	6,911.7	9,748.6	6,911.7	86.8	85.8	-90.06		41.0	3,060.4	975.6	803.6	172.06	5.671	
9,900.0	6,911.7	9,848.6	6,911.7	89.6	88.6	-90.06		40.5	3,160.4	975.7	798.1	177.58	5.494	
10,000.0	6,911.8	9,948.6	6,911.8	92.3	91.3	-90.06		40.0	3,260.4	975.7	792.6	183.10	5.329	
10,100.0	6,911.8	10,048.6	6,911.8	95.1	94.1	-90.06		39.6	3,360.4	975.8	787.1	188.64	5.173	

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis 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	6,911.8	10,148.6	6,911.8	97.8	96.9	-90.06	39.1	3,460.4	975.8	781.6	194.17	5.025	
10,300.0	6,911.8	10,248.6	6,911.8	100.6	99.6	-90.06	38.6	3,560.4	975.9	776.1	199.72	4.886	
10,400.0	6,911.8	10,348.6	6,911.8	103.3	102.4	-90.06	38.1	3,660.4	975.9	770.6	205.26	4.754	
10,500.0	6,911.8	10,448.6	6,911.8	106.1	105.2	-90.06	37.6	3,760.4	975.9	765.1	210.81	4.629	
10,600.0	6,911.9	10,548.6	6,911.9	108.9	108.0	-90.06	37.1	3,860.4	976.0	759.6	216.37	4.511	
10,700.0	6,911.9	10,648.6	6,911.9	111.6	110.8	-90.06	36.6	3,960.4	976.0	754.1	221.92	4.398	
10,800.0	6,911.9	10,748.6	6,911.9	114.4	113.5	-90.06	36.2	4,060.4	976.1	748.6	227.48	4.291	
10,900.0	6,911.9	10,848.6	6,911.9	117.2	116.3	-90.06	35.7	4,160.4	976.1	743.1	233.05	4.189	
11,000.0	6,911.9	10,948.6	6,911.9	119.9	119.1	-90.06	35.2	4,260.4	976.2	737.6	238.61	4.091	
11,100.0	6,911.9	11,048.6	6,911.9	122.7	121.9	-90.06	34.7	4,360.4	976.2	732.0	244.18	3.998	
11,200.0	6,912.0	11,148.6	6,912.0	125.5	124.7	-90.06	34.2	4,460.4	976.2	726.5	249.75	3.909	
11,300.0	6,912.0	11,248.6	6,912.0	128.3	127.5	-90.06	33.7	4,560.4	976.3	721.0	255.32	3.824	
11,400.0	6,912.0	11,348.6	6,912.0	131.0	130.2	-90.06	33.3	4,660.4	976.3	715.4	260.89	3.742	
11,408.1	6,912.0	11,354.5	6,912.0	131.3	130.4	-90.06	33.2	4,666.4	976.3	715.1	261.29	3.737 SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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-MWDD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	30.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.99	0.0	30.6	30.6	30.4	0.22	136.341		
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	30.6	30.6	30.0	0.67	45.447 CC		
300.0	300.0	300.0	300.0	0.5	0.6	-99.01	0.0	30.6	30.9	29.8	1.10	28.063 ES		
400.0	399.8	399.8	399.8	0.8	0.8	-108.24	0.0	30.6	32.1	30.6	1.53	20.954		
500.0	499.5	499.5	499.5	1.0	1.0	-121.50	0.0	30.6	35.8	33.8	2.00	17.937		
600.0	598.7	598.7	598.7	1.3	1.2	-135.17	0.0	30.6	43.5	41.0	2.48	17.555		
700.0	697.5	697.5	697.5	1.6	1.5	-146.42	0.0	30.6	55.7	52.7	2.95	18.869		
800.0	796.0	796.0	796.0	2.0	1.7	-154.10	0.0	30.6	70.7	67.2	3.41	20.708		
900.0	894.5	894.5	894.5	2.4	1.9	-159.06	0.0	30.6	86.4	82.6	3.87	22.335		
1,000.0	993.0	993.0	993.0	2.7	2.1	-162.48	0.0	30.6	102.6	98.3	4.33	23.715		
1,100.0	1,091.6	1,095.4	1,095.4	3.1	2.3	-164.93	-1.6	30.3	117.6	112.8	4.77	24.674		
1,200.0	1,190.1	1,199.1	1,199.0	3.5	2.5	-166.63	-6.8	29.2	129.2	124.0	5.18	24.915		
1,300.0	1,288.6	1,303.6	1,303.0	3.9	2.7	-167.90	-15.7	27.3	137.3	131.6	5.62	24.427		
1,400.0	1,387.1	1,408.1	1,406.8	4.3	2.9	-168.90	-28.4	24.5	141.8	135.7	6.07	23.365		
1,500.0	1,485.6	1,508.1	1,505.7	4.7	3.2	-169.76	-42.0	21.6	144.8	138.2	6.52	22.213		
1,600.0	1,584.2	1,608.0	1,604.7	5.1	3.4	-170.57	-55.5	18.7	147.8	140.8	6.97	21.194		
