

PETROLEUM DEVELOPMENT CORP Weld County CO

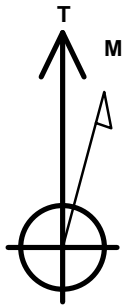
Well Name: **Maxey 240-232**

Surface Location: Maxey 240-HZ Pad Sec.24-T5N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4636.0

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

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 2058'FSL & 2081'FWL, Sec.19	6726.0	-312.9	4546.1	Point



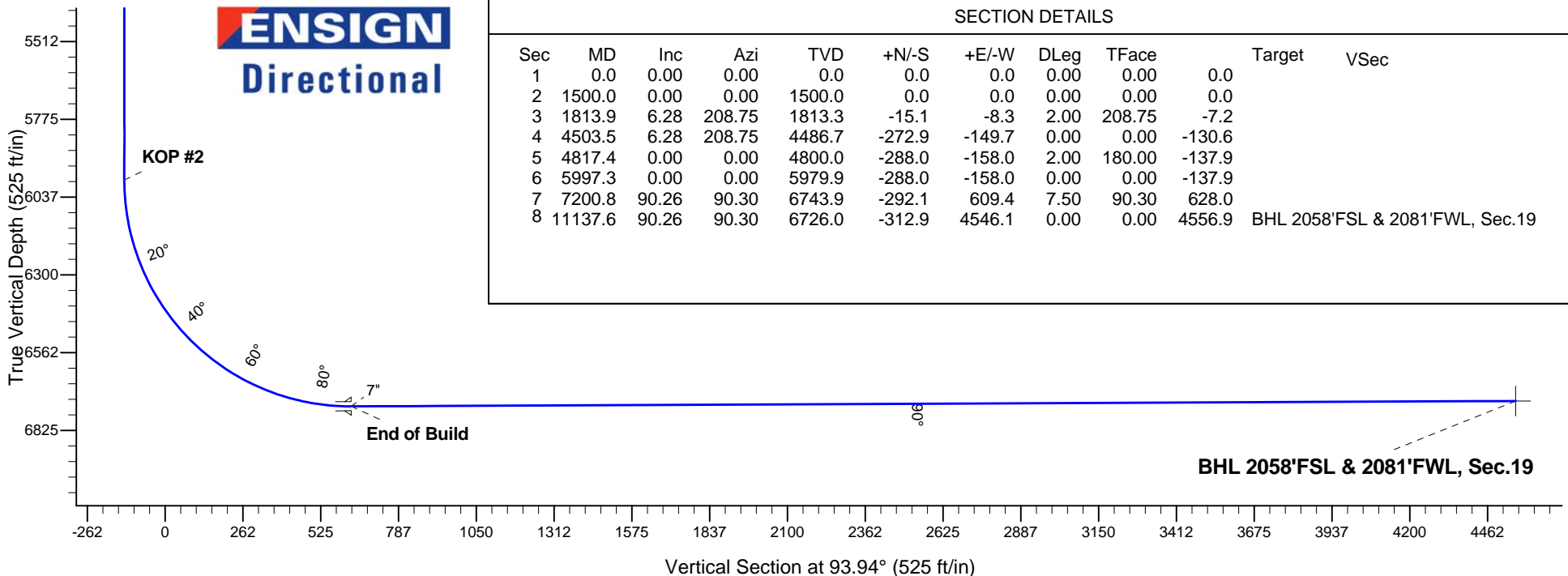
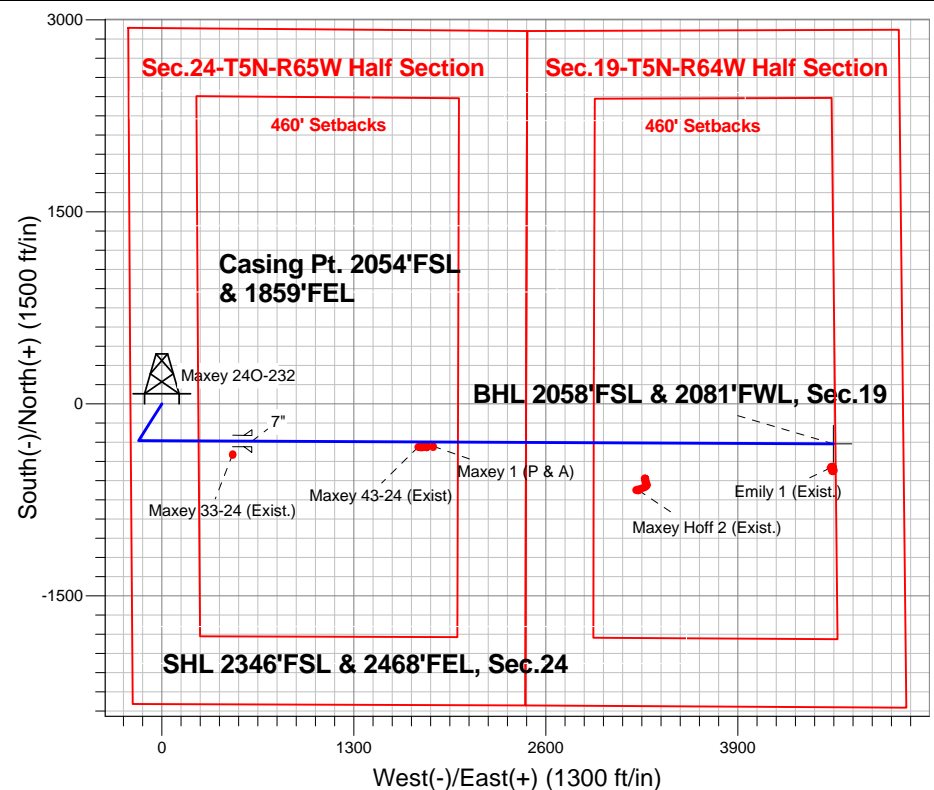
Azimuths to True North
Magnetic North: 8.49°

Magnetic Field
Strength: 52914.0snT
Dip Angle: 66.99°
Date: 8/9/2013
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP #1
5979.9	5997.3	KOP #2
6743.9	7200.8	End of Build

Maxey 240-HZ Pad Sec.24-T5N-R65W
Maxey 240-232
Plan #2 (8-9-13)
10:46, August 12 2013





PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24O-232

Wellbore #1

Plan: Plan #2 (8-9-13)

Standard Planning Report

12 August, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24O-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-9-13)		

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

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

Well	Maxey 24O-232					
Well Position	+N-S	0.0 ft	Northing:	1,383,922.72 ft	Latitude:	40.383860
	+E-W	61.3 ft	Easting:	3,247,717.36 ft	Longitude:	-104.610760
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,636.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/9/2013	8.49	66.99	52,914

Design	Plan #2 (8-9-13)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	93.94

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,813.9	6.28	208.75	1,813.3	-15.1	-8.3	2.00	2.00	0.00	208.75	
4,503.5	6.28	208.75	4,486.7	-272.9	-149.7	0.00	0.00	0.00	0.00	
4,817.4	0.00	0.00	4,800.0	-288.0	-158.0	2.00	-2.00	0.00	180.00	
5,997.3	0.00	0.00	5,979.9	-288.0	-158.0	0.00	0.00	0.00	0.00	
7,200.8	90.26	90.30	6,743.9	-292.1	609.4	7.50	7.50	0.00	90.30	
11,137.6	90.26	90.30	6,726.0	-312.9	4,546.1	0.00	0.00	0.00	0.00	BHL 2058'FSL & 2C

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24O-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-9-13)		

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
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
KOP #1									
1,600.0	2.00	208.75	1,600.0	-1.5	-0.8	-0.7	2.00	2.00	0.00
1,700.0	4.00	208.75	1,699.8	-6.1	-3.4	-2.9	2.00	2.00	0.00
1,800.0	6.00	208.75	1,799.5	-13.8	-7.5	-6.6	2.00	2.00	0.00
1,813.9	6.28	208.75	1,813.3	-15.1	-8.3	-7.2	2.00	2.00	0.00
1,900.0	6.28	208.75	1,898.9	-23.3	-12.8	-11.2	0.00	0.00	0.00
2,000.0	6.28	208.75	1,998.3	-32.9	-18.1	-15.8	0.00	0.00	0.00
2,100.0	6.28	208.75	2,097.7	-42.5	-23.3	-20.3	0.00	0.00	0.00
2,200.0	6.28	208.75	2,197.1	-52.1	-28.6	-24.9	0.00	0.00	0.00
2,300.0	6.28	208.75	2,296.5	-61.7	-33.8	-29.5	0.00	0.00	0.00
2,400.0	6.28	208.75	2,395.9	-71.3	-39.1	-34.1	0.00	0.00	0.00
2,500.0	6.28	208.75	2,495.3	-80.8	-44.4	-38.7	0.00	0.00	0.00
2,600.0	6.28	208.75	2,594.7	-90.4	-49.6	-43.3	0.00	0.00	0.00
2,700.0	6.28	208.75	2,694.1	-100.0	-54.9	-47.9	0.00	0.00	0.00
2,800.0	6.28	208.75	2,793.5	-109.6	-60.1	-52.5	0.00	0.00	0.00
2,900.0	6.28	208.75	2,892.9	-119.2	-65.4	-57.1	0.00	0.00	0.00
3,000.0	6.28	208.75	2,992.3	-128.8	-70.7	-61.6	0.00	0.00	0.00
3,100.0	6.28	208.75	3,091.7	-138.4	-75.9	-66.2	0.00	0.00	0.00
3,200.0	6.28	208.75	3,191.1	-148.0	-81.2	-70.8	0.00	0.00	0.00
3,300.0	6.28	208.75	3,290.5	-157.5	-86.4	-75.4	0.00	0.00	0.00
3,400.0	6.28	208.75	3,389.9	-167.1	-91.7	-80.0	0.00	0.00	0.00
3,500.0	6.28	208.75	3,489.3	-176.7	-97.0	-84.6	0.00	0.00	0.00
3,600.0	6.28	208.75	3,588.7	-186.3	-102.2	-89.2	0.00	0.00	0.00
3,700.0	6.28	208.75	3,688.1	-195.9	-107.5	-93.8	0.00	0.00	0.00
3,800.0	6.28	208.75	3,787.5	-205.5	-112.7	-98.4	0.00	0.00	0.00
3,900.0	6.28	208.75	3,886.9	-215.1	-118.0	-102.9	0.00	0.00	0.00
4,000.0	6.28	208.75	3,986.3	-224.7	-123.3	-107.5	0.00	0.00	0.00
4,100.0	6.28	208.75	4,085.7	-234.3	-128.5	-112.1	0.00	0.00	0.00
4,200.0	6.28	208.75	4,185.1	-243.8	-133.8	-116.7	0.00	0.00	0.00
4,300.0	6.28	208.75	4,284.5	-253.4	-139.0	-121.3	0.00	0.00	0.00
4,400.0	6.28	208.75	4,383.9	-263.0	-144.3	-125.9	0.00	0.00	0.00
4,500.0	6.28	208.75	4,483.3	-272.6	-149.6	-130.5	0.00	0.00	0.00
4,503.5	6.28	208.75	4,486.7	-272.9	-149.7	-130.6	0.00	0.00	0.00
4,600.0	4.35	208.75	4,582.8	-280.8	-154.0	-134.4	2.00	-2.00	0.00
4,700.0	2.35	208.75	4,682.6	-285.9	-156.8	-136.8	2.00	-2.00	0.00
4,800.0	0.35	208.75	4,782.6	-288.0	-158.0	-137.8	2.00	-2.00	0.00
4,817.4	0.00	0.00	4,800.0	-288.0	-158.0	-137.9	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24O-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-9-13)		

