

PETROLEUM DEVELOPMENT CORP Weld County CO

Well Name: **Maxey 24P-232**

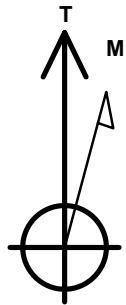
Surface Location: Maxey 24Q-HZ Pad Sec.24-T5N-R65W
 North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
 Ground Elevation: 4635.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1381915.29	3247715.20	40.378350	-104.610840	

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

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
BHL 1098'FSL, 2081'FWL, SEC.19	6726.0	732.7	4565.8	Point



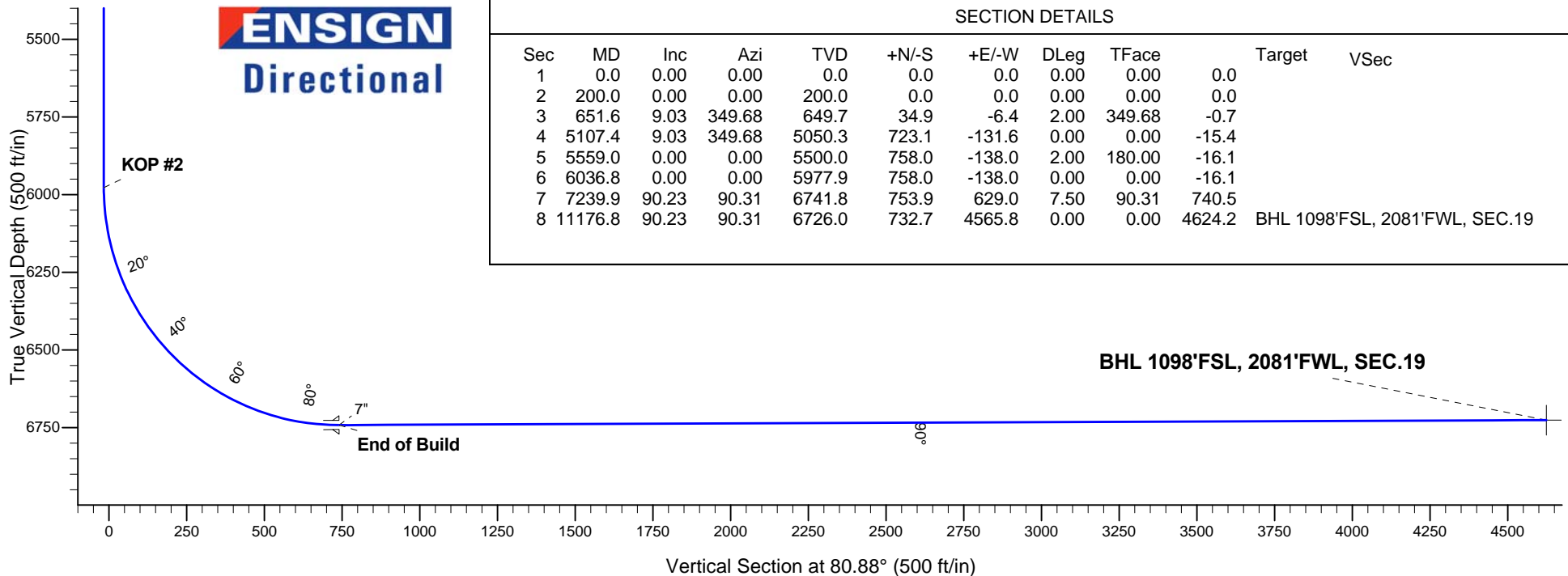
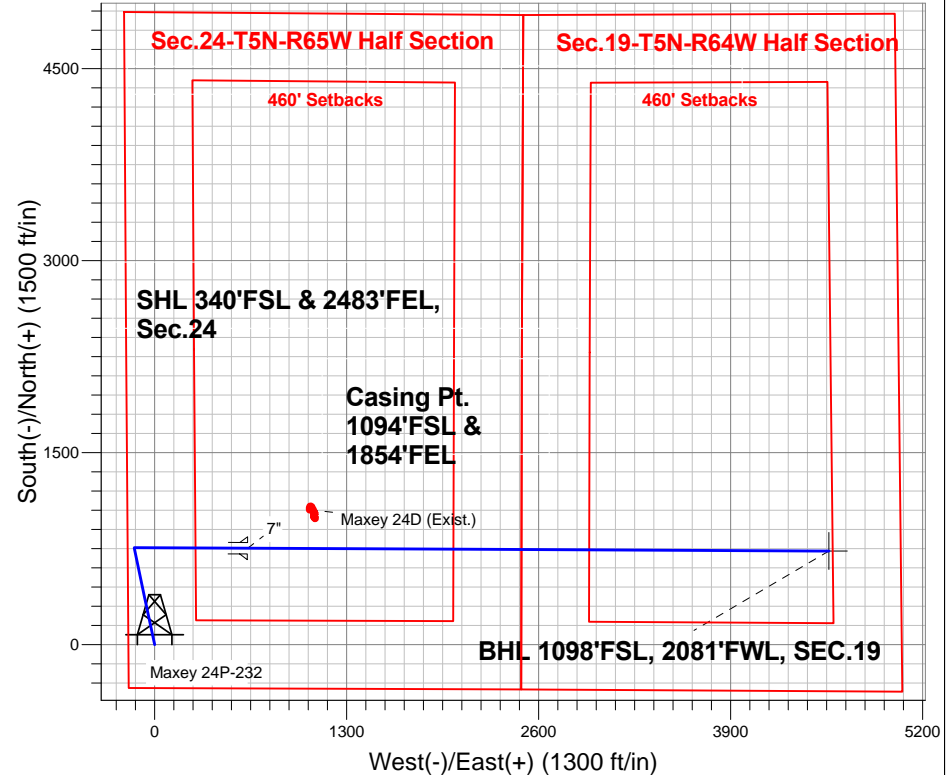
Azimuths to True North
 Magnetic North: 8.49°