1,700.0	1,682.7	1,707.9	1,703.6	5.5	3.7	-171.36	-69.1	15.8	150.9	143.4	7.43	20.291		
1,800.0	1,781.2	1,807.9	1,802.6	5.9	4.0	-172.11	-82.7	12.8	153.9	146.0	7.90	19.486		
1,900.0	1,879.7	1,907.8	1,901.6	6.3	4.3	-172.84	-96.3	9.9	157.1	148.7	8.37	18.768		
2,000.0	1,978.2	2,007.7	2,000.5	6.7	4.6	-173.53	-109.9	7.0	160.2	151.4	8.84	18.122		
2,100.0	2,076.8	2,107.7	2,099.5	7.1	4.9	-174.20	-123.5	4.1	163.4	154.0	9.31	17.538		
2,200.0	2,175.3	2,207.6	2,198.5	7.5	5.2	-174.85	-137.1	1.1	166.5	156.8	9.79	17.008		
2,300.0	2,273.8	2,307.5	2,297.4	7.9	5.6	-175.47	-150.7	-1.8	169.7	159.5	10.27	16.526		
2,400.0	2,372.3	2,407.5	2,396.4	8.3	5.9	-176.06	-164.3	-4.7	173.0	162.2	10.75	16.085		
2,500.0	2,470.8	2,507.4	2,495.3	8.7	6.2	-176.64	-177.9	-7.6	176.2	165.0	11.24	15.681		
2,600.0	2,569.4	2,607.3	2,594.3	9.1	6.5	-177.19	-191.5	-10.6	179.5	167.7	11.72	15.309		
2,700.0	2,667.9	2,707.3	2,693.3	9.5	6.9	-177.73	-205.1	-13.5	182.7	170.5	12.21	14.966		
2,800.0	2,766.4	2,807.2	2,792.2	9.9	7.2	-178.24	-218.6	-16.4	186.0	173.3	12.70	14.647		
2,900.0	2,864.9	2,907.1	2,891.2	10.3	7.5	-178.74	-232.2	-19.3	189.3	176.1	13.19	14.352		
3,000.0	2,963.5	3,007.1	2,990.1	10.7	7.9	-179.22	-245.8	-22.3	192.7	179.0	13.69	14.077		
3,100.0	3,062.0	3,107.0	3,089.1	11.1	8.2	-179.68	-259.4	-25.2	196.0	181.8	14.18	13.820		
3,200.0	3,160.5	3,206.9	3,188.1	11.5	8.6	179.87	-273.0	-28.1	199.3	184.6	14.68	13.580		
3,300.0	3,259.0	3,306.9	3,287.0	11.9	8.9	179.44	-286.6	-31.0	202.7	187.5	15.18	13.355		
3,400.0	3,357.5	3,406.8	3,386.0	12.3	9.2	179.02	-300.2	-34.0	206.0	190.4	15.68	13.144		
3,500.0	3,456.1	3,506.7	3,484.9	12.7	9.6	178.61	-313.8	-36.9	209.4	193.2	16.18	12.945		
3,600.0	3,554.6	3,606.7	3,583.9	13.1	9.9	178.22	-327.4	-39.8	212.8	196.1	16.68	12.758		
3,700.0	3,653.1	3,706.6	3,682.9	13.5	10.3	177.84	-341.0	-42.7	216.2	199.0	17.19	12.581		
3,800.0	3,751.6	3,806.5	3,781.8	13.9	10.6	177.47	-354.6	-45.7	219.6	201.9	17.69	12.414		
3,900.0	3,850.1	3,906.4	3,880.8	14.3	10.9	177.11	-368.2	-48.6	223.0	204.8	18.20	12.255		
4,000.0	3,948.7	4,006.4	3,979.7	14.7	11.3	176.76	-381.7	-51.5	226.4	207.7	18.71	12.105		
4,100.0	4,047.2	4,106.3	4,078.7	15.1	11.6	176.43	-395.3	-54.4	229.9	210.7	19.22	11.962		
4,200.0	4,145.7	4,206.2	4,177.7	15.5	12.0	176.10	-408.9	-57.4	233.3	213.6	19.73	11.826		
4,300.0	4,244.2	4,306.2	4,276.6	15.9	12.3	175.78	-422.5	-60.3	236.8	216.5	20.24	11.697		
4,400.0	4,342.8	4,406.1	4,375.6	16.2	12.7	175.48	-436.1	-63.2	240.2	219.5	20.76	11.574		
4,500.0	4,441.3	4,506.0	4,474.5	16.6	13.0	175.18	-449.7	-66.1	243.7	222.4	21.27	11.456		
4,600.0	4,539.8	4,606.0	4,573.5	17.0	13.4	174.89	-463.3	-69.1	247.1	225.4	21.79	11.344		
4,700.0	4,638.3	4,705.9	4,672.5	17.4	13.7	174.60	-476.9	-72.0	250.6	228.3	22.30	11.236		
4,800.0	4,736.8	4,805.8	4,771.4	17.8	14.1	174.33	-490.5	-74.9	254.1	231.3	22.82	11.133		
4,900.0	4,835.4	4,905.8	4,870.4	18.2	14.4	174.06	-504.1	-77.8	257.6	234.2	23.34	11.035		
5,000.0	4,933.9	5,005.7	4,969.3	18.6	14.8	173.80	-517.7	-80.8	261.1	237.2	23.86	10.940		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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