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)
4,900.0	0.00	0.00	4,882.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,000.0	0.00	0.00	4,982.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,100.0	0.00	0.00	5,082.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,182.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,282.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,382.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,500.0	0.00	0.00	5,482.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,600.0	0.00	0.00	5,582.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,700.0	0.00	0.00	5,682.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,800.0	0.00	0.00	5,782.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,900.0	0.00	0.00	5,882.6	-288.0	-158.0	-137.9	0.00	0.00	0.00
5,997.3	0.00	0.00	5,979.9	-288.0	-158.0	-137.9	0.00	0.00	0.00
KOP #2									
6,000.0	0.20	90.30	5,982.6	-288.0	-158.0	-137.8	7.46	7.46	0.00
6,100.0	7.70	90.30	6,082.3	-288.0	-151.1	-131.0	7.50	7.50	0.00
6,200.0	15.20	90.30	6,180.2	-288.1	-131.3	-111.2	7.50	7.50	0.00
6,300.0	22.70	90.30	6,274.8	-288.3	-98.8	-78.8	7.50	7.50	0.00
6,400.0	30.20	90.30	6,364.2	-288.5	-54.3	-34.4	7.50	7.50	0.00
6,500.0	37.70	90.30	6,447.1	-288.8	1.5	21.3	7.50	7.50	0.00
6,600.0	45.20	90.30	6,522.0	-289.2	67.7	87.3	7.50	7.50	0.00
6,700.0	52.70	90.30	6,587.6	-289.6	143.0	162.6	7.50	7.50	0.00
6,800.0	60.20	90.30	6,642.9	-290.0	226.3	245.7	7.50	7.50	0.00
6,900.0	67.70	90.30	6,686.7	-290.5	316.1	335.3	7.50	7.50	0.00
7,000.0	75.20	90.30	6,718.5	-291.0	410.8	429.8	7.50	7.50	0.00
7,100.0	82.70	90.30	6,737.7	-291.5	508.9	527.7	7.50	7.50	0.00
7,200.0	90.20	90.30	6,743.9	-292.1	608.6	627.2	7.50	7.50	0.00
7,200.8	90.26	90.30	6,743.9	-292.1	609.4	628.0	7.34	7.34	0.00
End of Build - 7"									
7,300.0	90.26	90.30	6,743.4	-292.6	708.6	727.0	0.00	0.00	0.00
7,400.0	90.26	90.30	6,743.0	-293.1	808.6	826.8	0.00	0.00	0.00
7,500.0	90.26	90.30	6,742.5	-293.6	908.6	926.6	0.00	0.00	0.00
7,600.0	90.26	90.30	6,742.1	-294.2	1,008.6	1,026.4	0.00	0.00	0.00
7,700.0	90.26	90.30	6,741.6	-294.7	1,108.6	1,126.2	0.00	0.00	0.00
7,800.0	90.26	90.30	6,741.1	-295.2	1,208.6	1,226.0	0.00	0.00	0.00
7,900.0	90.26	90.30	6,740.7	-295.8	1,308.6	1,325.8	0.00	0.00	0.00
8,000.0	90.26	90.30	6,740.2	-296.3	1,408.6	1,425.6	0.00	0.00	0.00
8,100.0	90.26	90.30	6,739.8	-296.8	1,508.6	1,525.4	0.00	0.00	0.00
8,200.0	90.26	90.30	6,739.3	-297.3	1,608.6	1,625.2	0.00	0.00	0.00
8,300.0	90.26	90.30	6,738.9	-297.9	1,708.6	1,725.0	0.00	0.00	0.00
8,400.0	90.26	90.30	6,738.4	-298.4	1,808.6	1,824.8	0.00	0.00	0.00
8,500.0	90.26	90.30	6,738.0	-298.9	1,908.6	1,924.6	0.00	0.00	0.00
8,600.0	90.26	90.30	6,737.5	-299.5	2,008.6	2,024.4	0.00	0.00	0.00
8,700.0	90.26	90.30	6,737.1	-300.0	2,108.6	2,124.2	0.00	0.00	0.00
8,800.0	90.26	90.30	6,736.6	-300.5	2,208.6	2,224.0	0.00	0.00	0.00
8,900.0	90.26	90.30	6,736.2	-301.0	2,308.6	2,323.8	0.00	0.00	0.00
9,000.0	90.26	90.30	6,735.7	-301.6	2,408.6	2,423.6	0.00	0.00	0.00
9,100.0	90.26	90.30	6,735.2	-302.1	2,508.6	2,523.4	0.00	0.00	0.00
9,200.0	90.26	90.30	6,734.8	-302.6	2,608.6	2,623.2	0.00	0.00	0.00
9,300.0	90.26	90.30	6,734.3	-303.2	2,708.6	2,723.0	0.00	0.00	0.00
9,400.0	90.26	90.30	6,733.9	-303.7	2,808.6	2,822.8	0.00	0.00	0.00
9,500.0	90.26	90.30	6,733.4	-304.2	2,908.6	2,922.6	0.00	0.00	0.00
9,600.0	90.26	90.30	6,733.0	-304.7	3,008.6	3,022.4	0.00	0.00	0.00
9,700.0	90.26	90.30	6,732.5	-305.3	3,108.6	3,122.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24O-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-9-13)		

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)
9,800.0	90.26	90.30	6,732.1	-305.8	3,208.6	3,222.0	0.00	0.00	0.00
9,900.0	90.26	90.30	6,731.6	-306.3	3,308.6	3,321.8	0.00	0.00	0.00
10,000.0	90.26	90.30	6,731.2	-306.9	3,408.5	3,421.6	0.00	0.00	0.00
10,100.0	90.26	90.30	6,730.7	-307.4	3,508.5	3,521.4	0.00	0.00	0.00
10,200.0	90.26	90.30	6,730.3	-307.9	3,608.5	3,621.2	0.00	0.00	0.00
10,300.0	90.26	90.30	6,729.8	-308.4	3,708.5	3,721.0	0.00	0.00	0.00
10,400.0	90.26	90.30	6,729.3	-309.0	3,808.5	3,820.8	0.00	0.00	0.00
10,500.0	90.26	90.30	6,728.9	-309.5	3,908.5	3,920.6	0.00	0.00	0.00
10,600.0	90.26	90.30	6,728.4	-310.0	4,008.5	4,020.4	0.00	0.00	0.00
10,700.0	90.26	90.30	6,728.0	-310.6	4,108.5	4,120.2	0.00	0.00	0.00
10,800.0	90.26	90.30	6,727.5	-311.1	4,208.5	4,220.0	0.00	0.00	0.00
10,900.0	90.26	90.30	6,727.1	-311.6	4,308.5	4,319.8	0.00	0.00	0.00
11,000.0	90.26	90.30	6,726.6	-312.1	4,408.5	4,419.6	0.00	0.00	0.00
11,100.0	90.26	90.30	6,726.2	-312.7	4,508.5	4,519.4	0.00	0.00	0.00
11,137.6	90.26	90.30	6,726.0	-312.9	4,546.1	4,556.9	0.00	0.00	0.00

BHL 2058'FSL & 2081'FWL, Sec.19

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,200.8	6,743.9	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,500.0	1,500.0	0.0	0.0	KOP #1
5,997.3	5,979.9	-288.0	-158.0	KOP #2
7,200.8	6,743.9	-292.1	609.4	End of Build



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24O-232

Wellbore #1

Plan #2 (8-9-13)

Anticollision Report

12 August, 2013



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (8-9-13)
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.0ft
Depth Range:	Unlimited
Results Limited by:	Maximum center-center distance of 1,000.0ft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Elliptical Conic

Survey Tool Program		Date	8/9/2013		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,137.6	Plan #2 (8-9-13) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Maxey 24O-HZ Pad Sec.24-T5N-R65W						
Maxey 24O-402 - Wellbore #1 - Plan #2 (8-9-13)	1,500.0	1,500.0	28.1	21.6	4.310	CC, ES
Maxey 24O-402 - Wellbore #1 - Plan #2 (8-9-13)	11,137.6	11,295.6	392.9	163.9	1.716	SF
Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)	966.3	967.3	30.6	26.5	7.435	CC
Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)	1,000.0	1,001.0	30.6	26.4	7.173	ES
Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)	11,137.6	11,243.8	339.2	87.3	1.347	Level 3, SF
Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	166.3	167.3	61.3	60.8	116.700	CC
Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	300.0	300.7	61.5	60.4	55.783	ES
Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	11,137.6	11,348.4	656.8	409.2	2.653	SF
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Emily 1 (Exist.) - Wellbore #1 - Wellbore #1	11,119.3	6,600.0	215.5	91.7	1.741	CC, ES
Emily 1 (Exist.) - Wellbore #1 - Wellbore #1	11,137.6	6,600.0	216.3	92.1	1.741	SF
Maxey 1 (P & A) - Wellbore #1 - Wellbore #1	8,427.5	6,720.3	32.9	-28.4	0.537	Level 1, CC, ES, SF
Maxey 33-24 (Exist.) - Wellbore #1 - Wellbore #1	7,070.5	6,718.4	102.1	74.5	3.698	CC, ES, SF
Maxey 43-24 (Exist.) - Wellbore #1 - Wellbore #1	8,333.0	6,723.2	36.9	-27.7	0.571	Level 1, CC, ES, SF
Maxey Hoff 2 (Exist.) - Wellbore #1 - Wellbore #1	9,819.1	6,719.6	370.8	264.6	3.491	CC, ES, SF