Magnetic Field
 Strength: 52911.1snT
 Dip Angle: 66.98°
 Date: 8/9/2013
 Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5977.8	6036.8	KOP #2
6741.8	7239.9	End of Build

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





PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24P-232

Wellbore #1

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

Standard Planning Report

12 August, 2013

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24P-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24P-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 24Q-HZ Pad Sec.24-T5N-R65W											
Site Position:			Northing:			1,381,915.64 ft			Latitude:			40.378350					
From:			Lat/Long			Easting:			3,247,745.85 ft			Longitude:			-104.610730		
Position Uncertainty:			0.0 ft			Slot Radius:			"			Grid Convergence:			0.57 °		

Well	Maxey 24P-232					
Well Position	+N/-S	0.0 ft	Northing:	1,381,915.29 ft	Latitude:	40.378350
	+E/-W	-30.6 ft	Easting:	3,247,715.20 ft	Longitude:	-104.610840
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,635.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/9/2013	8.49	66.98	52,911

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	80.88

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
651.6	9.03	349.68	649.7	34.9	-6.4	2.00	2.00	0.00	349.68	
5,107.4	9.03	349.68	5,050.3	723.1	-131.6	0.00	0.00	0.00	0.00	
5,559.0	0.00	0.00	5,500.0	758.0	-138.0	2.00	-2.00	0.00	180.00	
6,036.8	0.00	0.00	5,977.9	758.0	-138.0	0.00	0.00	0.00	0.00	
7,239.9	90.23	90.31	6,741.8	753.9	629.0	7.50	7.50	0.00	90.31	
11,176.8	90.23	90.31	6,726.0	732.7	4,565.8	0.00	0.00	0.00	0.00	BHL 1098'FSL, 208

Database:	Landmark	Local Co-ordinate Reference:	Well Maxey 24P-232
Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24P-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
KOP #1									
300.0	2.00	349.68	300.0	1.7	-0.3	0.0	2.00	2.00	0.00
400.0	4.00	349.68	399.8	6.9	-1.2	-0.1	2.00	2.00	0.00
500.0	6.00	349.68	499.5	15.4	-2.8	-0.3	2.00	2.00	0.00
600.0	8.00	349.68	598.7	27.4	-5.0	-0.6	2.00	2.00	0.00
651.6	9.03	349.68	649.7	34.9	-6.4	-0.7	2.00	2.00	0.00
700.0	9.03	349.68	697.5	42.4	-7.7	-0.9	0.00	0.00	0.00
800.0	9.03	349.68	796.3	57.9	-10.5	-1.2	0.00	0.00	0.00
900.0	9.03	349.68	895.1	73.3	-13.3	-1.6	0.00	0.00	0.00
1,000.0	9.03	349.68	993.8	88.8	-16.2	-1.9	0.00	0.00	0.00
1,100.0	9.03	349.68	1,092.6	104.2	-19.0	-2.2	0.00	0.00	0.00
1,200.0	9.03	349.68	1,191.3	119.6	-21.8	-2.5	0.00	0.00	0.00
1,300.0	9.03	349.68	1,290.1	135.1	-24.6	-2.9	0.00	0.00	0.00
1,400.0	9.03	349.68	1,388.9	150.5	-27.4	-3.2	0.00	0.00	0.00
1,500.0	9.03	349.68	1,487.6	166.0	-30.2	-3.5	0.00	0.00	0.00
1,600.0	9.03	349.68	1,586.4	181.4	-33.0	-3.9	0.00	0.00	0.00
1,700.0	9.03	349.68	1,685.1	196.9	-35.8	-4.2	0.00	0.00	0.00
1,800.0	9.03	349.68	1,783.9	212.3	-38.6	-4.5	0.00	0.00	0.00
1,900.0	9.03	349.68	1,882.7	227.7	-41.5	-4.9	0.00	0.00	0.00
2,000.0	9.03	349.68	1,981.4	243.2	-44.3	-5.2	0.00	0.00	0.00
2,100.0	9.03	349.68	2,080.2	258.6	-47.1	-5.5	0.00	0.00	0.00
2,200.0	9.03	349.68	2,178.9	274.1	-49.9	-5.8	0.00	0.00	0.00
2,300.0	9.03	349.68	2,277.7	289.5	-52.7	-6.2	0.00	0.00	0.00
2,400.0	9.03	349.68	2,376.5	305.0	-55.5	-6.5	0.00	0.00	0.00
2,500.0	9.03	349.68	2,475.2	320.4	-58.3	-6.8	0.00	0.00	0.00
2,600.0	9.03	349.68	2,574.0	335.8	-61.1	-7.2	0.00	0.00	0.00
2,700.0	9.03	349.68	2,672.7	351.3	-64.0	-7.5	0.00	0.00	0.00
2,800.0	9.03	349.68	2,771.5	366.7	-66.8	-7.8	0.00	0.00	0.00
2,900.0	9.03	349.68	2,870.3	382.2	-69.6	-8.1	0.00	0.00	0.00
3,000.0	9.03	349.68	2,969.0	397.6	-72.4	-8.5	0.00	0.00	0.00
3,100.0	9.03	349.68	3,067.8	413.1	-75.2	-8.8	0.00	0.00	0.00
3,200.0	9.03	349.68	3,166.5	428.5	-78.0	-9.1	0.00	0.00	0.00
3,300.0	9.03	349.68	3,265.3	443.9	-80.8	-9.5	0.00	0.00	0.00
3,400.0	9.03	349.68	3,364.1	459.4	-83.6	-9.8	0.00	0.00	0.00
3,500.0	9.03	349.68	3,462.8	474.8	-86.4	-10.1	0.00	0.00	0.00
3,600.0	9.03	349.68	3,561.6	490.3	-89.3	-10.4	0.00	0.00	0.00
3,700.0	9.03	349.68	3,660.3	505.7	-92.1	-10.8	0.00	0.00	0.00
3,800.0	9.03	349.68	3,759.1	521.2	-94.9	-11.1	0.00	0.00	0.00
3,900.0	9.03	349.68	3,857.9	536.6	-97.7	-11.4	0.00	0.00	0.00
4,000.0	9.03	349.68	3,956.6	552.0	-100.5	-11.8	0.00	0.00	0.00
4,100.0	9.03	349.68	4,055.4	567.5	-103.3	-12.1	0.00	0.00	0.00
4,200.0	9.03	349.68	4,154.1	582.9	-106.1	-12.4	0.00	0.00	0.00
4,300.0	9.03	349.68	4,252.9	598.4	-108.9	-12.7	0.00	0.00	0.00
4,400.0	9.03	349.68	4,351.7	613.8	-111.7	-13.1	0.00	0.00	0.00
4,500.0	9.03	349.68	4,450.4	629.3	-114.6	-13.4	0.00	0.00	0.00
4,600.0	9.03	349.68	4,549.2	644.7	-117.4	-13.7	0.00	0.00	0.00
4,700.0	9.03	349.68	4,647.9	660.1	-120.2	-14.1	0.00	0.00	0.00
4,800.0	9.03	349.68	4,746.7	675.6	-123.0	-14.4	0.00	0.00	0.00
4,900.0	9.03	349.68	4,845.5	691.0	-125.8	-14.7	0.00	0.00	0.00
5,000.0	9.03	349.68	4,944.2	706.5	-128.6	-15.0	0.00	0.00	0.00