5,100.0	5,032.4	5,105.6	5,068.3	19.0	15.1	173.55	-531.3	-83.7	264.6	240.2	24.38	10.850		
5,200.0	5,130.9	5,205.6	5,167.3	19.4	15.4	173.30	-544.9	-86.6	268.1	243.2	24.91	10.763		
5,300.0	5,229.4	5,305.5	5,266.2	19.8	15.8	173.06	-558.4	-89.5	271.6	246.1	25.43	10.679		
5,400.0	5,328.0	5,405.4	5,365.2	20.2	16.1	172.82	-572.0	-92.5	275.1	249.1	25.95	10.598		
5,500.0	5,426.5	5,505.4	5,464.1	20.6	16.5	172.60	-585.6	-95.4	278.6	252.1	26.48	10.521		
5,600.0	5,525.0	5,600.0	5,557.9	21.0	16.8	172.41	-598.0	-98.0	282.7	255.7	26.98	10.478		
5,700.0	5,623.9	5,690.9	5,648.4	21.3	17.0	172.33	-607.2	-100.0	287.4	260.0	27.37	10.497		
5,800.0	5,723.2	5,781.9	5,739.1	21.5	17.2	172.30	-613.6	-101.4	291.7	264.0	27.72	10.521		
5,900.0	5,822.9	5,872.8	5,829.9	21.7	17.3	172.33	-617.2	-102.2	295.6	267.6	28.02	10.550		
6,000.0	5,922.8	5,965.7	5,922.8	21.8	17.5	172.40	-618.0	-102.4	299.1	270.8	28.29	10.575		
6,100.0	6,022.8	6,065.7	6,022.8	22.0	17.6	-1.79	-618.0	-102.4	300.1	260.9	39.20	7.656		
6,200.0	6,122.8	6,166.5	6,123.5	22.1	17.7	-1.23	-618.0	-99.4	300.1	260.6	39.48	7.601		
6,285.5	6,208.2	6,252.0	6,208.1	22.1	17.8	-89.97	-618.1	-87.2	299.9	270.9	29.00	10.343		
6,300.0	6,222.6	6,266.3	6,222.1	22.2	17.8	-89.53	-618.1	-84.2	300.0	270.9	29.01	10.338		
6,400.0	6,321.0	6,364.8	6,316.6	22.3	17.9	-87.52	-618.2	-56.8	300.2	271.0	29.18	10.290		
6,500.0	6,416.2	6,461.9	6,405.6	22.4	18.0	-85.58	-618.5	-18.0	300.8	271.4	29.39	10.235		
6,600.0	6,506.7	6,557.9	6,488.0	22.5	18.1	-83.73	-618.7	31.0	301.7	272.0	29.73	10.148		
6,700.0	6,590.8	6,652.8	6,562.8	22.6	18.2	-81.99	-619.0	89.3	302.9	272.6	30.27	10.005		
6,800.0	6,667.2	6,746.7	6,629.2	22.7	18.4	-80.41	-619.4	155.7	304.2	273.1	31.10	9.780		
6,900.0	6,734.5	6,839.8	6,686.4	22.9	18.6	-78.99	-619.8	229.0	305.5	273.2	32.29	9.461		
7,000.0	6,791.7	6,932.1	6,733.9	23.2	19.0	-77.77	-620.3	308.1	306.8	272.9	33.90	9.051		
7,100.0	6,837.6	7,023.7	6,771.4	23.7	19.8	-76.74	-620.7	391.7	308.1	272.1	35.95	8.569		
7,200.0	6,871.5	7,114.9	6,798.4	24.4	20.9	-75.92	-621.2	478.7	309.1	270.7	38.44	8.042		
7,300.0	6,892.9	7,205.7	6,814.9	25.4	22.3	-75.31	-621.7	567.9	309.9	268.6	41.31	7.501		
7,400.0	6,904.1	7,296.1	6,820.6	26.8	24.0	-74.51	-622.2	658.0	311.2	266.5	44.70	6.961		
7,500.0	6,911.0	7,394.9	6,820.2	28.4	26.1	-73.15	-622.7	756.9	313.2	265.0	48.17	6.502		
7,600.0	6,911.3	7,494.9	6,819.6	30.3	28.2	-72.98	-623.3	856.9	313.4	261.1	52.36	5.986		
7,700.0	6,911.4	7,594.9	6,819.1	32.4	30.5	-72.88	-623.9	956.9	313.6	256.7	56.83	5.517		
7,800.0	6,911.4	7,694.9	6,818.5	34.6	32.9	-72.79	-624.4	1,056.9	313.7	252.3	61.45	5.105		
7,900.0	6,911.4	7,794.9	6,818.0	36.9	35.4	-72.69	-625.0	1,156.9	313.9	247.7	66.17	4.743		
8,000.0	6,911.4	7,894.9	6,817.4	39.3	37.9	-72.59	-625.5	1,256.9	314.0	243.0	70.98	4.424		
8,100.0	6,911.4	7,994.9	6,816.9	41.7	40.4	-72.49	-626.1	1,356.8	314.1	238.3	75.85	4.141		
8,200.0	6,911.4	8,094.9	6,816.4	44.2	43.0	-72.39	-626.6	1,456.8	314.3	233.5	80.78	3.891		
8,300.0	6,911.5	8,194.9	6,815.8	46.8	45.6	-72.29	-627.2	1,556.8	314.4	228.7	85.75	3.667		
8,400.0	6,911.5	8,294.9	6,815.3	49.3	48.2	-72.19	-627.7	1,656.8	314.6	223.8	90.76	3.466		
8,500.0	6,911.5	8,394.9	6,814.7	51.9	50.9	-72.10	-628.3	1,756.8	314.7	218.9	95.80	3.285		