Offset Design													
Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #2 (8-9-13)													
Survey Program: 0-MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	97.44	-3.6	27.9	28.1				
100.0	100.0	100.0	100.0	0.1	0.1	97.44	-3.6	27.9	28.1	27.9	0.22	124.999	
200.0	200.0	200.0	200.0	0.3	0.3	97.44	-3.6	27.9	28.1	27.4	0.67	41.666	
300.0	300.0	300.0	300.0	0.6	0.6	97.44	-3.6	27.9	28.1	27.0	1.12	25.000	
400.0	400.0	400.0	400.0	0.8	0.8	97.44	-3.6	27.9	28.1	26.5	1.57	17.857	
500.0	500.0	500.0	500.0	1.0	1.0	97.44	-3.6	27.9	28.1	26.1	2.02	13.889	
600.0	600.0	600.0	600.0	1.2	1.2	97.44	-3.6	27.9	28.1	25.6	2.47	11.364	
700.0	700.0	700.0	700.0	1.5	1.5	97.44	-3.6	27.9	28.1	25.2	2.92	9.615	
800.0	800.0	800.0	800.0	1.7	1.7	97.44	-3.6	27.9	28.1	24.7	3.37	8.333	
900.0	900.0	900.0	900.0	1.9	1.9	97.44	-3.6	27.9	28.1	24.3	3.82	7.353	
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	97.44	-3.6	27.9	28.1	23.8	4.27	6.579	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #2 (8-9-13)													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
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	97.44		-3.6	27.9	28.1	23.4	4.72	5.952	
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	97.44		-3.6	27.9	28.1	22.9	5.17	5.435	
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	97.44		-3.6	27.9	28.1	22.5	5.62	5.000	
1,400.0	1,400.0	1,400.0	1,400.0	3.0	3.0	97.44		-3.6	27.9	28.1	22.0	6.07	4.630	
1,500.0	1,500.0	1,500.0	1,500.0	3.3	3.3	97.44		-3.6	27.9	28.1	21.6	6.52	4.310 CC, ES	
1,600.0	1,600.0	1,600.0	1,600.0	3.5	3.5	-114.53		-3.6	27.9	28.8	21.8	6.94	4.147	
1,700.0	1,699.8	1,699.8	1,699.8	3.6	3.7	-123.23		-3.6	27.9	31.3	24.0	7.34	4.269	
1,800.0	1,799.5	1,799.5	1,799.5	3.8	3.9	-134.54		-3.6	27.9	36.8	29.1	7.73	4.764	
1,900.0	1,898.9	1,898.9	1,898.9	4.0	4.2	-144.42		-3.6	27.9	45.2	37.0	8.14	5.551	
2,000.0	1,998.3	1,998.3	1,998.3	4.2	4.4	-151.12		-3.6	27.9	54.4	45.9	8.55	6.369	
2,100.0	2,097.7	2,098.9	2,098.9	4.5	4.6	-157.14		-3.1	26.2	63.3	54.3	8.96	7.065	
2,200.0	2,197.1	2,199.5	2,199.3	4.7	4.8	-164.12		-1.6	21.2	71.0	61.6	9.36	7.580	
2,300.0	2,296.5	2,299.7	2,299.2	4.9	5.0	-172.03		1.0	12.9	78.2	68.5	9.78	8.003	
2,400.0	2,395.9	2,398.8	2,397.7	5.2	5.3	-179.65		4.1	2.9	86.3	76.1	10.21	8.456	
2,500.0	2,495.3	2,497.9	2,496.3	5.5	5.5	174.11		7.2	-7.2	95.6	85.0	10.65	8.976	
2,600.0	2,594.7	2,597.0	2,594.8	5.7	5.7	169.02		10.4	-17.2	105.9	94.8	11.12	9.525	
2,700.0	2,694.1	2,696.1	2,693.3	6.0	6.0	164.84		13.5	-27.2	116.8	105.2	11.59	10.080	
2,800.0	2,793.5	2,795.1	2,791.8	6.3	6.2	161.39		16.6	-37.3	128.3	116.2	12.07	10.625	
2,900.0	2,892.9	2,894.2	2,890.3	6.5	6.5	158.52		19.7	-47.3	140.1	127.6	12.56	11.152	
3,000.0	2,992.3	2,993.3	2,988.8	6.8	6.7	156.09		22.8	-57.3	152.2	139.2	13.06	11.656	
3,100.0	3,091.7	3,092.3	3,087.3	7.1	7.0	154.03		26.0	-67.4	164.6	151.0	13.56	12.136	
3,200.0	3,191.1	3,191.4	3,185.8	7.4	7.3	152.25		29.1	-77.4	177.2	163.1	14.07	12.590	
3,300.0	3,290.5	3,290.5	3,284.4	7.7	7.5	150.71		32.2	-87.4	189.8	175.3	14.58	13.018	
3,400.0	3,389.9	3,389.6	3,382.9	7.9	7.8	149.36		35.3	-97.4	202.7	187.6	15.10	13.422	
3,500.0	3,489.3	3,488.6	3,481.4	8.2	8.1	148.18		38.4	-107.5	215.6	199.9	15.62	13.803	
3,600.0	3,588.7	3,587.7	3,579.9	8.5	8.3	147.12		41.6	-117.5	228.5	212.4	16.14	14.163	
3,700.0	3,688.1	3,686.8	3,678.4	8.8	8.6	146.18		44.7	-127.5	241.6	224.9	16.66	14.501	
3,800.0	3,787.5	3,785.8	3,776.9	9.1	8.9	145.34		47.8	-137.6	254.7	237.5	17.19	14.820	
3,900.0	3,886.9	3,884.9	3,875.4	9.4	9.2	144.58		50.9	-147.6	267.9	250.2	17.71	15.122	
4,000.0	3,986.3	3,987.3	3,977.3	9.7	9.4	144.09		53.8	-156.9	280.6	262.4	18.22	15.402	
4,100.0	4,085.7	4,090.8	4,080.7	10.0	9.6	144.29		55.6	-162.8	291.9	273.3	18.67	15.635	
4,200.0	4,185.1	4,194.6	4,184.4	10.3	9.8	145.12		56.3	-165.1	301.8	282.7	19.10	15.803	
4,300.0	4,284.5	4,294.6	4,284.5	10.6	10.0	146.27		56.4	-165.1	310.9	291.4	19.52	15.929	
4,400.0	4,383.9	4,394.0	4,383.9	10.9	10.2	147.36		56.4	-165.1	320.1	300.1	19.95	16.040	
4,500.0	4,483.3	4,493.4	4,483.3	11.2	10.4	148.38		56.4	-165.1	329.3	308.9	20.39	16.151	
4,600.0	4,582.8	4,593.0	4,582.8	11.4	10.6	149.29		56.4	-165.1	337.3	316.5	20.84	16.187	
4,700.0	4,682.6	4,692.8	4,682.6	11.6	10.8	149.84		56.4	-165.1	342.4	321.1	21.25	16.108	
4,800.0	4,782.6	4,792.8	4,782.6	11.8	11.0	150.06		56.4	-165.1	344.4	322.7	21.65	15.907	
4,900.0	4,882.6	4,892.8	4,882.6	12.0	11.2	-1.19		56.4	-165.1	344.4	322.2	22.27	15.470	
5,000.0	4,982.6	4,992.8	4,982.6	12.2	11.4	-1.19		56.4	-165.1	344.4	321.8	22.66	15.201	
5,100.0	5,082.6	5,092.8	5,082.6	12.3	11.6	-1.19		56.4	-165.1	344.4	321.4	23.05	14.941	
5,200.0	5,182.6	5,192.8	5,182.6	12.5	11.9	-1.19		56.4	-165.1	344.4	321.0	23.45	14.689	
5,300.0	5,282.6	5,292.8	5,282.6	12.7	12.1	-1.19		56.4	-165.1	344.4	320.6	23.85	14.443	
5,400.0	5,382.6	5,392.8	5,382.6	12.9	12.3	-1.19		56.4	-165.1	344.4	320.2	24.25	14.205	
5,500.0	5,482.6	5,492.8	5,482.6	13.0	12.5	-1.19		56.4	-165.1	344.4	319.8	24.65	13.974	
5,600.0	5,582.6	5,592.8	5,582.6	13.2	12.7	-1.19		56.4	-165.1	344.4	319.4	25.05	13.749	
5,700.0	5,682.6	5,692.8	5,682.6	13.4	12.9	-1.19		56.4	-165.1	344.4	319.0	25.46	13.530	
5,800.0	5,782.6	5,792.8	5,782.6	13.6	13.1	-1.19		56.4	-165.1	344.4	318.6	25.86	13.318	
5,900.0	5,882.6	5,892.8	5,882.6	13.8	13.3	-1.19		56.4	-165.1	344.4	318.2	26.27	13.112	
5,965.7	5,948.4	5,958.5	5,948.4	13.9	13.5	-91.50		56.4	-165.1	344.4	318.0	26.41	13.044	
6,000.0	5,982.6	5,992.8	5,982.6	14.0	13.6	-91.49		56.4	-165.1	344.4	317.9	26.55	12.974	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 240-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 240-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 240-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 240-HZ Pad Sec.24-T5N-R65W - Maxey 240-402 - Wellbore #1 - Plan #2 (8-9-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
6,100.0	6,082.3	6,092.5	6,082.3	14.1	13.8	-92.61		56.4	-165.1	344.7	317.7	26.95	12.791	
6,200.0	6,180.2	6,192.4	6,182.3	14.2	14.0	-95.59		56.4	-163.8	346.0	318.7	27.31	12.671	
6,300.0	6,274.8	6,296.4	6,285.3	14.3	14.1	-98.85		56.3	-150.7	348.6	321.1	27.58	12.643	
6,400.0	6,364.2	6,403.5	6,388.6	14.4	14.3	-101.96		56.2	-122.7	352.3	324.5	27.78	12.680	
6,500.0	6,447.1	6,513.9	6,489.9	14.5	14.4	-104.85		55.9	-79.1	356.6	328.6	27.99	12.741	
6,600.0	6,522.0	6,627.5	6,586.4	14.6	14.6	-107.46		55.6	-19.4	361.4	333.1	28.34	12.752	
6,700.0	6,587.6	6,744.3	6,675.3	15.0	15.0	-109.72		55.3	56.2	366.3	337.3	29.02	12.623	
6,800.0	6,642.9	6,864.1	6,753.5	15.9	15.8	-111.60		54.8	146.8	370.8	340.5	30.24	12.261	
6,900.0	6,686.7	6,986.4	6,817.6	17.2	17.0	-113.05		54.3	250.8	374.6	342.4	32.19	11.637	
7,000.0	6,718.5	7,110.7	6,865.0	18.9	18.8	-114.04		53.8	365.5	377.3	342.4	34.95	10.796	
7,100.0	6,737.7	7,236.2	6,893.4	20.7	21.0	-114.55		53.2	487.7	378.8	340.3	38.50	9.840	
7,200.0	6,743.9	7,342.7	6,905.2	22.8	23.1	-115.07		52.6	593.5	380.9	338.7	42.17	9.031	
7,300.0	6,743.4	7,459.4	6,911.3	25.0	25.5	-115.98		52.1	710.0	383.4	337.2	46.14	8.309	
7,400.0	6,743.0	7,559.7	6,911.3	27.3	27.8	-116.04		51.6	810.3	383.6	333.4	50.25	7.635	
7,500.0	6,742.5	7,659.7	6,911.4	29.7	30.2	-116.10		51.1	910.3	383.9	329.4	54.50	7.044	
7,600.0	6,742.1	7,759.7	6,911.4	32.1	32.6	-116.16		50.6	1,010.3	384.1	325.2	58.87	6.525	
7,700.0	6,741.6	7,859.7	6,911.4	34.6	35.1	-116.22		50.1	1,110.3	384.3	321.0	63.34	6.068	
7,800.0	6,741.1	7,959.7	6,911.4	37.2	37.6	-116.28		49.6	1,210.3	384.6	316.7	67.89	5.665	
7,900.0	6,740.7	8,059.7	6,911.4	39.8	40.2	-116.34		49.1	1,310.3	384.8	312.3	72.50	5.308	
8,000.0	6,740.2	8,159.7	6,911.5	42.4	42.8	-116.40		48.6	1,410.3	385.1	307.9	77.16	4.991	
8,100.0	6,739.8	8,259.7	6,911.5	45.0	45.4	-116.46		48.1	1,510.3	385.3	303.5	81.86	4.707	
8,200.0	6,739.3	8,359.7	6,911.5	47.7	48.0	-116.52		47.6	1,610.3	385.6	299.0	86.59	4.453	
8,300.0	6,738.9	8,459.7	6,911.5	50.4	50.7	-116.58		47.2	1,710.3	385.8	294.4	91.35	4.223	
8,400.0	6,738.4	8,559.7	6,911.5	53.1	53.3	-116.64		46.7	1,810.3	386.0	289.9	96.13	4.016	
8,500.0	6,738.0	8,659.7	6,911.5	55.8	56.0	-116.70		46.2	1,910.3	386.3	285.4	100.94	3.827	
8,600.0	6,737.5	8,759.7	6,911.6	58.5	58.7	-116.76		45.7	2,010.2	386.5	280.8	105.75	3.655	
8,700.0	6,737.1	8,859.7	6,911.6	61.2	61.4	-116.82		45.2	2,110.2	386.8	276.2	110.58	3.498	
8,800.0	6,736.6	8,959.7	6,911.6	63.9	64.2	-116.88		44.7	2,210.2	387.0	271.6	115.42	3.353	
8,900.0	6,736.2	9,059.7	6,911.6	66.6	66.9	-116.94		44.2	2,310.2	387.3	267.0	120.26	3.220	
9,000.0	6,735.7	9,159.7	6,911.6	69.4	69.6	-117.00		43.7	2,410.2	387.5	262.4	125.12	3.097	
9,100.0	6,735.2	9,259.7	6,911.6	72.1	72.4	-117.06		43.2	2,510.2	387.8	257.8	129.97	2.983	
9,200.0	6,734.8	9,359.7	6,911.7	74.9	75.1	-117.12		42.7	2,610.2	388.0	253.2	134.84	2.878	
9,300.0	6,734.3	9,459.7	6,911.7	77.6	77.8	-117.18		42.2	2,710.2	388.3	248.6	139.70	2.779	
9,400.0	6,733.9	9,559.7	6,911.7	80.4	80.6	-117.24		41.7	2,810.2	388.5	243.9	144.57	2.687	
9,500.0	6,733.4	9,659.7	6,911.7	83.2	83.4	-117.30		41.3	2,910.2	388.8	239.3	149.44	2.601	
9,600.0	6,733.0	9,759.7	6,911.7	85.9	86.1	-117.36		40.8	3,010.2	389.0	234.7	154.31	2.521	
9,700.0	6,732.5	9,859.7	6,911.7	88.7	88.9	-117.41		40.3	3,110.2	389.3	230.1	159.19	2.445	
9,800.0	6,732.1	9,959.7	6,911.8	91.5	91.6	-117.47		39.8	3,210.2	389.5	225.5	164.06	2.374	
9,900.0	6,731.6	10,059.7	6,911.8	94.2	94.4	-117.53		39.3	3,310.2	389.8	220.8	168.93	2.307	
10,000.0	6,731.2	10,159.7	6,911.8	97.0	97.2	-117.59		38.8	3,410.2	390.0	216.2	173.80	2.244	
10,100.0	6,730.7	10,259.7	6,911.8	99.8	100.0	-117.65		38.3	3,510.2	390.3	211.6	178.67	2.184	
10,200.0	6,730.3	10,359.7	6,911.8	102.6	102.7	-117.71		37.8	3,610.2	390.5	207.0	183.54	2.128	
10,300.0	6,729.8	10,459.7	6,911.9	105.3	105.5	-117.77		37.3	3,710.2	390.8	202.4	188.40	2.074	
10,400.0	6,729.3	10,559.7	6,911.9	108.1	108.3	-117.83		36.8	3,810.2	391.0	197.8	193.27	2.023	
10,500.0	6,728.9	10,659.7	6,911.9	110.9	111.1	-117.88		36.3	3,910.2	391.3	193.1	198.13	1.975	
10,600.0	6,728.4	10,759.7	6,911.9	113.7	113.8	-117.94		35.9	4,010.2	391.5	188.5	202.99	1.929	
10,700.0	6,728.0	10,859.7	6,911.9	116.5	116.6	-118.00		35.4	4,110.2	391.8	183.9	207.85	1.885	
10,800.0	6,727.5	10,959.7	6,911.9	119.3	119.4	-118.06		34.9	4,210.2	392.0	179.3	212.70	1.843	
10,900.0	6,727.1	11,059.7	6,912.0	122.0	122.2	-118.12		34.4	4,310.2	392.3	174.7	217.55	1.803	
11,000.0	6,726.6	11,159.7	6,912.0	124.8	125.0	-118.18		33.9	4,410.2	392.5	170.2	222.40	1.765	
11,100.0	6,726.2	11,259.7	6,912.0	127.6	127.8	-118.23		33.4	4,510.2	392.8	165.6	227.24	1.729	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24O-402 - Wellbore #1 - Plan #2 (8-9-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance										
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
11,137.6	6,726.0	11,295.6	6,912.0	128.7	128.8	-118.25	33.2	4,546.1	392.9	163.9	229.02	1.716 SF		