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Well:	Maxey 24P-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)
5,100.0	9.03	349.68	5,043.0	721.9	-131.4	-15.4	0.00	0.00	0.00
5,107.4	9.03	349.68	5,050.3	723.1	-131.6	-15.4	0.00	0.00	0.00
5,200.0	7.18	349.68	5,142.0	735.9	-134.0	-15.7	2.00	-2.00	0.00
5,300.0	5.18	349.68	5,241.4	746.5	-135.9	-15.9	2.00	-2.00	0.00
5,400.0	3.18	349.68	5,341.1	753.7	-137.2	-16.1	2.00	-2.00	0.00
5,500.0	1.18	349.68	5,441.0	757.4	-137.9	-16.1	2.00	-2.00	0.00
5,559.0	0.00	0.00	5,500.0	758.0	-138.0	-16.1	2.00	-2.00	0.00
5,600.0	0.00	0.00	5,541.0	758.0	-138.0	-16.1	0.00	0.00	0.00
5,700.0	0.00	0.00	5,641.0	758.0	-138.0	-16.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,741.0	758.0	-138.0	-16.1	0.00	0.00	0.00
5,900.0	0.00	0.00	5,841.0	758.0	-138.0	-16.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,941.0	758.0	-138.0	-16.1	0.00	0.00	0.00
6,036.8	0.00	0.00	5,977.8	758.0	-138.0	-16.1	0.00	0.00	0.00
KOP #2									
6,100.0	4.74	90.31	6,041.0	758.0	-135.4	-13.6	7.50	7.50	0.00
6,200.0	12.24	90.31	6,139.8	757.9	-120.6	1.0	7.50	7.50	0.00
6,300.0	19.74	90.31	6,235.9	757.8	-93.1	28.1	7.50	7.50	0.00
6,400.0	27.24	90.31	6,327.5	757.5	-53.3	67.4	7.50	7.50	0.00
6,500.0	34.74	90.31	6,413.2	757.3	-1.8	118.2	7.50	7.50	0.00
6,600.0	42.24	90.31	6,491.4	756.9	60.3	179.5	7.50	7.50	0.00
6,700.0	49.74	90.31	6,560.8	756.5	132.2	250.4	7.50	7.50	0.00
6,800.0	57.24	90.31	6,620.3	756.1	212.5	329.6	7.50	7.50	0.00
6,900.0	64.74	90.31	6,668.7	755.6	299.9	415.9	7.50	7.50	0.00
7,000.0	72.24	90.31	6,705.4	755.1	392.9	507.6	7.50	7.50	0.00
7,100.0	79.74	90.31	6,729.6	754.6	489.8	603.2	7.50	7.50	0.00
7,200.0	87.24	90.31	6,740.9	754.1	589.1	701.2	7.50	7.50	0.00
7,239.9	90.23	90.31	6,741.8	753.9	629.0	740.5	7.50	7.50	0.00
End of Build - 7"									
7,300.0	90.23	90.31	6,741.6	753.6	689.1	799.8	0.00	0.00	0.00
7,400.0	90.23	90.31	6,741.2	753.0	789.1	898.4	0.00	0.00	0.00
7,500.0	90.23	90.31	6,740.8	752.5	889.1	997.1	0.00	0.00	0.00
7,600.0	90.23	90.31	6,740.4	751.9	989.1	1,095.7	0.00	0.00	0.00
7,700.0	90.23	90.31	6,740.0	751.4	1,089.1	1,194.4	0.00	0.00	0.00
7,800.0	90.23	90.31	6,739.6	750.9	1,189.1	1,293.0	0.00	0.00	0.00
7,900.0	90.23	90.31	6,739.2	750.3	1,289.1	1,391.7	0.00	0.00	0.00
8,000.0	90.23	90.31	6,738.8	749.8	1,389.1	1,490.3	0.00	0.00	0.00
8,100.0	90.23	90.31	6,738.4	749.3	1,489.1	1,589.0	0.00	0.00	0.00
8,200.0	90.23	90.31	6,737.9	748.7	1,589.1	1,687.6	0.00	0.00	0.00
8,300.0	90.23	90.31	6,737.5	748.2	1,689.1	1,786.3	0.00	0.00	0.00
8,400.0	90.23	90.31	6,737.1	747.7	1,789.1	1,884.9	0.00	0.00	0.00
8,500.0	90.23	90.31	6,736.7	747.1	1,889.1	1,983.6	0.00	0.00	0.00
8,600.0	90.23	90.31	6,736.3	746.6	1,989.1	2,082.2	0.00	0.00	0.00
8,700.0	90.23	90.31	6,735.9	746.0	2,089.1	2,180.9	0.00	0.00	0.00
8,800.0	90.23	90.31	6,735.5	745.5	2,189.1	2,279.5	0.00	0.00	0.00
8,900.0	90.23	90.31	6,735.1	745.0	2,289.1	2,378.2	0.00	0.00	0.00
9,000.0	90.23	90.31	6,734.7	744.4	2,389.1	2,476.8	0.00	0.00	0.00
9,100.0	90.23	90.31	6,734.3	743.9	2,489.1	2,575.5	0.00	0.00	0.00
9,200.0	90.23	90.31	6,733.9	743.4	2,589.1	2,674.1	0.00	0.00	0.00
9,300.0	90.23	90.31	6,733.5	742.8	2,689.0	2,772.8	0.00	0.00	0.00
9,400.0	90.23	90.31	6,733.1	742.3	2,789.0	2,871.4	0.00	0.00	0.00
9,500.0	90.23	90.31	6,732.7	741.7	2,889.0	2,970.1	0.00	0.00	0.00
9,600.0	90.23	90.31	6,732.3	741.2	2,989.0	3,068.7	0.00	0.00	0.00
9,700.0	90.23	90.31	6,731.9	740.7	3,089.0	3,167.4	0.00	0.00	0.00