8,600.0	6,911.5	8,494.9	6,814.2	54.5	53.5	-72.00	-628.8	1,856.8	314.9	214.0	100.86	3.122		
8,700.0	6,911.5	8,594.9	6,813.7	57.1	56.2	-71.90	-629.4	1,956.8	315.0	209.1	105.94	2.974		
8,800.0	6,911.5	8,694.9	6,813.1	59.8	58.9	-71.80	-629.9	2,056.8	315.2	204.1	111.03	2.838		
8,900.0	6,911.6	8,794.9	6,812.6	62.4	61.6	-71.70	-630.5	2,156.8	315.3	199.2	116.14	2.715		
9,000.0	6,911.6	8,894.9	6,812.0	65.1	64.3	-71.61	-631.0	2,256.8	315.5	194.2	121.26	2.602		
9,100.0	6,911.6	8,994.9	6,811.5	67.8	67.0	-71.51	-631.6	2,356.8	315.6	189.2	126.39	2.497		
9,200.0	6,911.6	9,094.9	6,811.0	70.5	69.7	-71.41	-632.2	2,456.8	315.8	184.2	131.52	2.401		
9,300.0	6,911.6	9,194.9	6,810.4	73.2	72.5	-71.31	-632.7	2,556.8	315.9	179.3	136.66	2.312		
9,400.0	6,911.6	9,294.9	6,809.9	75.9	75.2	-71.22	-633.3	2,656.8	316.1	174.3	141.81	2.229		
9,500.0	6,911.7	9,394.9	6,809.3	78.6	77.9	-71.12	-633.8	2,756.8	316.2	169.3	146.96	2.152		
9,600.0	6,911.7	9,494.9	6,808.8	81.4	80.7	-71.02	-634.4	2,856.8	316.4	164.3	152.10	2.080		
9,700.0	6,911.7	9,594.9	6,808.3	84.1	83.4	-70.93	-634.9	2,956.8	316.6	159.3	157.25	2.013		
9,800.0	6,911.7	9,694.9	6,807.7	86.8	86.2	-70.83	-635.5	3,056.8	316.7	154.3	162.41	1.950		
9,900.0	6,911.7	9,794.9	6,807.2	89.6	89.0	-70.73	-636.0	3,156.8	316.9	149.3	167.56	1.891		
10,000.0	6,911.8	9,894.9	6,806.6	92.3	91.7	-70.63	-636.6	3,256.8	317.0	144.3	172.71	1.836		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
10,100.0	6,911.8	9,994.9	6,806.1	95.1	94.5	-70.54	-637.1	3,356.8	317.2	139.3	177.85	1.783	
10,200.0	6,911.8	10,094.9	6,805.5	97.8	97.2	-70.44	-637.7	3,456.8	317.4	134.4	183.00	1.734	
10,300.0	6,911.8	10,194.9	6,805.0	100.6	100.0	-70.34	-638.2	3,556.7	317.5	129.4	188.15	1.688	
10,400.0	6,911.8	10,294.9	6,804.5	103.3	102.8	-70.25	-638.8	3,656.7	317.7	124.4	193.29	1.644	
10,500.0	6,911.8	10,394.9	6,803.9	106.1	105.6	-70.15	-639.3	3,756.7	317.9	119.4	198.43	1.602	
10,600.0	6,911.9	10,494.9	6,803.4	108.9	108.3	-70.06	-639.9	3,856.7	318.0	114.5	203.56	1.562	
10,700.0	6,911.9	10,594.9	6,802.8	111.6	111.1	-69.96	-640.5	3,956.7	318.2	109.5	208.70	1.525	
10,800.0	6,911.9	10,694.9	6,802.3	114.4	113.9	-69.86	-641.0	4,056.7	318.4	104.5	213.83	1.489 Level 3	
10,900.0	6,911.9	10,794.9	6,801.8	117.2	116.7	-69.77	-641.6	4,156.7	318.5	99.6	218.95	1.455 Level 3	
11,000.0	6,911.9	10,894.8	6,801.2	119.9	119.4	-69.67	-642.1	4,256.7	318.7	94.6	224.07	1.422 Level 3	
11,100.0	6,911.9	10,994.8	6,800.7	122.7	122.2	-69.58	-642.7	4,356.7	318.9	89.7	229.19	1.391 Level 3	
11,200.0	6,912.0	11,094.8	6,800.1	125.5	125.0	-69.48	-643.2	4,456.7	319.0	84.7	234.30	1.362 Level 3	
11,300.0	6,912.0	11,194.8	6,799.6	128.3	127.8	-69.39	-643.8	4,556.7	319.2	79.8	239.41	1.333 Level 3	
11,400.0	6,912.0	11,294.8	6,799.1	131.0	130.6	-69.29	-644.3	4,656.7	319.4	74.9	244.51	1.306 Level 3	
11,408.1	6,912.0	11,302.9	6,799.0	131.3	130.8	-69.28	-644.4	4,664.8	319.4	74.5	244.93	1.304 Level 3, SF	

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<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		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	132.18	-1,020.0	1,125.5	1,519.0					