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)													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 (ft)	Offset (ft)	Semi Major Axis (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	1.0	1.0	0.0	0.0	-89.99	-89.99	0.0	-30.6	30.6	30.6	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-89.99	-89.99	0.0	-30.6	30.6	30.4	0.23	134.991	
200.0	200.0	201.0	201.0	0.3	0.3	-89.99	-89.99	0.0	-30.6	30.6	30.0	0.68	45.296	
300.0	300.0	301.0	301.0	0.6	0.6	-89.99	-89.99	0.0	-30.6	30.6	29.5	1.13	27.214	
400.0	400.0	401.0	401.0	0.8	0.8	-89.99	-89.99	0.0	-30.6	30.6	29.1	1.58	19.449	
500.0	500.0	501.0	501.0	1.0	1.0	-89.99	-89.99	0.0	-30.6	30.6	28.6	2.03	15.132	
600.0	600.0	601.0	601.0	1.2	1.2	-89.99	-89.99	0.0	-30.6	30.6	28.2	2.47	12.383	
700.0	700.0	701.0	701.0	1.5	1.5	-89.99	-89.99	0.0	-30.6	30.6	27.7	2.92	10.480	
800.0	800.0	801.0	801.0	1.7	1.7	-89.99	-89.99	0.0	-30.6	30.6	27.3	3.37	9.083	
900.0	900.0	901.0	901.0	1.9	1.9	-89.99	-89.99	0.0	-30.6	30.6	26.8	3.82	8.015	
966.3	966.3	967.3	967.3	2.1	2.1	-89.99	-89.99	0.0	-30.6	30.6	26.5	4.12	7.435 CC	
1,000.0	1,000.0	1,001.0	1,001.0	2.1	2.1	-89.99	-89.99	0.0	-30.6	30.6	26.4	4.27	7.173 ES	
1,100.0	1,100.0	1,100.7	1,100.7	2.4	2.3	-93.19	-93.19	-1.7	-31.0	31.1	26.4	4.69	6.620	
1,200.0	1,200.0	1,200.0	1,199.8	2.6	2.5	-101.99	-101.99	-6.8	-32.1	32.8	27.8	5.09	6.448	
1,300.0	1,300.0	1,299.2	1,298.7	2.8	2.7	-114.22	-114.22	-15.3	-33.9	37.3	31.8	5.51	6.768	
1,400.0	1,400.0	1,397.5	1,396.3	3.0	2.9	-126.45	-126.45	-26.9	-36.4	45.5	39.6	5.93	7.684	
1,500.0	1,500.0	1,496.5	1,494.3	3.3	3.1	-135.75	-135.75	-40.4	-39.3	56.8	50.4	6.35	8.939	
1,600.0	1,600.0	1,595.8	1,592.6	3.5	3.4	9.55	9.55	-53.9	-42.2	67.3	60.5	6.76	9.945	
1,700.0	1,699.8	1,695.4	1,691.2	3.6	3.7	5.50	5.50	-67.4	-45.2	74.8	67.7	7.14	10.479	
1,800.0	1,799.5	1,795.2	1,790.0	3.8	4.0	2.31	2.31	-81.0	-48.1	79.2	71.7	7.52	10.532	
1,900.0	1,898.9	1,895.1	1,888.9	4.0	4.3	-0.55	-0.55	-94.6	-51.0	81.6	73.7	7.92	10.301	
2,000.0	1,998.3	1,994.9	1,987.9	4.2	4.6	-3.24	-3.24	-108.2	-53.9	84.2	75.8	8.33	10.099	
2,100.0	2,097.7	2,094.8	2,086.8	4.5	4.9	-5.76	-5.76	-121.8	-56.8	86.9	78.1	8.75	9.929	
2,200.0	2,197.1	2,194.7	2,185.7	4.7	5.2	-8.13	-8.13	-135.3	-59.8	89.8	80.6	9.17	9.785	
2,300.0	2,296.5	2,294.6	2,284.6	4.9	5.5	-10.35	-10.35	-148.9	-62.7	92.8	83.2	9.61	9.661	
2,400.0	2,395.9	2,394.5	2,383.5	5.2	5.8	-12.42	-12.42	-162.5	-65.6	96.0	85.9	10.04	9.555	
2,500.0	2,495.3	2,494.4	2,482.5	5.5	6.2	-14.36	-14.36	-176.1	-68.5	99.2	88.8	10.49	9.462	
2,600.0	2,594.7	2,594.3	2,581.4	5.7	6.5	-16.18	-16.18	-189.7	-71.5	102.6	91.7	10.94	9.380	
2,700.0	2,694.1	2,694.2	2,680.3	6.0	6.8	-17.87	-17.87	-203.3	-74.4	106.1	94.7	11.40	9.308	
2,800.0	2,793.5	2,794.1	2,779.2	6.3	7.2	-19.46	-19.46	-216.9	-77.3	109.7	97.8	11.87	9.243	
2,900.0	2,892.9	2,894.0	2,878.1	6.5	7.5	-20.95	-20.95	-230.4	-80.2	113.3	101.0	12.34	9.184	
3,000.0	2,992.3	2,993.9	2,977.1	6.8	7.8	-22.34	-22.34	-244.0	-83.2	117.1	104.2	12.82	9.130	
3,100.0	3,091.7	3,093.7	3,076.0	7.1	8.2	-23.65	-23.65	-257.6	-86.1	120.8	107.5	13.31	9.081	
3,200.0	3,191.1	3,193.6	3,174.9	7.4	8.5	-24.87	-24.87	-271.2	-89.0	124.7	110.9	13.80	9.036	
3,300.0	3,290.5	3,293.5	3,273.8	7.7	8.8	-26.03	-26.03	-284.8	-91.9	128.6	114.3	14.30	8.994	
3,400.0	3,389.9	3,393.4	3,372.7	7.9	9.2	-27.11	-27.11	-298.4	-94.9	132.5	117.7	14.80	8.955	
3,500.0	3,489.3	3,493.3	3,471.7	8.2	9.5	-28.13	-28.13	-312.0	-97.8	136.5	121.2	15.31	8.918	
3,600.0	3,588.7	3,593.2	3,570.6	8.5	9.9	-29.10	-29.10	-325.6	-100.7	140.6	124.7	15.82	8.884	
3,700.0	3,688.1	3,693.1	3,669.5	8.8	10.2	-30.01	-30.01	-339.1	-103.6	144.6	128.3	16.34	8.852	
3,800.0	3,787.5	3,793.0	3,768.4	9.1	10.6	-30.87	-30.87	-352.7	-106.6	148.7	131.9	16.86	8.822	
3,900.0	3,886.9	3,892.9	3,867.3	9.4	10.9	-31.68	-31.68	-366.3	-109.5	152.9	135.5	17.38	8.793	
4,000.0	3,986.3	3,992.8	3,966.3	9.7	11.2	-32.45	-32.45	-379.9	-112.4	157.0	139.1	17.91	8.766	
4,100.0	4,085.7	4,092.7	4,065.2	10.0	11.6	-33.18	-33.18	-393.5	-115.3	161.2	142.8	18.45	8.740	
4,200.0	4,185.1	4,192.6	4,164.1	10.3	11.9	-33.87	-33.87	-407.1	-118.3	165.4	146.5	18.98	8.716	
4,300.0	4,284.5	4,292.4	4,263.0	10.6	12.3	-34.53	-34.53	-420.7	-121.2	169.7	150.2	19.52	8.692	
4,400.0	4,383.9	4,392.3	4,361.9	10.9	12.6	-35.16	-35.16	-434.2	-124.1	173.9	153.9	20.06	8.670	
4,500.0	4,483.3	4,492.2	4,460.9	11.2	13.0	-35.75	-35.75	-447.8	-127.0	178.2	157.6	20.60	8.649	
4,600.0	4,582.8	4,592.1	4,559.7	11.4	13.3	-36.09	-36.09	-461.4	-129.9	183.8	162.7	21.11	8.709	
4,700.0	4,682.6	4,691.7	4,658.4	11.6	13.7	-35.82	-35.82	-475.0	-132.9	189.2	170.7	21.53	8.929	
4,800.0	4,782.6	4,791.0	4,756.7	11.8	14.0	-35.04	-35.04	-488.5	-135.8	203.5	181.6	21.89	9.296	
4,900.0	4,882.6	4,890.0	4,854.8	12.0	14.3	174.84	174.84	-501.9	-138.7	216.7	191.1	25.60	8.465	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 240-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 240-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 240-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 240-HZ Pad Sec.24-T5N-R65W - Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)												Offset Site Error: 0.0 ft	
Survey Program: 0-MWD												Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
5,000.0	4,982.6	4,989.1	4,952.9	12.2	14.7	175.87	-515.4	-141.6	230.1	203.9	26.17	8.790	
5,100.0	5,082.6	5,088.1	5,050.9	12.3	15.0	176.78	-528.9	-144.5	243.5	216.7	26.73	9.107	
5,200.0	5,182.6	5,187.1	5,149.0	12.5	15.4	177.61	-542.3	-147.4	256.9	229.6	27.29	9.413	
5,300.0	5,282.6	5,286.2	5,247.1	12.7	15.7	178.35	-555.8	-150.3	270.4	242.6	27.85	9.710	
5,400.0	5,382.6	5,385.2	5,345.1	12.9	16.1	179.01	-569.3	-153.2	283.9	255.5	28.40	9.997	
5,500.0	5,482.6	5,484.2	5,443.2	13.0	16.4	179.62	-582.8	-156.1	297.5	268.6	28.95	10.276	
5,600.0	5,582.6	5,588.0	5,546.0	13.2	16.7	-179.81	-596.5	-159.0	310.8	281.3	29.49	10.538	
5,700.0	5,682.6	5,699.5	5,656.9	13.4	17.0	-179.38	-607.9	-161.5	321.0	291.1	29.95	10.719	
5,800.0	5,782.6	5,811.8	5,768.9	13.6	17.2	-179.12	-615.1	-163.0	327.4	297.1	30.36	10.786	
5,900.0	5,882.6	5,924.4	5,881.5	13.8	17.4	-179.02	-617.9	-163.6	330.0	299.3	30.72	10.740	
6,000.0	5,982.6	6,026.5	5,983.6	14.0	17.5	90.68	-618.0	-163.6	330.0	303.4	26.61	12.402	
6,100.0	6,082.3	6,126.6	6,083.7	14.1	17.7	91.78	-618.0	-163.2	330.2	303.3	26.90	12.276	
6,200.0	6,180.2	6,228.1	6,184.6	14.2	17.8	93.47	-618.0	-152.8	330.6	303.5	27.11	12.196	
6,300.0	6,274.8	6,331.0	6,284.6	14.3	17.9	95.10	-618.2	-128.8	331.3	304.0	27.30	12.136	
6,400.0	6,364.2	6,435.2	6,381.6	14.4	18.0	96.64	-618.4	-91.0	332.3	304.7	27.55	12.061	
6,500.0	6,447.1	6,540.8	6,473.7	14.5	18.1	98.07	-618.7	-39.6	333.4	305.4	27.95	11.929	
6,600.0	6,522.0	6,647.6	6,558.8	14.6	18.2	99.35	-619.0	24.8	334.5	305.9	28.63	11.686	
6,700.0	6,587.6	6,755.5	6,634.9	15.0	18.4	100.47	-619.5	101.3	335.7	305.9	29.76	11.281	
6,800.0	6,642.9	6,864.5	6,699.9	15.9	18.7	101.39	-620.0	188.6	336.8	305.3	31.47	10.702	
6,900.0	6,686.7	6,974.3	6,752.2	17.2	19.3	102.10	-620.5	285.0	337.7	303.8	33.83	9.980	
7,000.0	6,718.5	7,084.7	6,790.4	18.9	20.5	102.59	-621.1	388.5	338.3	301.5	36.85	9.181	
7,100.0	6,737.7	7,195.5	6,813.3	20.7	22.2	102.85	-621.7	496.8	338.7	298.3	40.44	8.376	
7,200.0	6,743.9	7,306.2	6,820.3	22.8	24.2	102.87	-622.3	607.2	338.8	294.3	44.45	7.621	
7,218.8	6,743.8	7,325.0	6,820.2	23.2	24.6	102.86	-622.4	626.0	338.8	293.5	45.25	7.486	
7,300.0	6,743.4	7,406.2	6,819.8	25.0	26.3	102.85	-622.9	707.2	338.8	290.1	48.72	6.953	