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Project:	SEC.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	North Reference:	True
Well:	Maxey 24P-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	90.23	90.31	6,731.5	740.1	3,189.0	3,266.0	0.00	0.00	0.00
9,900.0	90.23	90.31	6,731.1	739.6	3,289.0	3,364.7	0.00	0.00	0.00
10,000.0	90.23	90.31	6,730.7	739.1	3,389.0	3,463.3	0.00	0.00	0.00
10,100.0	90.23	90.31	6,730.3	738.5	3,489.0	3,562.0	0.00	0.00	0.00
10,200.0	90.23	90.31	6,729.9	738.0	3,589.0	3,660.6	0.00	0.00	0.00
10,300.0	90.23	90.31	6,729.5	737.5	3,689.0	3,759.3	0.00	0.00	0.00
10,400.0	90.23	90.31	6,729.1	736.9	3,789.0	3,857.9	0.00	0.00	0.00
10,500.0	90.23	90.31	6,728.7	736.4	3,889.0	3,956.6	0.00	0.00	0.00
10,600.0	90.23	90.31	6,728.3	735.8	3,989.0	4,055.2	0.00	0.00	0.00
10,700.0	90.23	90.31	6,727.9	735.3	4,089.0	4,153.9	0.00	0.00	0.00
10,800.0	90.23	90.31	6,727.5	734.8	4,189.0	4,252.5	0.00	0.00	0.00
10,900.0	90.23	90.31	6,727.1	734.2	4,289.0	4,351.2	0.00	0.00	0.00
11,000.0	90.23	90.31	6,726.7	733.7	4,389.0	4,449.8	0.00	0.00	0.00
11,100.0	90.23	90.31	6,726.3	733.2	4,489.0	4,548.5	0.00	0.00	0.00
11,176.8	90.23	90.31	6,726.0	732.7	4,565.8	4,624.2	0.00	0.00	0.00
BHL 1098'FSL, 2081'FWL, SEC.19									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,239.9	6,741.8	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP #1
6,036.8	5,977.8	758.0	-138.0	KOP #2
7,239.9	6,741.8	753.9	629.0	End of Build