100.0	100.0	98.0	98.0	0.1	0.1	132.18	-1,020.0	1,125.5	1,519.0	1,518.8	0.22	6,820.314		
200.0	200.0	198.0	198.0	0.3	0.2	132.18	-1,020.0	1,125.5	1,519.0	1,518.4	0.56	2,713.152		
300.0	300.0	298.0	298.0	0.5	0.3	-53.67	-1,020.0	1,125.5	1,518.0	1,517.1	0.87	1,736.802		
400.0	399.8	397.8	397.8	0.8	0.4	-53.88	-1,020.0	1,125.5	1,514.9	1,513.7	1.19	1,271.796		
500.0	499.5	497.5	497.5	1.0	0.6	-54.23	-1,020.0	1,125.5	1,509.7	1,508.2	1.54	982.030		
600.0	598.7	596.7	596.7	1.3	0.7	-54.72	-1,020.0	1,125.5	1,502.6	1,500.7	1.92	784.470		
700.0	697.5	695.5	695.5	1.6	0.8	-55.34	-1,020.0	1,125.5	1,493.6	1,491.2	2.33	640.745		
800.0	796.0	794.0	794.0	2.0	0.9	-55.88	-1,020.0	1,125.5	1,483.8	1,481.0	2.77	534.941		
900.0	894.5	892.5	892.5	2.4	1.0	-56.43	-1,020.0	1,125.5	1,474.2	1,470.9	3.23	456.651		
1,000.0	993.0	991.0	991.0	2.7	1.1	-56.98	-1,020.0	1,125.5	1,464.7	1,461.0	3.69	396.859		
1,100.0	1,091.6	1,089.6	1,089.6	3.1	1.2	-57.54	-1,020.0	1,125.5	1,455.3	1,451.1	4.16	349.912		
1,200.0	1,190.1	1,188.1	1,188.1	3.5	1.3	-58.11	-1,020.0	1,125.5	1,446.1	1,441.4	4.63	312.176		
1,300.0	1,288.6	1,286.6	1,286.6	3.9	1.4	-58.68	-1,020.0	1,125.5	1,437.0	1,431.9	5.11	281.238		
1,400.0	1,387.1	1,385.1	1,385.1	4.3	1.6	-59.26	-1,020.0	1,125.5	1,428.1	1,422.5	5.59	255.449		
1,500.0	1,485.6	1,483.6	1,483.6	4.7	1.7	-59.85	-1,020.0	1,125.5	1,419.3	1,413.2	6.07	233.644		
1,600.0	1,584.2	1,582.2	1,582.2	5.1	1.8	-60.45	-1,020.0	1,125.5	1,410.7	1,404.1	6.56	214.983		
1,700.0	1,682.7	1,680.7	1,680.7	5.5	1.9	-61.05	-1,020.0	1,125.5	1,402.2	1,395.1	7.05	198.843		
1,800.0	1,781.2	1,779.2	1,779.2	5.9	2.0	-61.66	-1,020.0	1,125.5	1,393.9	1,386.3	7.54	184.755		
1,900.0	1,879.7	1,877.7	1,877.7	6.3	2.1	-62.27	-1,020.0	1,125.5	1,385.7	1,377.7	8.04	172.359		
2,000.0	1,978.2	1,976.2	1,976.2	6.7	2.2	-62.90	-1,020.0	1,125.5	1,377.8	1,369.2	8.54	161.375		
2,100.0	2,076.8	2,074.8	2,074.8	7.1	2.3	-63.53	-1,020.0	1,125.5	1,369.9	1,360.9	9.04	151.579		
2,200.0	2,175.3	2,173.3	2,173.3	7.5	2.4	-64.16	-1,020.0	1,125.5	1,362.3	1,352.8	9.54	142.795		
2,300.0	2,273.8	2,271.8	2,271.8	7.9	2.6	-64.81	-1,020.0	1,125.5	1,354.8	1,344.8	10.04	134.876		
2,400.0	2,372.3	2,370.3	2,370.3	8.3	2.7	-65.46	-1,020.0	1,125.5	1,347.5	1,337.0	10.55	127.707		
2,500.0	2,470.8	2,468.8	2,468.8	8.7	2.8	-66.12	-1,020.0	1,125.5	1,340.4	1,329.4	11.06	121.188		
2,600.0	2,569.4	2,567.4	2,567.4	9.1	2.9	-66.78	-1,020.0	1,125.5	1,333.5	1,321.9	11.57	115.239		
2,700.0	2,667.9	2,665.9	2,665.9	9.5	3.0	-67.45	-1,020.0	1,125.5	1,326.7	1,314.7	12.08	109.791		
2,800.0	2,766.4	2,764.4	2,764.4	9.9	3.1	-68.13	-1,020.0	1,125.5	1,320.2	1,307.6	12.60	104.787		
2,900.0	2,864.9	2,862.9	2,862.9	10.3	3.2	-68.82	-1,020.0	1,125.5	1,313.8	1,300.7	13.11	100.177		
3,000.0	2,963.5	2,961.5	2,961.5	10.7	3.3	-69.51	-1,020.0	1,125.5	1,307.6	1,294.0	13.63	95.919		
3,100.0	3,062.0	3,060.0	3,060.0	11.1	3.4	-70.20	-1,020.0	1,125.5	1,301.7	1,287.5	14.15	91.976		
3,200.0	3,160.5	3,158.5	3,158.5	11.5	3.5	-70.91	-1,020.0	1,125.5	1,295.9	1,281.2	14.67	88.318		
3,300.0	3,259.0	3,257.0	3,257.0	11.9	3.7	-71.62	-1,020.0	1,125.5	1,290.3	1,275.1	15.19	84.917		
3,400.0	3,357.5	3,355.5	3,355.5	12.3	3.8	-72.33	-1,020.0	1,125.5	1,284.9	1,269.2	15.72	81.749		