7,400.0	6,743.0	7,506.2	6,819.2	27.3	28.5	102.84	-623.4	807.2	338.8	285.6	53.22	6.366	
7,500.0	6,742.5	7,606.2	6,818.7	29.7	30.8	102.82	-624.0	907.2	338.8	280.9	57.88	5.853	
7,600.0	6,742.1	7,706.2	6,818.1	32.1	33.2	102.81	-624.5	1,007.2	338.8	276.1	62.69	5.405	
7,700.0	6,741.6	7,806.2	6,817.6	34.6	35.7	102.79	-625.1	1,107.2	338.8	271.2	67.59	5.013	
7,800.0	6,741.1	7,906.2	6,817.1	37.2	38.2	102.77	-625.7	1,207.2	338.8	266.2	72.59	4.668	
7,900.0	6,740.7	8,006.2	6,816.5	39.8	40.7	102.76	-626.2	1,307.2	338.8	261.2	77.65	4.364	
8,000.0	6,740.2	8,106.2	6,816.0	42.4	43.3	102.74	-626.8	1,407.2	338.9	256.1	82.77	4.094	
8,100.0	6,739.8	8,206.2	6,815.4	45.0	45.9	102.73	-627.4	1,507.1	338.9	250.9	87.93	3.854	
8,200.0	6,739.3	8,306.2	6,814.9	47.7	48.5	102.71	-627.9	1,607.1	338.9	245.8	93.13	3.639	
8,300.0	6,738.9	8,406.2	6,814.4	50.4	51.2	102.70	-628.5	1,707.1	338.9	240.5	98.37	3.445	
8,400.0	6,738.4	8,506.2	6,813.8	53.1	53.8	102.68	-629.0	1,807.1	338.9	235.3	103.63	3.270	
8,500.0	6,738.0	8,606.2	6,813.3	55.8	56.5	102.67	-629.6	1,907.1	338.9	230.0	108.92	3.112	
8,600.0	6,737.5	8,706.2	6,812.7	58.5	59.2	102.65	-630.2	2,007.1	338.9	224.7	114.23	2.967	
8,700.0	6,737.1	8,806.2	6,812.2	61.2	61.9	102.63	-630.7	2,107.1	338.9	219.4	119.55	2.835	
8,800.0	6,736.6	8,906.2	6,811.7	63.9	64.6	102.62	-631.3	2,207.1	339.0	214.1	124.89	2.714	
8,900.0	6,736.2	9,006.2	6,811.1	66.6	67.3	102.60	-631.8	2,307.1	339.0	208.7	130.25	2.602	
9,000.0	6,735.7	9,106.2	6,810.6	69.4	70.1	102.59	-632.4	2,407.1	339.0	203.4	135.62	2.500	
9,100.0	6,735.2	9,206.2	6,810.0	72.1	72.8	102.57	-633.0	2,507.1	339.0	198.0	141.00	2.404	
9,200.0	6,734.8	9,306.2	6,809.5	74.9	75.5	102.56	-633.5	2,607.1	339.0	192.6	146.38	2.316	
9,300.0	6,734.3	9,406.2	6,809.0	77.6	78.3	102.54	-634.1	2,707.1	339.0	187.2	151.78	2.234	
9,400.0	6,733.9	9,506.2	6,808.4	80.4	81.0	102.53	-634.6	2,807.1	339.0	181.8	157.19	2.157	
9,500.0	6,733.4	9,606.2	6,807.9	83.2	83.8	102.51	-635.2	2,907.1	339.0	176.4	162.60	2.085	
9,600.0	6,733.0	9,706.2	6,807.3	85.9	86.5	102.49	-635.8	3,007.1	339.1	171.0	168.02	2.018	
9,700.0	6,732.5	9,806.2	6,806.8	88.7	89.3	102.48	-636.3	3,107.1	339.1	165.6	173.44	1.955	
9,800.0	6,732.1	9,906.2	6,806.2	91.5	92.0	102.46	-636.9	3,207.1	339.1	160.2	178.88	1.896	
9,900.0	6,731.6	10,006.2	6,805.7	94.2	94.8	102.45	-637.4	3,307.1	339.1	154.8	184.31	1.840	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-312 - Wellbore #1 - Plan #2 (8-9-13)													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	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	
10,000.0	6,731.2	10,106.2	6,805.2	97.0	97.6	102.43	-638.0	3,407.1	339.1	149.3	189.75	1.787		
10,100.0	6,730.7	10,206.2	6,804.6	99.8	100.3	102.42	-638.6	3,507.1	339.1	143.9	195.20	1.737		
10,200.0	6,730.3	10,306.2	6,804.1	102.6	103.1	102.40	-639.1	3,607.1	339.1	138.5	200.65	1.690		
10,300.0	6,729.8	10,406.2	6,803.5	105.3	105.9	102.39	-639.7	3,707.1	339.1	133.0	206.10	1.645		
10,400.0	6,729.3	10,506.2	6,803.0	108.1	108.7	102.37	-640.2	3,807.1	339.2	127.6	211.56	1.603		
10,500.0	6,728.9	10,606.2	6,802.5	110.9	111.4	102.35	-640.8	3,907.1	339.2	122.1	217.02	1.563		
10,600.0	6,728.4	10,706.2	6,801.9	113.7	114.2	102.34	-641.4	4,007.1	339.2	116.7	222.48	1.525		
10,700.0	6,728.0	10,806.2	6,801.4	116.5	117.0	102.32	-641.9	4,107.1	339.2	111.2	227.95	1.488	Level 3	
10,800.0	6,727.5	10,906.2	6,800.8	119.3	119.8	102.31	-642.5	4,207.1	339.2	105.8	233.41	1.453	Level 3	
10,900.0	6,727.1	11,006.2	6,800.3	122.0	122.6	102.29	-643.0	4,307.1	339.2	100.3	238.89	1.420	Level 3	
11,000.0	6,726.6	11,106.2	6,799.8	124.8	125.3	102.28	-643.6	4,407.1	339.2	94.9	244.36	1.388	Level 3	
11,100.0	6,726.2	11,206.2	6,799.2	127.6	128.1	102.26	-644.2	4,507.1	339.2	89.4	249.84	1.358	Level 3	
11,137.6	6,726.0	11,243.8	6,799.0	128.7	129.2	102.26	-644.4	4,544.6	339.2	87.3	251.90	1.347	Level 3, SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	1.0	1.0	0.0	0.0	-90.00	-90.00	0.0	-61.3	61.3	61.3	0.00	N/A	
100.0	100.0	101.0	101.0	0.1	0.1	-90.00	-90.00	0.0	-61.3	61.3	61.1	0.23	269.981	
166.3	166.3	167.3	167.3	0.3	0.3	-90.00	-90.00	0.0	-61.3	61.3	60.8	0.53	116.700 CC	
200.0	200.0	201.0	201.0	0.3	0.3	-90.00	-90.00	0.0	-61.3	61.3	60.6	0.68	90.624	
300.0	300.0	300.7	300.7	0.6	0.5	-91.64	-91.64	-1.8	-61.5	61.5	60.4	1.10	55.783 ES	
400.0	400.0	400.2	400.1	0.8	0.8	-96.41	-96.41	-7.0	-62.0	62.4	60.9	1.53	40.658	
500.0	500.0	499.3	498.7	1.0	1.0	-103.88	-103.88	-15.5	-62.9	64.8	62.8	1.99	32.533	
600.0	600.0	597.6	596.3	1.2	1.3	-113.16	-113.16	-27.4	-64.1	69.8	67.4	2.46	28.379	
700.0	700.0	695.0	692.5	1.5	1.6	-122.90	-122.90	-42.4	-65.6	78.6	75.6	2.93	26.813	
800.0	800.0	793.5	789.6	1.7	2.0	-131.35	-131.35	-59.2	-67.3	90.4	87.0	3.38	26.704	
900.0	900.0	892.0	886.6	1.9	2.3	-137.78	-137.78	-76.0	-69.0	103.7	99.8	3.83	27.058	
1,000.0	1,000.0	990.5	983.7	2.1	2.7	-142.71	-142.71	-92.8	-70.7	117.9	113.7	4.28	27.529	
1,100.0	1,100.0	1,089.1	1,080.8	2.4	3.1	-146.56	-146.56	-109.6	-72.4	132.9	128.2	4.75	28.004	
1,200.0	1,200.0	1,187.6	1,177.8	2.6	3.5	-149.62	-149.62	-126.4	-74.1	148.3	143.1	5.22	28.441	
1,300.0	1,300.0	1,286.1	1,274.9	2.8	3.9	-152.11	-152.11	-143.2	-75.8	164.1	158.4	5.69	28.831	
1,400.0	1,400.0	1,384.6	1,372.0	3.0	4.2	-154.16	-154.16	-160.0	-77.5	180.1	174.0	6.17	29.173	
1,500.0	1,500.0	1,483.1	1,469.0	3.3	4.6	-155.87	-155.87	-176.8	-79.2	196.3	189.7	6.66	29.473	
1,600.0	1,600.0	1,581.9	1,566.3	3.5	5.0	-6.09	-6.09	-193.6	-80.9	211.0	203.8	7.20	29.315	
1,700.0	1,699.8	1,681.1	1,664.1	3.6	5.4	-7.49	-7.49	-210.5	-82.6	222.3	214.7	7.61	29.208	
1,800.0	1,799.5	1,780.6	1,762.1	3.8	5.8	-8.88	-8.88	-227.5	-84.3	230.3	222.3	8.03	28.700	
1,900.0	1,898.9	1,880.3	1,860.3	4.0	6.2	-10.29	-10.29	-244.5	-86.1	236.3	227.9	8.45	27.965	
2,000.0	1,998.3	1,979.9	1,958.5	4.2	6.6	-11.64	-11.64	-261.5	-87.8	242.4	233.5	8.88	27.289	
2,100.0	2,097.7	2,079.6	2,056.7	4.5	7.0	-12.92	-12.92	-278.5	-89.5	248.7	239.3	9.32	26.673	
2,200.0	2,197.1	2,179.3	2,154.8	4.7	7.4	-14.13	-14.13	-295.5	-91.2	255.0	245.2	9.77	26.110	
2,300.0	2,296.5	2,278.9	2,253.0	4.9	7.8	-15.29	-15.29	-312.4	-92.9	261.5	251.2	10.22	25.593	
2,400.0	2,395.9	2,378.6	2,351.2	5.2	8.2	-16.39	-16.39	-329.4	-94.7	268.0	257.3	10.67	25.117	
2,500.0	2,495.3	2,478.2	2,449.4	5.5	8.6	-17.44	-17.44	-346.4	-96.4	274.7	263.5	11.13	24.676	
2,600.0	2,594.7	2,577.9	2,547.6	5.7	9.0	-18.44	-18.44	-363.4	-98.1	281.4	269.8	11.60	24.268	
2,700.0	2,694.1	2,677.5	2,645.8	6.0	9.4	-19.39	-19.39	-380.4	-99.8	288.2	276.1	12.06	23.888	
2,800.0	2,793.5	2,777.2	2,743.9	6.3	9.8	-20.29	-20.29	-397.4	-101.5	295.1	282.6	12.54	23.533	
2,900.0	2,892.9	2,876.8	2,842.1	6.5	10.2	-21.16	-21.16	-414.4	-103.3	302.1	289.0	13.02	23.202	
3,000.0	2,992.3	2,976.5	2,940.3	6.8	10.6	-21.99	-21.99	-431.4	-105.0	309.1	295.6	13.50	22.892	
3,100.0	3,091.7	3,076.2	3,038.5	7.1	11.0	-22.78	-22.78	-448.4	-106.7	316.2	302.2	13.99	22.600	
3,200.0	3,191.1	3,175.8	3,136.7	7.4	11.4	-23.53	-23.53	-465.3	-108.4	323.3	308.8	14.48	22.326	
3,300.0	3,290.5	3,275.5	3,234.8	7.7	11.8	-24.25	-24.25	-482.3	-110.2	330.5	315.6	14.98	22.067	
3,400.0	3,389.9	3,375.1	3,333.0	7.9	12.2	-24.94	-24.94	-499.3	-111.9	337.8	322.3	15.48	21.823	
3,500.0	3,489.3	3,474.8	3,431.2	8.2	12.6	-25.61	-25.61	-516.3	-113.6	345.1	329.1	15.98	21.593	
3,600.0	3,588.7	3,574.4	3,529.4	8.5	13.0	-26.24	-26.24	-533.3	-115.3	352.4	335.9	16.49	21.374	
3,700.0	3,688.1	3,674.1	3,627.6	8.8	13.4	-26.85	-26.85	-550.3	-117.0	359.8	342.8	17.00	21.167	