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24P-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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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	11,176.8	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 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	6,117.2	6,137.2	331.4	302.1	11.318	CC
Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	11,176.8	11,349.1	379.2	150.9	1.661	ES, SF
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1	7,659.7	6,745.8	306.7	259.4	6.474	CC, ES
Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1	7,700.0	6,745.6	309.4	261.0	6.396	SF
Maxey 24P-332 - Wellbore #1 - Plan #2 (8-9-13)	200.0	200.0	30.6	30.0	45.451	CC
Maxey 24P-332 - Wellbore #1 - Plan #2 (8-9-13)	300.0	300.0	31.0	29.9	27.592	ES
Maxey 24P-332 - Wellbore #1 - Plan #2 (8-9-13)	11,176.8	11,222.3	363.3	107.3	1.419	Level 3, SF
Maxey 24Q-112 - Wellbore #1 - Plan #2 (8-9-13)	200.0	200.0	61.3	60.6	90.901	CC
Maxey 24Q-112 - Wellbore #1 - Plan #2 (8-9-13)	300.0	300.0	61.6	60.5	54.848	ES
Maxey 24Q-112 - Wellbore #1 - Plan #2 (8-9-13)	11,176.8	11,003.2	700.0	447.2	2.770	SF
Maxey 24Q-302 - Wellbore #1 - Plan #2 (8-9-13)	200.0	200.0	91.9	91.3	136.352	CC
Maxey 24Q-302 - Wellbore #1 - Plan #2 (8-9-13)	300.0	300.0	92.3	91.1	82.117	ES
Maxey 24Q-302 - Wellbore #1 - Plan #2 (8-9-13)	1,400.0	1,388.9	192.1	185.7	29.909	SF

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
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
3,500.0	3,462.8	3,681.0	3,634.4	11.8	13.4	10.23	1,455.9	-94.9	995.7	978.4	17.25	57.710	
3,600.0	3,561.6	3,775.8	3,727.7	12.1	13.8	10.28	1,439.8	-96.5	963.6	945.9	17.74	54.315	
3,700.0	3,660.3	3,870.5	3,821.1	12.5	14.1	10.34	1,423.6	-98.1	931.6	913.3	18.23	51.101	
3,800.0	3,759.1	3,965.2	3,914.4	12.9	14.5	10.41	1,407.5	-99.8	899.5	880.8	18.72	48.055	
3,900.0	3,857.9	4,059.9	4,007.7	13.2	14.9	10.48	1,391.3	-101.4	867.4	848.2	19.21	45.163	
4,000.0	3,956.6	4,154.6	4,101.0	13.6	15.3	10.55	1,375.2	-103.0	835.4	815.7	19.70	42.414	
4,100.0	4,055.4	4,249.3	4,194.3	13.9	15.6	10.64	1,359.0	-104.7	803.3	783.1	20.19	39.797	
4,200.0	4,154.1	4,344.1	4,287.6	14.3	16.0	10.72	1,342.9	-106.3	771.3	750.6	20.67	37.304	
4,300.0	4,252.9	4,438.8	4,381.0	14.7	16.4	10.82	1,326.8	-108.0	739.2	718.0	21.16	34.926	
4,400.0	4,351.7	4,533.5	4,474.3	15.0	16.8	10.92	1,310.6	-109.6	707.2	685.5	21.66	32.655	
4,500.0	4,450.4	4,628.2	4,567.6	15.4	17.2	11.04	1,294.5	-111.2	675.1	653.0	22.15	30.484	
4,600.0	4,549.2	4,722.9	4,660.9	15.8	17.5	11.16	1,278.3	-112.9	643.1	620.4	22.64	28.407	