3,500.0	3,456.1	3,454.1	3,454.1	12.7	3.9	-73.05	-1,020.0	1,125.5	1,279.8	1,263.5	16.24	78.792		
3,600.0	3,554.6	3,552.6	3,552.6	13.1	4.0	-73.78	-1,020.0	1,125.5	1,274.8	1,258.0	16.77	76.029		
3,700.0	3,653.1	3,651.1	3,651.1	13.5	4.1	-74.51	-1,020.0	1,125.5	1,270.1	1,252.8	17.29	73.442		
3,800.0	3,751.6	3,749.6	3,749.6	13.9	4.2	-75.25	-1,020.0	1,125.5	1,265.5	1,247.7	17.82	71.017		
3,900.0	3,850.1	3,848.1	3,848.1	14.3	4.3	-75.99	-1,020.0	1,125.5	1,261.2	1,242.9	18.35	68.741		
4,000.0	3,948.7	3,946.7	3,946.7	14.7	4.4	-76.74	-1,020.0	1,125.5	1,257.1	1,238.2	18.87	66.603		
4,100.0	4,047.2	4,045.2	4,045.2	15.1	4.5	-77.49	-1,020.0	1,125.5	1,253.2	1,233.8	19.40	64.591		
4,200.0	4,145.7	4,143.7	4,143.7	15.5	4.7	-78.25	-1,020.0	1,125.5	1,249.6	1,229.7	19.93	62.697		
4,300.0	4,244.2	4,242.2	4,242.2	15.9	4.8	-79.01	-1,020.0	1,125.5	1,246.2	1,225.7	20.46	60.911		
4,400.0	4,342.8	4,340.8	4,340.8	16.2	4.9	-79.77	-1,020.0	1,125.5	1,243.0	1,222.0	20.99	59.227		
4,500.0	4,441.3	4,439.3	4,439.3	16.6	5.0	-80.54	-1,020.0	1,125.5	1,240.0	1,218.5	21.51	57.637		
4,600.0	4,539.8	4,537.8	4,537.8	17.0	5.1	-81.31	-1,020.0	1,125.5	1,237.2	1,215.2	22.04	56.135		
4,700.0	4,638.3	4,636.3	4,636.3	17.4	5.2	-82.09	-1,020.0	1,125.5	1,234.7	1,212.2	22.57	54.714		
4,800.0	4,736.8	4,734.8	4,734.8	17.8	5.3	-82.86	-1,020.0	1,125.5	1,232.5	1,209.4	23.09	53.371		
4,900.0	4,835.4	4,833.4	4,833.4	18.2	5.4	-83.64	-1,020.0	1,125.5	1,230.4	1,206.8	23.62	52.099		
5,000.0	4,933.9	4,931.9	4,931.9	18.6	5.5	-84.43	-1,020.0	1,125.5	1,228.6	1,204.5	24.14	50.894		

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design												Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 ft
Survey Program: 7300-MWD												Offset Well Error:		0.0 ft		
Reference		Offset		Semi Major Axis			Distance						Warning			
Measured Depth	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	5,032.4	5,030.4	5,030.4	19.0	5.7	-85.21	-1,020.0	1,125.5	1,227.0	1,202.4	24.66	49.753				
5,200.0	5,130.9	5,128.9	5,128.9	19.4	5.8	-86.00	-1,020.0	1,125.5	1,225.7	1,200.5	25.18	48.672				
5,300.0	5,229.4	5,227.4	5,227.4	19.8	5.9	-86.78	-1,020.0	1,125.5	1,224.6	1,198.9	25.70	47.646				
5,400.0	5,328.0	5,326.0	5,326.0	20.2	6.0	-87.57	-1,020.0	1,125.5	1,223.8	1,197.5	26.22	46.673				
5,500.0	5,426.5	5,424.5	5,424.5	20.6	6.1	-88.36	-1,020.0	1,125.5	1,223.1	1,196.4	26.73	45.751				
5,600.0	5,525.0	5,523.0	5,523.0	21.0	6.2	-89.15	-1,020.0	1,125.5	1,222.8	1,195.5	27.24	44.892				
5,700.0	5,623.9	5,621.9	5,621.9	21.3	6.3	-89.84	-1,020.0	1,125.5	1,222.6	1,195.0	27.60	44.300				
5,727.7	5,651.4	5,649.4	5,649.4	21.3	6.3	-90.00	-1,020.0	1,125.5	1,222.6	1,194.9	27.69	44.155				
5,800.0	5,723.2	5,721.2	5,721.2	21.5	6.4	-90.37	-1,020.0	1,125.5	1,222.6	1,194.7	27.93	43.782				
5,900.0	5,822.9	5,820.9	5,820.9	21.7	6.5	-90.74	-1,020.0	1,125.5	1,222.7	1,194.5	28.22	43.333				
6,000.0	5,922.8	5,920.8	5,920.8	21.8	6.7	-90.95	-1,020.0	1,125.5	1,222.8	1,194.3	28.47	42.945				
6,100.0	6,022.8	6,020.8	6,020.8	22.0	6.8	94.79	-1,020.0	1,125.5	1,222.8	1,201.4	21.38	57.186				
6,200.0	6,122.8	6,120.8	6,120.8	22.1	6.9	94.79	-1,020.0	1,125.5	1,222.8	1,201.2	21.65	56.474				