3,800.0	3,787.5	3,773.7	3,725.8	9.1	13.7	-27.44	-27.44	-567.3	-118.8	367.2	349.7	17.51	20.971	
3,900.0	3,886.9	3,873.4	3,823.9	9.4	14.1	-28.00	-28.00	-584.3	-120.5	374.7	356.7	18.03	20.784	
4,000.0	3,986.3	3,973.1	3,922.1	9.7	14.5	-28.54	-28.54	-601.2	-122.2	382.2	363.6	18.55	20.606	
4,100.0	4,085.7	4,072.7	4,020.3	10.0	14.9	-29.05	-29.05	-618.2	-123.9	389.7	370.6	19.07	20.437	
4,200.0	4,185.1	4,172.4	4,118.5	10.3	15.3	-29.55	-29.55	-635.2	-125.6	397.3	377.7	19.59	20.276	
4,300.0	4,284.5	4,272.0	4,216.7	10.6	15.7	-30.03	-30.03	-652.2	-127.4	404.8	384.7	20.12	20.122	
4,400.0	4,383.9	4,371.7	4,314.8	10.9	16.1	-30.50	-30.50	-669.2	-129.1	412.5	391.8	20.65	19.976	
4,500.0	4,483.3	4,471.3	4,413.0	11.2	16.5	-30.94	-30.94	-686.2	-130.8	420.1	398.9	21.18	19.835	
4,600.0	4,582.8	4,570.9	4,511.1	11.4	16.9	-31.35	-31.35	-703.2	-132.5	429.1	407.5	21.67	19.803	
4,700.0	4,682.6	4,670.2	4,608.9	11.6	17.3	-31.54	-31.54	-720.1	-134.2	441.2	419.0	22.10	19.957	
4,800.0	4,782.6	4,769.0	4,706.3	11.8	17.7	-31.53	-31.53	-736.9	-135.9	456.1	433.6	22.50	20.273	
4,900.0	4,882.6	4,867.5	4,803.4	12.0	18.1	-177.50	-177.50	-753.7	-137.6	473.0	443.4	29.60	15.983	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,000.0	4,982.6	4,966.1	4,900.5	12.2	18.5	177.79		-770.5	-139.3	490.0	459.8	30.18	16.238	
5,100.0	5,082.6	5,064.6	4,997.5	12.3	18.9	178.06		-787.3	-141.1	507.0	476.2	30.76	16.483	
5,200.0	5,182.6	5,163.1	5,094.6	12.5	19.3	178.31		-804.1	-142.8	524.0	492.6	31.34	16.720	
5,300.0	5,282.6	5,261.6	5,191.6	12.7	19.7	178.54		-820.9	-144.5	541.0	509.0	31.92	16.947	
5,400.0	5,382.6	5,360.2	5,288.7	12.9	20.1	178.77		-837.7	-146.2	558.0	525.5	32.50	17.166	
5,500.0	5,482.6	5,458.7	5,385.8	13.0	20.5	178.97		-854.5	-147.9	575.0	541.9	33.09	17.378	
5,600.0	5,582.6	5,557.2	5,482.8	13.2	20.9	179.17		-871.3	-149.6	592.0	558.3	33.67	17.582	
5,700.0	5,682.6	5,674.9	5,599.1	13.4	21.2	179.38		-889.9	-151.4	607.9	573.7	34.21	17.769	
5,800.0	5,782.6	5,801.1	5,724.3	13.6	21.5	179.53		-904.8	-152.9	619.6	584.9	34.68	17.866	
5,900.0	5,882.6	5,928.4	5,851.2	13.8	21.7	179.62		-914.1	-153.9	627.0	591.9	35.09	17.866	
6,000.0	5,982.6	6,056.2	5,979.0	14.0	21.9	89.36		-917.9	-154.3	629.9	602.3	27.65	22.785	
6,100.0	6,082.3	6,160.5	6,083.3	14.1	22.0	89.99		-918.0	-154.3	630.0	602.0	27.96	22.535	
6,101.1	6,083.4	6,161.6	6,084.4	14.1	22.0	90.00		-918.0	-154.3	630.0	602.0	27.96	22.533	
6,200.0	6,180.2	6,259.5	6,182.3	14.2	22.1	91.64		-918.0	-153.0	630.2	602.1	28.16	22.381	
6,300.0	6,274.8	6,361.2	6,283.2	14.3	22.2	93.46		-918.1	-140.3	631.2	602.8	28.35	22.260	
6,400.0	6,364.2	6,465.9	6,384.2	14.4	22.3	95.24		-918.2	-113.4	632.7	604.1	28.59	22.130	
6,500.0	6,447.1	6,573.7	6,483.5	14.5	22.4	96.95		-918.4	-71.5	634.8	605.8	28.96	21.923	
6,600.0	6,522.0	6,684.8	6,578.5	14.6	22.6	98.55		-918.7	-14.2	637.3	607.7	29.56	21.561	
6,700.0	6,587.6	6,799.1	6,666.5	15.0	22.7	100.01		-919.1	58.5	639.9	609.4	30.55	20.950	
6,800.0	6,642.9	6,916.4	6,744.7	15.9	23.0	101.29		-919.6	145.9	642.6	610.6	32.08	20.034	
6,900.0	6,686.7	7,036.7	6,809.8	17.2	23.4	102.35		-920.1	246.8	645.1	610.8	34.25	18.832	
7,000.0	6,718.5	7,159.3	6,859.2	18.9	24.1	103.17		-920.7	358.9	647.1	610.0	37.13	17.426	
7,100.0	6,737.7	7,283.7	6,890.3	20.7	25.2	103.71		-921.4	479.2	648.5	607.8	40.67	15.945	
7,200.0	6,743.9	7,393.9	6,903.5	22.8	26.7	104.13		-922.0	588.6	649.9	605.5	44.40	14.638	
7,300.0	6,743.4	7,507.8	6,911.1	25.0	28.6	104.82		-922.6	702.2	651.7	603.0	48.69	13.384	
7,400.0	6,743.0	7,610.8	6,911.3	27.3	30.6	104.88		-923.1	805.2	651.9	598.7	53.16	12.264	
7,500.0	6,742.5	7,710.8	6,911.4	29.7	32.6	104.92		-923.7	905.2	652.0	594.3	57.73	11.294	
7,600.0	6,742.1	7,810.8	6,911.4	32.1	34.9	104.96		-924.2	1,005.2	652.1	589.7	62.44	10.444	
7,700.0	6,741.6	7,910.8	6,911.4	34.6	37.2	105.00		-924.7	1,105.2	652.3	585.0	67.26	9.698	
7,800.0	6,741.1	8,010.8	6,911.4	37.2	39.6	105.04		-925.3	1,205.2	652.4	580.2	72.16	9.041	
7,900.0	6,740.7	8,110.8	6,911.4	39.8	42.0	105.08		-925.8	1,305.2	652.5	575.4	77.14	8.459	
8,000.0	6,740.2	8,210.8	6,911.5	42.4	44.5	105.12		-926.3	1,405.2	652.6	570.5	82.16	7.943	
8,100.0	6,739.8	8,310.8	6,911.5	45.0	47.0	105.16		-926.9	1,505.2	652.8	565.5	87.24	7.483	
8,200.0	6,739.3	8,410.8	6,911.5	47.7	49.6	105.20		-927.4	1,605.2	652.9	560.6	92.35	7.070	
8,300.0	6,738.9	8,510.8	6,911.5	50.4	52.2	105.24		-927.9	1,705.2	653.0	555.5	97.50	6.698	
8,400.0	6,738.4	8,610.8	6,911.5	53.1	54.8	105.28		-928.5	1,805.2	653.2	550.5	102.67	6.362	
8,500.0	6,738.0	8,710.8	6,911.5	55.8	57.4	105.32		-929.0	1,905.2	653.3	545.4	107.86	6.057	
8,600.0	6,737.5	8,810.8	6,911.6	58.5	60.1	105.36		-929.5	2,005.2	653.4	540.4	113.07	5.779	
8,700.0	6,737.1	8,910.8	6,911.6	61.2	62.7	105.40		-930.1	2,105.2	653.6	535.3	118.30	5.524	
8,800.0	6,736.6	9,010.8	6,911.6	63.9	65.4	105.44		-930.6	2,205.2	653.7	530.1	123.55	5.291	
8,900.0	6,736.2	9,110.8	6,911.6	66.6	68.1	105.48		-931.1	2,305.2	653.8	525.0	128.80	5.076	
9,000.0	6,735.7	9,210.8	6,911.6	69.4	70.8	105.51		-931.7	2,405.2	654.0	519.9	134.07	4.878	
9,100.0	6,735.2	9,310.8	6,911.6	72.1	73.5	105.55		-932.2	2,505.2	654.1	514.7	139.34	4.694	
9,200.0	6,734.8	9,410.8	6,911.7	74.9	76.2	105.59		-932.7	2,605.2	654.2	509.6	144.62	4.524	
9,300.0	6,734.3	9,510.8	6,911.7	77.6	78.9	105.63		-933.3	2,705.2	654.3	504.4	149.91	4.365	
9,400.0	6,733.9	9,610.8	6,911.7	80.4	81.7	105.67		-933.8	2,805.2	654.5	499.3	155.21	4.217	
9,500.0	6,733.4	9,710.8	6,911.7	83.2	84.4	105.71		-934.4	2,905.2	654.6	494.1	160.51	4.078	
9,600.0	6,733.0	9,810.8	6,911.7	85.9	87.1	105.75		-934.9	3,005.2	654.7	488.9	165.81	3.949	
9,700.0	6,732.5	9,910.8	6,911.7	88.7	89.9	105.79		-935.4	3,105.2	654.9	483.8	171.12	3.827	
9,800.0	6,732.1	10,010.8	6,911.8	91.5	92.6	105.83		-936.0	3,205.2	655.0	478.6	176.43	3.713	
9,900.0	6,731.6	10,110.8	6,911.8	94.2	95.4	105.87		-936.5	3,305.2	655.2	473.4	181.74	3.605	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Survey Program: 0-MWD												Maxey 24O-HZ Pad Sec.24-T5N-R65W - Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)		Offset Site Error: 0.0 ft	
Reference		Offset		Semi Major Axis		Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
10,000.0	6,731.2	10,210.8	6,911.8	97.0	98.1	105.91	-937.0	3,405.1	655.3	468.2	187.06	3.503			
10,100.0	6,730.7	10,310.8	6,911.8	99.8	100.9	105.95	-937.6	3,505.1	655.4	463.0	192.38	3.407			
10,200.0	6,730.3	10,410.8	6,911.8	102.6	103.6	105.99	-938.1	3,605.1	655.6	457.9	197.70	3.316			
10,300.0	6,729.8	10,510.8	6,911.9	105.3	106.4	106.03	-938.6	3,705.1	655.7	452.7	203.02	3.230			
10,400.0	6,729.3	10,610.8	6,911.9	108.1	109.2	106.07	-939.2	3,805.1	655.8	447.5	208.34	3.148			
10,500.0	6,728.9	10,710.8	6,911.9	110.9	111.9	106.11	-939.7	3,905.1	656.0	442.3	213.66	3.070			
10,600.0	6,728.4	10,810.8	6,911.9	113.7	114.7	106.15	-940.2	4,005.1	656.1	437.1	218.99	2.996			
10,700.0	6,728.0	10,910.8	6,911.9	116.5	117.5	106.19	-940.8	4,105.1	656.2	431.9	224.31	2.926			
10,800.0	6,727.5	11,010.8	6,911.9	119.3	120.2	106.23	-941.3	4,205.1	656.4	426.7	229.64	2.858			
10,900.0	6,727.1	11,110.8	6,912.0	122.0	123.0	106.27	-941.8	4,305.1	656.5	421.6	234.96	2.794			
11,000.0	6,726.6	11,210.8	6,912.0	124.8	125.8	106.30	-942.4	4,405.1	656.7	416.4	240.28	2.733			
11,100.0	6,726.2	11,310.8	6,912.0	127.6	128.6	106.34	-942.9	4,505.1	656.8	411.2	245.61	2.674			
11,137.6	6,726.0	11,348.4	6,912.0	128.7	129.6	106.36	-943.1	4,542.7	656.8	409.2	247.61	2.653 SF			