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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
4,700.0	4,647.9	4,817.6	4,754.2	16.1	17.9	11.30	1,262.2	-114.5	611.0	587.9	23.13	26.417		
4,800.0	4,746.7	4,912.4	4,847.5	16.5	18.3	11.46	1,246.0	-116.1	579.0	555.4	23.62	24.510		
4,900.0	4,845.5	5,007.1	4,940.8	16.9	18.7	11.63	1,229.9	-117.8	546.9	522.8	24.12	22.680		
5,000.0	4,944.2	5,101.8	5,034.2	17.2	19.1	11.82	1,213.7	-119.4	514.9	490.3	24.61	20.923		
5,100.0	5,043.0	5,196.5	5,127.5	17.6	19.4	12.04	1,197.6	-121.0	482.9	457.8	25.11	19.234		
5,200.0	5,142.0	5,291.7	5,221.2	17.9	19.8	12.12	1,181.4	-122.7	452.3	426.6	25.67	17.617		
5,300.0	5,241.4	5,387.8	5,316.0	18.2	20.2	12.14	1,165.0	-124.3	424.9	398.7	26.18	16.227		
5,400.0	5,341.1	5,484.9	5,411.6	18.3	20.6	12.07	1,148.4	-126.0	400.8	374.1	26.66	15.032		
5,500.0	5,441.0	5,582.7	5,508.0	18.5	21.0	11.92	1,131.7	-127.7	380.1	353.0	27.11	14.020		
5,600.0	5,541.0	5,670.2	5,594.4	18.6	21.2	1.42	1,118.1	-129.1	363.9	324.3	27.60	12.888		
5,700.0	5,641.0	5,758.4	5,681.9	18.8	21.4	1.28	1,107.0	-130.2	351.3	311.3	28.09	11.794		
5,800.0	5,741.0	5,847.3	5,770.3	18.9	21.6	1.17	1,098.6	-131.1	341.7	301.5	28.57	10.707		
5,900.0	5,841.0	5,936.6	5,859.4	19.1	21.7	1.09	1,092.8	-131.7	335.3	294.7	29.05	9.620		
6,000.0	5,941.0	6,026.1	5,948.9	19.2	21.9	1.04	1,089.8	-132.0	332.0	291.1	29.53	8.533		
6,100.0	6,041.0	6,120.1	6,043.0	19.3	22.0	-89.72	1,089.4	-132.0	331.4	302.2	29.99	7.446		
6,117.2	6,058.0	6,137.2	6,060.0	19.4	22.0	-90.00	1,089.4	-132.0	331.4	302.1	29.98	11.318 CC		
6,200.0	6,139.8	6,219.1	6,141.9	19.5	22.1	-92.22	1,089.4	-132.0	331.7	302.1	29.94	11.227		
6,300.0	6,235.9	6,320.0	6,242.5	19.5	22.2	-95.69	1,089.4	-124.8	333.1	303.2	29.93	11.131		
6,400.0	6,327.5	6,423.9	6,344.1	19.6	22.3	-99.08	1,089.2	-103.5	335.8	305.5	30.34	11.066		
6,500.0	6,413.2	6,530.9	6,444.8	19.7	22.4	-102.31	1,089.0	-67.5	339.5	308.8	30.75	11.040		
6,600.0	6,491.4	6,641.2	6,542.2	19.8	22.5	-105.30	1,088.8	-16.0	344.0	312.8	31.17	11.036		
6,700.0	6,560.8	6,754.7	6,633.7	19.9	22.7	-108.00	1,088.4	51.0	348.9	317.2	31.69	11.010		
6,800.0	6,620.3	6,817.4	6,716.3	20.2	22.9	-110.35	1,088.0	133.3	353.9	321.4	32.50	10.890		
6,900.0	6,668.7	6,911.1	6,787.0	20.6	23.2	-112.29	1,087.5	229.7	358.5	324.7	33.81	10.603		
7,000.0	6,705.4	7,113.3	6,842.8	21.4	23.8	-113.80	1,086.9	338.3	362.4	326.6	35.86	10.107		
7,100.0	6,729.6	7,237.5	6,881.0	22.7	24.7	-114.83	1,086.2	456.3	365.3	326.5	38.74	9.430		
7,200.0	6,740.9	7,357.2	6,899.7	24.3	26.1	-115.40	1,085.6	574.4	367.0	324.7	42.29	8.679		
7,300.0	6,741.6	7,464.9	6,909.6	26.2	27.8	-116.60	1,085.0	681.6	370.8	325.0	45.79	8.097		
7,400.0	6,741.2	7,574.1	6,911.3	28.3	29.8	-116.90	1,084.5	790.8	371.7	321.9	49.80	7.464		
7,500.0	6,740.8	7,674.1	6,911.4	30.5	31.9	-116.96	1,083.9	890.8	371.9	318.0	53.89	6.900		
7,600.0	6,740.4	7,774.1	6,911.4	32.8	34.0	-117.02	1,083.4	990.8	372.1	313.9	58.13	6.400		
7,700.0	6,740.0	7,874.1	6,911.4	35.2	36.3	-117.08	1,082.9	1,090.8	372.2	309.8	62.48	5.958		
7,800.0	6,739.6	7,974.1	6,911.4	37.7	38.7	-117.13	1,082.3	1,190.8	372.4	305.5	66.92	5.565		
7,900.0	6,739.2	8,074.1	6,911.4	40.1	41.1	-117.19	1,081.8	1,290.8	372.6	301.2	71.43	5.217		
8,000.0	6,738.8	8,174.1	6,911.4	42.7	43.6	-117.25	1,081.3	1,390.8	372.8	296.8	76.00	4.906		
8,100.0	6,738.4	8,274.1	6,911.5	45.2	46.1	-117.30	1,080.7	1,490.8	373.0	292.4	80.62	4.627		
8,200.0	6,737.9	8,374.1	6,911.5	47.8	48.7	-117.36	1,080.2	1,590.8	373.2	287.9	85.27	4.377		
8,300.0	6,737.5	8,474.1	6,911.5	50.4	51.2	-117.42	1,079.6	1,690.8	373.4	283.4	89.96	4.151		
8,400.0	6,737.1	8,574.1	6,911.5	53.1	53.8	-117.48	1,079.1	1,790.8	373.6	278.9	94.68	3.946		
8,500.0	6,736.7	8,674.1	6,911.5	55.7	56.5	-117.53	1,078.6	1,890.8	373.8	274.4	99.41	3.760		
8,600.0	6,736.3	8,774.1	6,911.6	58.4	59.1	-117.59	1,078.0	1,990.8	374.0	269.8	104.17	3.590		
8,700.0	6,735.9	8,874.1	6,911.6	61.1	61.8	-117.65	1,077.5	2,090.8	374.2	265.3	108.94	3.435		
8,800.0	6,735.5	8,974.1	6,911.6	63.8	64.4	-117.70	1,077.0	2,190.8	374.4	260.7	113.72	3.292		
8,900.0	6,735.1	9,074.1	6,911.6	66.5	67.1	-117.76	1,076.4	2,290.8	374.6	256.1	118.51	3.161		
9,000.0	6,734.7	9,174.1	6,911.6	69.2	69.8	-117.82	1,075.9	2,390.8	374.8	251.5	123.31	3.039		
9,100.0	6,734.3	9,274.1	6,911.6	71.9	72.5	-117.87	1,075.4	2,490.8	375.0	246.9	128.12	2.927		
9,200.0	6,733.9	9,374.1	6,911.7	74.6	75.2	-117.93	1,074.8	2,590.8	375.2	242.2	132.94	2.822		
9,300.0	6,733.5	9,474.1	6,911.7	77.3	77.9	-117.98	1,074.3	2,690.8	375.4	237.6	137.76	2.725		
9,400.0	6,733.1	9,574.1	6,911.7	80.1	80.7	-118.04	1,073.8	2,790.8	375.6	233.0	142.58	2.634		
9,500.0	6,732.7	9,674.1	6,911.7	82.8	83.4	-118.10	1,073.2	2,890.8	375.8	228.4	147.40	2.549		
9,600.0	6,732.3	9,774.1	6,911.7	85.6	86.1	-118.15	1,072.7	2,990.8	376.0	223.7	152.23	2.470		