6,300.0	6,222.6	6,220.6	6,220.6	22.2	7.0	4.53	-1,020.0	1,125.5	1,218.1	1,189.0	29.02	41.967				
6,400.0	6,321.0	6,319.0	6,319.0	22.3	7.1	4.71	-1,020.0	1,125.5	1,200.5	1,171.7	28.78	41.714				
6,500.0	6,416.2	6,414.2	6,414.2	22.4	7.2	5.03	-1,020.0	1,125.5	1,170.3	1,142.1	28.20	41.506				
6,600.0	6,506.7	6,504.7	6,504.7	22.5	7.3	5.55	-1,020.0	1,125.5	1,128.0	1,100.7	27.30	41.327				
6,700.0	6,590.8	6,588.8	6,588.8	22.6	7.4	6.33	-1,020.0	1,125.5	1,074.3	1,048.2	26.11	41.147				
6,800.0	6,667.2	6,665.2	6,665.2	22.7	7.5	7.52	-1,020.0	1,125.5	1,010.2	985.5	24.69	40.911				
6,900.0	6,734.5	6,732.5	6,732.5	22.9	7.6	9.34	-1,020.0	1,125.5	936.7	913.5	23.13	40.489				
7,000.0	6,791.7	6,789.7	6,789.7	23.2	7.6	12.29	-1,020.0	1,125.5	855.2	833.5	21.62	39.546				
7,100.0	6,837.6	6,835.6	6,835.6	23.7	7.7	17.42	-1,020.0	1,125.5	767.0	746.4	20.63	37.173				
7,200.0	6,871.5	6,869.5	6,869.5	24.4	7.7	27.33	-1,020.0	1,125.5	673.9	652.4	21.43	31.446				
7,300.0	6,892.9	6,890.9	6,890.9	25.4	7.7	48.29	-1,020.0	1,125.5	577.4	551.2	26.20	22.039				
7,400.0	6,904.1	6,902.1	6,902.1	26.8	7.8	62.80	-1,020.0	1,125.5	479.7	449.5	30.18	15.894				
7,500.0	6,911.0	6,909.0	6,909.0	28.4	7.8	84.45	-1,020.0	1,125.5	382.5	348.7	33.82	11.310				
7,600.0	6,911.3	6,909.3	6,909.3	30.3	7.8	89.97	-1,020.0	1,125.5	286.8	250.8	35.94	7.980				
7,700.0	6,911.4	6,909.4	6,909.4	32.4	7.8	89.98	-1,020.0	1,125.5	195.3	157.1	38.26	5.106				
7,800.0	6,911.4	6,909.4	6,909.4	34.6	7.8	89.99	-1,020.0	1,125.5	118.7	78.0	40.66	2.919				
7,870.3	6,911.4	6,909.4	6,909.4	36.2	7.8	90.00	-1,020.0	1,125.5	95.6	53.2	42.39	2.256 CC, ES, SF				
7,900.0	6,911.4	6,909.4	6,909.4	36.9	7.8	90.00	-1,020.0	1,125.5	100.1	57.0	43.12	2.322				
8,000.0	6,911.4	6,909.4	6,909.4	39.3	7.8	90.01	-1,020.0	1,125.5	161.1	115.5	45.63	3.531				
8,100.0	6,911.4	6,909.4	6,909.4	41.7	7.8	90.02	-1,020.0	1,125.5	248.8	200.6	48.18	5.164				
8,200.0	6,911.4	6,909.4	6,909.4	44.2	7.8	90.03	-1,020.0	1,125.5	343.2	292.5	50.76	6.763				
8,300.0	6,911.5	6,909.5	6,909.5	46.8	7.8	90.04	-1,020.0	1,125.5	440.2	386.8	53.36	8.248				
8,400.0	6,911.5	6,909.5	6,909.5	49.3	7.8	90.06	-1,020.0	1,125.5	538.2	482.2	55.99	9.612				
8,500.0	6,911.5	6,909.5	6,909.5	51.9	7.8	90.07	-1,020.0	1,125.5	636.9	578.2	58.64	10.860				
8,600.0	6,911.5	6,909.5	6,909.5	54.5	7.8	90.08	-1,020.0	1,125.5	735.9	674.6	61.31	12.003				
8,700.0	6,911.5	6,909.5	6,909.5	57.1	7.8	90.09	-1,020.0	1,125.5	835.1	771.2	63.99	13.052				
8,800.0	6,911.5	6,909.5	6,909.5	59.8	7.8	90.10	-1,020.0	1,125.5	934.6	867.9	66.68	14.016				
8,900.0	6,911.6	6,909.6	6,909.6	62.4	7.8	90.11	-1,020.0	1,125.5	1,034.1	964.7	69.38	14.904				
9,000.0	6,911.6	6,909.6	6,909.6	65.1	7.8	90.12	-1,020.0	1,125.5	1,133.7	1,061.6	72.09	15.726				
9,100.0	6,911.6	6,909.6	6,909.6	67.8	7.8	90.13	-1,020.0	1,125.5	1,233.4	1,158.6	74.81	16.486				
9,200.0	6,911.6	6,909.6	6,909.6	70.5	7.8	90.14	-1,020.0	1,125.5	1,333.1	1,255.6	77.54	17.193				
9,300.0	6,911.6	6,909.6	6,909.6	73.2	7.8	90.15	-1,020.0	1,125.5	1,432.9	1,352.6	80.27	17.850				
9,400.0	6,911.6	6,909.6	6,909.6	75.9	7.8	90.16	-1,020.0	1,125.5	1,532.6	1,449.6	83.01	18.464				
9,500.0	6,911.7	6,909.7	6,909.7	78.6	7.8	90.17	-1,020.0	1,125.5	1,632.5	1,546.7	85.75	19.037				