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Emily 1 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,200.0	6,730.3	6,600.0	6,599.0	102.6	11.5	61.14	-501.5	4,526.4	944.2	843.1	101.18	9.332	
10,300.0	6,729.8	6,600.0	6,599.0	105.3	11.5	61.14	-501.5	4,526.4	847.2	743.6	103.64	8.175	
10,400.0	6,729.3	6,600.0	6,599.0	108.1	11.5	61.14	-501.5	4,526.4	750.9	644.8	106.09	7.078	
10,500.0	6,728.9	6,600.0	6,599.0	110.9	11.5	61.14	-501.5	4,526.4	655.7	547.2	108.55	6.041	
10,600.0	6,728.4	6,600.0	6,599.0	113.7	11.5	61.14	-501.5	4,526.4	562.3	451.3	111.01	5.065	
10,700.0	6,728.0	6,600.0	6,599.0	116.5	11.5	61.14	-501.5	4,526.4	471.5	358.0	113.47	4.155	
10,800.0	6,727.5	6,600.0	6,599.0	119.3	11.5	61.14	-501.5	4,526.4	385.3	269.3	115.94	3.323	
10,900.0	6,727.1	6,600.0	6,599.0	122.0	11.5	61.14	-501.5	4,526.4	307.5	189.1	118.40	2.597	
11,000.0	6,726.6	6,600.0	6,599.0	124.8	11.5	61.14	-501.5	4,526.4	246.4	125.5	120.86	2.038	
11,100.0	6,726.2	6,600.0	6,599.0	127.6	11.5	61.14	-501.5	4,526.4	216.4	93.1	123.33	1.755	
11,119.3	6,726.1	6,600.0	6,599.0	128.2	11.5	61.14	-501.5	4,526.4	215.5	91.7	123.80	1.741 CC, ES	
11,137.6	6,726.0	6,600.0	6,599.0	128.7	11.5	61.14	-501.5	4,526.4	216.3	92.1	124.25	1.741 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 1 (P & A) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 7300-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (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
7,500.0	6,742.5	6,724.5	6,724.5	29.7	7.6	97.29	-331.5	1,835.9	928.1	891.3	36.83	25.199	
7,600.0	6,742.1	6,724.1	6,724.1	32.1	7.6	96.51	-331.5	1,835.9	828.2	788.8	39.33	21.057	
7,700.0	6,741.6	6,723.6	6,723.6	34.6	7.6	95.73	-331.5	1,835.9	728.2	686.4	41.88	17.387	
7,800.0	6,741.1	6,723.1	6,723.1	37.2	7.6	94.95	-331.5	1,835.9	628.4	583.9	44.48	14.127	
7,900.0	6,740.7	6,722.7	6,722.7	39.8	7.6	94.16	-331.5	1,835.9	528.5	481.4	47.11	11.219	
8,000.0	6,740.2	6,722.2	6,722.2	42.4	7.6	93.37	-331.5	1,835.9	428.8	379.0	49.77	8.616	
8,100.0	6,739.8	6,721.8	6,721.8	45.0	7.6	92.59	-331.5	1,835.9	329.2	276.7	52.44	6.276	
8,200.0	6,739.3	6,721.3	6,721.3	47.7	7.6	91.80	-331.5	1,835.9	229.9	174.7	55.13	4.169	
8,300.0	6,738.9	6,720.9	6,720.9	50.4	7.6	91.01	-331.5	1,835.9	131.7	73.9	57.83	2.277	
8,400.0	6,738.4	6,720.4	6,720.4	53.1	7.6	90.22	-331.5	1,835.9	42.9	-17.6	60.54	0.709 Level 1	
8,427.5	6,738.3	6,720.3	6,720.3	53.8	7.6	90.00	-331.5	1,835.9	32.9	-28.4	61.28	0.537 Level 1, CC, ES, SF	
8,500.0	6,738.0	6,720.0	6,720.0	55.8	7.6	89.43	-331.5	1,835.9	79.6	16.4	63.25	1.259 Level 3	
8,600.0	6,737.5	6,719.5	6,719.5	58.5	7.6	88.64	-331.5	1,835.9	175.6	109.6	65.95	2.663	
8,700.0	6,737.1	6,719.1	6,719.1	61.2	7.6	87.85	-331.5	1,835.9	274.5	205.8	68.66	3.998	
8,800.0	6,736.6	6,718.6	6,718.6	63.9	7.6	87.06	-331.5	1,835.9	373.9	302.6	71.35	5.241	
8,900.0	6,736.2	6,718.2	6,718.2	66.6	7.6	86.27	-331.5	1,835.9	473.6	399.6	74.04	6.397	
9,000.0	6,735.7	6,717.7	6,717.7	69.4	7.5	85.49	-331.5	1,835.9	573.4	496.7	76.72	7.474	
9,100.0	6,735.2	6,717.2	6,717.2	72.1	7.5	84.70	-331.5	1,835.9	673.3	593.9	79.39	8.481	
9,200.0	6,734.8	6,716.8	6,716.8	74.9	7.5	83.92	-331.5	1,835.9	773.2	691.1	82.04	9.424	
9,300.0	6,734.3	6,716.3	6,716.3	77.6	7.5	83.14	-331.5	1,835.9	873.1	788.4	84.68	10.311	
9,400.0	6,733.9	6,715.9	6,715.9	80.4	7.5	82.36	-331.5	1,835.9	973.0	885.7	87.30	11.146	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 7300-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
0.0	0.0	0.0	0.0	0.0	0.0	129.39	-393.4	479.2	620.2				
100.0	100.0	85.0	85.0	0.1	0.1	129.39	-393.4	479.2	620.0	619.8	0.21	2,979.302	
200.0	200.0	185.0	185.0	0.3	0.2	129.39	-393.4	479.2	620.0	619.5	0.55	1,137.109	
300.0	300.0	285.0	285.0	0.6	0.3	129.39	-393.4	479.2	620.0	619.1	0.88	702.643	
400.0	400.0	385.0	385.0	0.8	0.4	129.39	-393.4	479.2	620.0	618.8	1.22	508.396	
500.0	500.0	485.0	485.0	1.0	0.5	129.39	-393.4	479.2	620.0	618.5	1.56	398.288	
600.0	600.0	585.0	585.0	1.2	0.7	129.39	-393.4	479.2	620.0	618.1	1.89	327.384	
700.0	700.0	685.0	685.0	1.5	0.8	129.39	-393.4	479.2	620.0	617.8	2.23	277.909	
800.0	800.0	785.0	785.0	1.7	0.9	129.39	-393.4	479.2	620.0	617.4	2.57	241.425	
900.0	900.0	885.0	885.0	1.9	1.0	129.39	-393.4	479.2	620.0	617.1	2.91	213.409	
1,000.0	1,000.0	985.0	985.0	2.1	1.1	129.39	-393.4	479.2	620.0	616.8	3.24	191.219	
1,100.0	1,100.0	1,085.0	1,085.0	2.4	1.2	129.39	-393.4	479.2	620.0	616.4	3.58	173.208	
1,200.0	1,200.0	1,185.0	1,185.0	2.6	1.3	129.39	-393.4	479.2	620.0	616.1	3.92	158.299	
1,300.0	1,300.0	1,285.0	1,285.0	2.8	1.4	129.39	-393.4	479.2	620.0	615.8	4.25	145.753	
1,400.0	1,400.0	1,385.0	1,385.0	3.0	1.6	129.39	-393.4	479.2	620.0	615.4	4.59	135.049	
1,500.0	1,500.0	1,485.0	1,485.0	3.3	1.7	129.39	-393.4	479.2	620.0	615.1	4.93	125.810	
1,600.0	1,600.0	1,585.0	1,585.0	3.5	1.8	-79.53	-393.4	479.2	619.7	614.5	5.24	118.312	
1,700.0	1,699.8	1,684.8	1,684.8	3.6	1.9	-80.02	-393.4	479.2	618.8	613.2	5.53	111.980	
1,800.0	1,799.5	1,784.5	1,784.5	3.8	2.0	-80.84	-393.4	479.2	617.3	611.5	5.82	105.987	
1,900.0	1,898.9	1,883.9	1,883.9	4.0	2.1	-81.84	-393.4	479.2	615.7	609.5	6.14	100.298	
2,000.0	1,998.3	1,983.3	1,983.3	4.2	2.2	-82.85	-393.4	479.2	614.2	607.7	6.47	94.999	
2,100.0	2,097.7	2,082.7	2,082.7	4.5	2.3	-83.85	-393.4	479.2	612.9	606.1	6.80	90.091	
2,200.0	2,197.1	2,182.1	2,182.1	4.7	2.5	-84.87	-393.4	479.2	611.8	604.7	7.15	85.558	
2,300.0	2,296.5	2,281.5	2,281.5	4.9	2.6	-85.88	-393.4	479.2	610.9	603.4	7.51	81.383	
2,400.0	2,395.9	2,380.9	2,380.9	5.2	2.7	-86.90	-393.4	479.2	610.3	602.4	7.87	77.540	
2,500.0	2,495.3	2,480.3	2,480.3	5.5	2.8	-87.92	-393.4	479.2	609.8	601.5	8.24	74.005	
2,600.0	2,594.7	2,579.7	2,579.7	5.7	2.9	-88.94	-393.4	479.2	609.5	600.8	8.61	70.753	
2,700.0	2,694.1	2,679.1	2,679.1	6.0	3.0	-89.96	-393.4	479.2	609.4	600.4	8.99	67.761	
2,703.5	2,697.6	2,682.6	2,682.6	6.0	3.0	-90.00	-393.4	479.2	609.4	600.3	9.01	67.659	
2,800.0	2,793.5	2,778.5	2,778.5	6.3	3.1	-90.99	-393.4	479.2	609.4	600.1	9.38	65.005	
2,900.0	2,892.9	2,877.9	2,877.9	6.5	3.2	-92.01	-393.4	479.2	609.7	600.0	9.76	62.465	
3,000.0	2,992.3	2,977.3	2,977.3	6.8	3.3	-93.03	-393.4	479.2	610.2	600.1	10.15	60.122	
3,100.0	3,091.7	3,076.7	3,076.7	7.1	3.5	-94.05	-393.4	479.2	610.9	600.4	10.54	57.958	
3,200.0	3,191.1	3,176.1	3,176.1	7.4	3.6	-95.06	-393.4	479.2	611.8	600.8	10.93	55.957	
3,300.0	3,290.5	3,275.5	3,275.5	7.7	3.7	-96.07	-393.4	479.2	612.8	601.5	11.33	54.105	
3,400.0	3,389.9	3,374.9	3,374.9	7.9	3.8	-97.08	-393.4	479.2	614.1	602.4	11.72	52.390	
3,500.0	3,489.3	3,474.3	3,474.3	8.2	3.9	-98.09	-393.4	479.2	615.5	603.4	12.12	50.798	
3,600.0	3,588.7	3,573.7	3,573.7	8.5	4.0	-99.09	-393.4	479.2	617.2	604.7	12.51	49.320	
3,700.0	3,688.1	3,673.1	3,673.1	8.8	4.1	-100.08	-393.4	479.2	619.0	606.1	12.91	47.947	
3,800.0	3,787.5	3,772.5	3,772.5	9.1	4.2	-101.07	-393.4	479.2	621.0	607.7	13.31	46.669	
3,900.0	3,886.9	3,871.9	3,871.9	9.4	4.4	-102.05	-393.4	479.2	623.2	609.5	13.70	45.480	
4,000.0	3,986.3	3,971.3	3,971.3	9.7	4.5	-103.02	-393.4	479.2	625.6	611.5	14.10	44.371	
4,100.0	4,085.7	4,070.7	4,070.7	10.0	4.6	-103.99	-393.4	479.2	628.2	613.7	14.50	43.336	
4,200.0	4,185.1	4,170.1	4,170.1	10.3	4.7	-104.95	-393.4	479.2	630.9	616.1	14.89	42.371	
4,300.0	4,284.5	4,269.5	4,269.5	10.6	4.8	-105.90	-393.4	479.2	633.9	618.6	15.29	41.468	
4,400.0	4,383.9	4,368.9	4,368.9	10.9	4.9	-106.84	-393.4	479.2	637.0	621.3	15.68	40.625	
4,500.0	4,483.3	4,468.3	4,468.3	11.2	5.0	-107.77	-393.4	479.2	640.2	624.2	16.07	39.836	
4,600.0	4,582.8	4,567.8	4,567.8	11.4	5.1	-108.61	-393.4	479.2	643.2	626.7	16.43	39.155	
4,700.0	4,682.6	4,667.6	4,667.6	11.6	5.2	-109.14	-393.4	479.2	645.1	628.3	16.73	38.554	
4,800.0	4,782.6	4,767.6	4,767.6	11.8	5.4	-109.35	-393.4	479.2	645.8	628.8	17.02	37.947	
4,900.0	4,882.6	4,867.6	4,867.6	12.0	5.5	99.40	-393.4	479.2	645.8	629.7	16.12	40.066	