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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
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)			
9,700.0	6,731.9	9,874.1	6,911.7	88.3	88.9	-118.21	1,072.2	3,090.8	376.2	219.1	157.06	2.395	
9,800.0	6,731.5	9,974.1	6,911.8	91.1	91.6	-118.27	1,071.6	3,190.8	376.4	214.5	161.89	2.325	
9,900.0	6,731.1	10,074.1	6,911.8	93.8	94.4	-118.32	1,071.1	3,290.8	376.6	209.9	166.72	2.259	
10,000.0	6,730.7	10,174.1	6,911.8	96.6	97.1	-118.38	1,070.6	3,390.8	376.8	205.2	171.55	2.196	
10,100.0	6,730.3	10,274.1	6,911.8	99.3	99.9	-118.43	1,070.0	3,490.8	377.0	200.6	176.38	2.137	
10,200.0	6,729.9	10,374.1	6,911.8	102.1	102.6	-118.49	1,069.5	3,590.8	377.2	196.0	181.21	2.081	
10,300.0	6,729.5	10,474.1	6,911.8	104.9	105.4	-118.54	1,069.0	3,690.8	377.4	191.3	186.04	2.028	
10,400.0	6,729.1	10,574.1	6,911.9	107.6	108.2	-118.60	1,068.4	3,790.8	377.6	186.7	190.87	1.978	
10,500.0	6,728.7	10,674.1	6,911.9	110.4	110.9	-118.66	1,067.9	3,890.8	377.8	182.1	195.69	1.930	
10,600.0	6,728.3	10,774.1	6,911.9	113.2	113.7	-118.71	1,067.3	3,990.8	378.0	177.5	200.51	1.885	
10,700.0	6,727.9	10,874.1	6,911.9	116.0	116.5	-118.77	1,066.8	4,090.8	378.2	172.9	205.34	1.842	
10,800.0	6,727.5	10,974.1	6,911.9	118.7	119.2	-118.82	1,066.3	4,190.8	378.4	168.2	210.15	1.801	
10,900.0	6,727.1	11,074.1	6,912.0	121.5	122.0	-118.88	1,065.7	4,290.8	378.6	163.6	214.97	1.761	
11,000.0	6,726.7	11,174.1	6,912.0	124.3	124.8	-118.93	1,065.2	4,390.8	378.8	159.0	219.78	1.724	
11,100.0	6,726.3	11,274.1	6,912.0	127.1	127.6	-118.99	1,064.7	4,490.7	379.0	154.4	224.59	1.688	
11,176.8	6,726.0	11,349.1	6,912.0	129.2	129.6	-119.03	1,064.3	4,565.7	379.2	150.9	228.24	1.661 ES, SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24D (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						
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
6,700.0	6,560.8	6,557.7	6,555.8	19.9	14.1	-28.26	1,066.6	1,051.2	970.0	944.4	25.58	37.920	
6,800.0	6,620.3	6,622.4	6,620.4	20.2	14.1	-35.33	1,064.3	1,051.3	893.7	868.5	25.14	35.542	
6,900.0	6,668.7	6,678.4	6,676.4	20.6	14.2	-45.91	1,061.6	1,051.0	811.3	784.5	26.82	30.251	
7,000.0	6,705.4	6,715.6	6,713.6	21.4	14.2	-59.82	1,059.6	1,050.7	725.2	694.6	30.62	23.685	
7,100.0	6,729.6	6,737.5	6,735.3	22.7	14.2	-75.35	1,058.3	1,050.6	638.0	603.3	34.70	18.384	
7,200.0	6,740.9	6,747.7	6,745.6	24.3	14.2	-89.35	1,057.7	1,050.5	552.7	515.5	37.21	14.852	
7,300.0	6,741.6	6,748.1	6,746.0	26.2	14.2	-93.72	1,057.7	1,050.5	472.7	433.7	39.02	12.115	
7,400.0	6,741.2	6,747.5	6,745.4	28.3	14.2	-93.60	1,057.8	1,050.5	401.9	360.7	41.22	9.750	
7,500.0	6,740.8	6,746.9	6,744.8	30.5	14.2	-93.48	1,057.8	1,050.5	345.8	302.3	43.53	7.945	
7,600.0	6,740.4	6,746.2	6,744.1	32.8	14.2	-93.36	1,057.8	1,050.5	312.5	266.6	45.91	6.806	
7,659.7	6,740.1	6,745.8	6,743.7	34.2	14.2	-93.29	1,057.8	1,050.5	306.7	259.4	47.38	6.474 CC, ES	
7,700.0	6,740.0	6,745.6	6,743.4	35.2	14.2	-93.24	1,057.9	1,050.5	309.4	261.0	48.37	6.396 SF	
7,800.0	6,739.6	6,744.9	6,742.8	37.7	14.2	-93.11	1,057.9	1,050.5	337.3	286.4	50.87	6.630	
7,900.0	6,739.2	6,744.2	6,742.0	40.1	14.2	-92.98	1,057.9	1,050.5	389.6	336.2	53.42	7.294	