9,600.0	6,911.7	6,909.7	6,909.7	81.4	7.8	90.18	-1,020.0	1,125.5	1,732.3	1,643.8	88.50	19.574				
9,700.0	6,911.7	6,909.7	6,909.7	84.1	7.8	90.19	-1,020.0	1,125.5	1,832.2	1,740.9	91.25	20.078				
9,800.0	6,911.7	6,909.7	6,909.7	86.8	7.8	90.20	-1,020.0	1,125.5	1,932.0	1,838.0	94.01	20.552				
9,900.0	6,911.7	6,909.7	6,909.7	89.6	7.8	90.21	-1,020.0	1,125.5	2,031.9	1,935.1	96.77	20.998				

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

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design											Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1		Offset Site Error:	0.0 ft
Survey Program: 7300-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,000.0	6,911.8	6,909.8	6,909.8	92.3	7.8	90.22	-1,020.0	1,125.5	2,131.8	2,032.3	99.53	21.419		
10,100.0	6,911.8	6,909.8	6,909.8	95.1	7.8	90.23	-1,020.0	1,125.5	2,231.7	2,129.4	102.29	21.817		
10,200.0	6,911.8	6,909.8	6,909.8	97.8	7.8	90.24	-1,020.0	1,125.5	2,331.6	2,226.6	105.06	22.193		
10,300.0	6,911.8	6,909.8	6,909.8	100.6	7.8	90.25	-1,020.0	1,125.5	2,431.5	2,323.7	107.83	22.550		
10,400.0	6,911.8	6,909.8	6,909.8	103.3	7.8	90.26	-1,020.0	1,125.5	2,531.5	2,420.9	110.60	22.888		
10,500.0	6,911.8	6,909.8	6,909.8	106.1	7.8	90.28	-1,020.0	1,125.5	2,631.4	2,518.0	113.37	23.210		
10,600.0	6,911.9	6,909.9	6,909.9	108.9	7.8	90.29	-1,020.0	1,125.5	2,731.3	2,615.2	116.15	23.516		
10,700.0	6,911.9	6,909.9	6,909.9	111.6	7.8	90.30	-1,020.0	1,125.5	2,831.3	2,712.3	118.93	23.807		
10,800.0	6,911.9	6,909.9	6,909.9	114.4	7.8	90.31	-1,020.0	1,125.5	2,931.2	2,809.5	121.71	24.084		
10,900.0	6,911.9	6,909.9	6,909.9	117.2	7.8	90.32	-1,020.0	1,125.5	3,031.2	2,906.7	124.49	24.350		
11,000.0	6,911.9	6,909.9	6,909.9	119.9	7.8	90.33	-1,020.0	1,125.5	3,131.1	3,003.9	127.27	24.603		
11,100.0	6,911.9	6,909.9	6,909.9	122.7	7.8	90.34	-1,020.0	1,125.5	3,231.1	3,101.0	130.05	24.845		
11,200.0	6,912.0	6,910.0	6,910.0	125.5	7.8	90.35	-1,020.0	1,125.5	3,331.0	3,198.2	132.83	25.077		
11,300.0	6,912.0	6,910.0	6,910.0	128.3	7.8	90.36	-1,020.0	1,125.5	3,431.0	3,295.4	135.62	25.299		
11,400.0	6,912.0	6,910.0	6,910.0	131.0	7.8	90.37	-1,020.0	1,125.5	3,531.0	3,392.5	138.40	25.512		
11,408.1	6,912.0	6,910.0	6,910.0	131.3	7.8	90.37	-1,020.0	1,125.5	3,539.0	3,400.4	138.63	25.529		

<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4652.0ft (RKB - 15')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24P-402

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°



<b>Company:</b>	PETROLEUM DEVELOPMENT CORP Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Maxey 24P-402
<b>Project:</b>	SEC.24-T5N-R65W	<b>TVD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Reference Site:</b>	Maxey 24O-HZ Pad Sec.24-T5N-R65W	<b>MD Reference:</b>	WELL @ 4652.0ft (RKB - 15')
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Maxey 24P-402	<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 (3-5-13)	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to WELL @ 4652.0ft (RKB - 15')  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24P-402  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
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