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

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 ft
Survey Program: 7300-MWD												Offset Well Error:	0.0 ft
Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 33-24 (Exist.) - Wellbore #1 - Wellbore #1													
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)					
5,000.0	4,982.6	4,967.6	4,967.6	12.2	5.6	99.40	-393.4	479.2	645.8	629.4	16.43	39.318	
5,100.0	5,082.6	5,067.6	5,067.6	12.3	5.7	99.40	-393.4	479.2	645.8	629.1	16.73	38.595	
5,200.0	5,182.6	5,167.6	5,167.6	12.5	5.8	99.40	-393.4	479.2	645.8	628.8	17.04	37.896	
5,300.0	5,282.6	5,267.6	5,267.6	12.7	5.9	99.40	-393.4	479.2	645.8	628.5	17.35	37.219	
5,400.0	5,382.6	5,367.6	5,367.6	12.9	6.0	99.40	-393.4	479.2	645.8	628.2	17.66	36.564	
5,500.0	5,482.6	5,467.6	5,467.6	13.0	6.1	99.40	-393.4	479.2	645.8	627.9	17.98	35.929	
5,600.0	5,582.6	5,567.6	5,567.6	13.2	6.3	99.40	-393.4	479.2	645.8	627.6	18.29	35.315	
5,700.0	5,682.6	5,667.6	5,667.6	13.4	6.4	99.40	-393.4	479.2	645.8	627.2	18.60	34.720	
5,800.0	5,782.6	5,767.6	5,767.6	13.6	6.5	99.40	-393.4	479.2	645.8	626.9	18.92	34.143	
5,900.0	5,882.6	5,867.6	5,867.6	13.8	6.6	99.40	-393.4	479.2	645.8	626.6	19.23	33.583	
6,000.0	5,982.6	5,967.6	5,967.6	14.0	6.7	9.09	-393.4	479.2	645.8	625.3	20.52	31.480	
6,100.0	6,082.3	6,067.3	6,067.3	14.1	6.8	9.27	-393.4	479.2	639.0	618.4	20.68	30.904	
6,200.0	6,180.2	6,165.2	6,165.2	14.2	6.9	9.82	-393.4	479.2	619.5	598.8	20.64	30.007	
6,300.0	6,274.8	6,259.8	6,259.8	14.3	7.0	10.83	-393.4	479.2	587.5	567.1	20.42	28.765	
6,400.0	6,364.2	6,349.2	6,349.2	14.4	7.1	12.47	-393.4	479.2	543.7	523.7	20.04	27.126	
6,500.0	6,447.1	6,432.1	6,432.1	14.5	7.2	15.10	-393.4	479.2	489.0	469.4	19.56	24.998	
6,600.0	6,522.0	6,507.0	6,507.0	14.6	7.3	19.37	-393.4	479.2	424.5	405.4	19.11	22.220	
6,700.0	6,587.6	6,572.6	6,572.6	15.0	7.4	26.58	-393.4	479.2	351.8	332.8	19.01	18.509	
6,800.0	6,642.9	6,627.9	6,627.9	15.9	7.4	39.03	-393.4	479.2	273.2	253.2	20.05	13.624	
6,900.0	6,686.7	6,671.7	6,671.7	17.2	7.5	58.69	-393.4	479.2	192.9	169.9	22.96	8.402	
7,000.0	6,718.5	6,703.5	6,703.5	18.9	7.5	80.22	-393.4	479.2	123.2	97.1	26.10	4.719	
7,070.5	6,733.4	6,718.4	6,718.4	20.2	7.6	90.00	-393.4	479.2	102.1	74.5	27.60	3.698 CC, ES, SF	
7,100.0	6,737.7	6,722.7	6,722.7	20.7	7.6	92.08	-393.4	479.2	106.2	78.0	28.13	3.773	
7,200.0	6,743.9	6,728.9	6,728.9	22.8	7.6	89.75	-393.4	479.2	164.4	134.2	30.23	5.439	
7,300.0	6,743.4	6,728.4	6,728.4	25.0	7.6	89.42	-393.4	479.2	250.6	218.2	32.43	7.728	
7,400.0	6,743.0	6,728.0	6,728.0	27.3	7.6	89.16	-393.4	479.2	344.4	309.6	34.74	9.913	
7,500.0	6,742.5	6,727.5	6,727.5	29.7	7.6	88.91	-393.4	479.2	440.9	403.7	37.14	11.872	
7,600.0	6,742.1	6,727.1	6,727.1	32.1	7.6	88.65	-393.4	479.2	538.7	499.1	39.60	13.604	
7,700.0	6,741.6	6,726.6	6,726.6	34.6	7.6	88.40	-393.4	479.2	637.1	595.0	42.11	15.130	
7,800.0	6,741.1	6,726.1	6,726.1	37.2	7.6	88.14	-393.4	479.2	736.0	691.3	44.66	16.479	
7,900.0	6,740.7	6,725.7	6,725.7	39.8	7.6	87.89	-393.4	479.2	835.2	787.9	47.25	17.675	
8,000.0	6,740.2	6,725.2	6,725.2	42.4	7.6	87.64	-393.4	479.2	934.5	884.6	49.86	18.741	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design												Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 43-24 (Exist) - Wellbore #1 - Wellbore #1		Offset Site Error:		0.0 ft	
Survey Program: 100-NS-GYRO-MS														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)						
7,400.0	6,743.0	6,751.0	6,750.3	27.3	13.5	126.51	-335.2	1,740.7	933.3	900.1	33.24	28.076					
7,500.0	6,742.5	6,747.8	6,747.0	29.7	13.5	123.18	-335.2	1,740.8	833.5	797.0	36.47	22.852					
7,600.0	6,742.1	6,744.6	6,743.8	32.1	13.5	119.64	-335.1	1,740.9	733.6	693.7	39.88	18.394					
7,700.0	6,741.6	6,741.5	6,740.7	34.6	13.5	115.90	-335.1	1,740.9	633.8	590.4	43.43	14.595					
7,800.0	6,741.1	6,738.5	6,737.7	37.2	13.5	111.99	-335.1	1,741.0	534.1	487.0	47.04	11.353					
7,900.0	6,740.7	6,735.5	6,734.7	39.8	13.5	107.92	-335.1	1,741.1	434.4	383.7	50.66	8.575					
8,000.0	6,740.2	6,732.5	6,731.8	42.4	13.5	103.74	-335.0	1,741.2	334.9	280.7	54.20	6.179					
8,100.0	6,739.8	6,729.7	6,728.9	45.0	13.5	99.48	-335.0	1,741.2	235.8	178.2	57.61	4.093					
8,200.0	6,739.3	6,726.9	6,726.1	47.7	13.5	95.19	-335.0	1,741.3	138.0	77.2	60.80	2.269					
8,300.0	6,738.9	6,724.1	6,723.3	50.4	13.5	90.92	-334.9	1,741.4	49.5	-14.2	63.74	0.776 Level 1					
8,333.0	6,738.7	6,723.2	6,722.4	51.3	13.5	89.52	-334.9	1,741.4	36.9	-27.7	64.64	0.571 Level 1, CC, ES, SF					
8,400.0	6,738.4	6,721.4	6,720.6	53.1	13.5	86.71	-334.9	1,741.4	76.5	10.1	66.37	1.152 Level 2					
8,500.0	6,738.0	6,718.7	6,717.9	55.8	13.4	82.61	-334.9	1,741.5	171.0	102.3	68.67	2.490					
8,600.0	6,737.5	6,716.1	6,715.3	58.5	13.4	78.66	-334.9	1,741.5	269.5	198.8	70.65	3.814					
8,700.0	6,737.1	6,713.5	6,712.8	61.2	13.4	74.88	-334.9	1,741.6	368.7	296.4	72.30	5.100					
8,800.0	6,736.6	6,711.0	6,710.3	63.9	13.4	71.29	-334.9	1,741.7	468.3	394.6	73.67	6.357					
8,900.0	6,736.2	6,708.6	6,707.8	66.6	13.4	67.90	-334.8	1,741.7	568.0	493.2	74.77	7.597					
9,000.0	6,735.7	6,706.1	6,705.4	69.4	13.4	64.72	-334.8	1,741.8	667.8	592.2	75.65	8.828					
9,100.0	6,735.2	6,703.7	6,703.0	72.1	13.4	61.76	-334.8	1,741.8	767.6	691.3	76.33	10.056					
9,200.0	6,734.8	6,700.0	6,699.2	74.9	13.4	57.40	-334.8	1,741.9	867.5	791.8	75.70	11.460					
9,300.0	6,734.3	6,700.0	6,699.2	77.6	13.4	57.40	-334.8	1,741.9	967.4	889.3	78.04	12.396					

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey Hoff 2 (Exist.) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 100-NS-GYRO-MS												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)					
8,900.0	6,736.2	6,697.6	6,694.9	66.6	14.3	87.37	-677.0	3,225.1	990.9	910.0	80.83	12.258	
9,000.0	6,735.7	6,700.3	6,697.6	69.4	14.3	87.78	-676.9	3,225.2	898.9	815.3	83.59	10.754	
9,100.0	6,735.2	6,702.8	6,700.2	72.1	14.3	88.17	-676.9	3,225.3	808.9	722.6	86.35	9.368	
9,200.0	6,734.8	6,705.3	6,702.6	74.9	14.3	88.56	-676.9	3,225.3	721.5	632.4	89.12	8.096	
9,300.0	6,734.3	6,707.8	6,705.1	77.6	14.3	88.93	-676.8	3,225.4	637.8	546.0	91.88	6.942	
9,400.0	6,733.9	6,710.2	6,707.5	80.4	14.3	89.30	-676.8	3,225.5	559.5	464.9	94.64	5.912	
9,500.0	6,733.4	6,712.5	6,709.8	83.2	14.3	89.66	-676.8	3,225.5	489.2	391.8	97.41	5.022	
9,600.0	6,733.0	6,714.8	6,712.1	85.9	14.3	90.01	-676.7	3,225.6	430.7	330.5	100.17	4.299	
9,700.0	6,732.5	6,717.0	6,714.3	88.7	14.3	90.36	-676.7	3,225.6	389.5	286.5	102.94	3.784	
9,800.0	6,732.1	6,719.2	6,716.5	91.5	14.3	90.69	-676.7	3,225.7	371.3	265.6	105.70	3.513	
9,819.1	6,732.0	6,719.6	6,716.9	92.0	14.3	90.76	-676.7	3,225.7	370.8	264.6	106.23	3.491 CC, ES, SF	
9,900.0	6,731.6	6,721.3	6,718.6	94.2	14.3	91.02	-676.7	3,225.8	379.5	271.1	108.46	3.499	
10,000.0	6,731.2	6,723.4	6,720.7	97.0	14.3	91.35	-676.6	3,225.8	412.6	301.4	111.22	3.709	
10,100.0	6,730.7	6,725.4	6,722.8	99.8	14.3	91.66	-676.6	3,225.9	465.2	351.2	113.98	4.081	
10,200.0	6,730.3	6,727.5	6,724.8	102.6	14.3	91.97	-676.6	3,225.9	531.5	414.8	116.74	4.553	
10,300.0	6,729.8	6,729.4	6,726.7	105.3	14.3	92.28	-676.6	3,226.0	607.2	487.7	119.50	5.081	
10,400.0	6,729.3	6,731.3	6,728.6	108.1	14.3	92.57	-676.5	3,226.0	689.1	566.8	122.25	5.636	
10,500.0	6,728.9	6,733.2	6,730.5	110.9	14.3	92.87	-676.5	3,226.1	775.2	650.2	125.00	6.202	
10,600.0	6,728.4	6,735.1	6,732.4	113.7	14.3	93.15	-676.5	3,226.1	864.3	736.6	127.75	6.766	
10,700.0	6,728.0	6,736.9	6,734.2	116.5	14.3	93.43	-676.5	3,226.2	955.6	825.1	130.50	7.323	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (RKB - 15')
Reference Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24O-232	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (8-9-13)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4651.0ft (RKB - 15')

Offset Depths are relative to Offset Datum

Central Meridian is -105.500000 °

Coordinates are relative to: Maxey 24O-232

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.57°



Coordinates are relative to: Maxey 240-232
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.57°