8,000.0	6,738.8	6,743.4	6,741.3	42.7	14.2	-92.84	1,058.0	1,050.5	458.1	402.1	56.00	8.180	
8,100.0	6,738.4	6,742.7	6,740.6	45.2	14.2	-92.70	1,058.0	1,050.5	536.6	478.0	58.61	9.154	
8,200.0	6,737.9	6,741.9	6,739.8	47.8	14.2	-92.55	1,058.1	1,050.5	621.3	560.0	61.25	10.143	
8,300.0	6,737.5	6,741.1	6,739.0	50.4	14.2	-92.40	1,058.1	1,050.5	709.9	646.0	63.91	11.109	
8,400.0	6,737.1	6,740.3	6,738.2	53.1	14.2	-92.25	1,058.2	1,050.5	801.3	734.7	66.58	12.035	
8,500.0	6,736.7	6,739.4	6,737.3	55.7	14.2	-92.09	1,058.2	1,050.6	894.5	825.2	69.27	12.914	
8,600.0	6,736.3	6,738.5	6,736.4	58.4	14.2	-91.92	1,058.3	1,050.6	989.0	917.0	71.97	13.742	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24P-332 - 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)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.95	89.95	0.0	30.6	30.6				
100.0	100.0	100.0	100.0	0.1	0.1	89.95	89.95	0.0	30.6	30.6	30.4	0.22	136.352	
200.0	200.0	200.0	200.0	0.3	0.3	89.95	89.95	0.0	30.6	30.6	30.0	0.67	45.451 CC	
300.0	300.0	300.0	300.0	0.6	0.6	103.44	103.44	0.0	30.6	31.0	29.9	1.12	27.592 ES	
400.0	399.8	399.8	399.8	0.8	0.8	112.37	112.37	0.0	30.6	32.6	31.0	1.58	20.643	
500.0	499.5	499.5	499.5	1.0	1.0	124.91	124.91	0.0	30.6	36.8	34.8	2.05	17.954	
600.0	598.7	598.7	598.7	1.3	1.2	137.60	137.60	0.0	30.6	45.0	42.4	2.53	17.754	
700.0	697.5	697.5	697.5	1.6	1.5	147.85	147.85	0.0	30.6	57.2	54.2	3.01	19.023	
800.0	796.3	796.3	796.3	2.0	1.7	154.59	154.59	0.0	30.6	71.0	67.5	3.47	20.470	
900.0	895.1	895.1	895.1	2.3	1.9	159.10	159.10	0.0	30.6	85.5	81.5	3.93	21.755	
1,000.0	993.8	993.8	993.8	2.7	2.1	162.30	162.30	0.0	30.6	100.3	95.9	4.39	22.854	
1,100.0	1,092.6	1,096.4	1,096.4	3.0	2.4	164.70	164.70	1.5	30.0	113.8	109.0	4.85	23.453	
1,200.0	1,191.3	1,200.1	1,200.0	3.4	2.6	166.55	166.55	6.5	28.0	123.9	118.6	5.32	23.297	
1,300.0	1,290.1	1,303.9	1,303.4	3.8	2.8	168.11	168.11	14.9	24.6	130.5	124.7	5.79	22.543	
1,400.0	1,388.9	1,403.7	1,402.6	4.1	3.1	169.47	169.47	24.3	20.8	135.8	129.5	6.26	21.694	
1,500.0	1,487.6	1,503.5	1,501.9	4.5	3.3	170.73	170.73	33.7	16.9	141.1	134.4	6.73	20.969	
1,600.0	1,586.4	1,603.3	1,601.2	4.8	3.6	171.90	171.90	43.1	13.1	146.6	139.4	7.20	20.343	
1,700.0	1,685.1	1,703.2	1,700.5	5.2	3.8	172.98	172.98	52.5	9.3	152.0	144.4	7.68	19.797	
1,800.0	1,783.9	1,803.0	1,799.8	5.6	4.1	173.99	173.99	61.9	5.5	157.6	149.4	8.16	19.318	
1,900.0	1,882.7	1,902.8	1,899.1	5.9	4.4	174.93	174.93	71.3	1.7	163.1	154.5	8.63	18.893	
2,000.0	1,981.4	2,002.6	1,998.4	6.3	4.6	175.81	175.81	80.7	-2.2	168.7	159.6	9.11	18.513	
2,100.0	2,080.2	2,102.4	2,097.7	6.7	4.9	176.63	176.63	90.0	-6.0	174.4	164.8	9.60	18.173	
2,200.0	2,178.9	2,202.2	2,197.0	7.0	5.2	177.40	177.40	99.4	-9.8	180.1	170.0	10.08	17.866	
2,300.0	2,277.7	2,302.0	2,296.3	7.4	5.5	178.12	178.12	108.8	-13.6	185.8	175.2	10.56	17.587	
2,400.0	2,376.5	2,401.8	2,395.6	7.7	5.7	178.80	178.80	118.2	-17.5	191.5	180.5	11.05	17.333	
2,500.0	2,475.2	2,501.6	2,494.9	8.1	6.0	179.44	179.44	127.6	-21.3	197.3	185.8	11.54	17.100	
2,600.0	2,574.0	2,601.5	2,594.2	8.5	6.3	-179.95	-179.95	137.0	-25.1	203.1	191.1	12.03	16.886	
2,700.0	2,672.7	2,701.3	2,693.5	8.8	6.6	-179.38	-179.38	146.4	-28.9	208.9	196.4	12.52	16.689	
2,800.0	2,771.5	2,801.1	2,792.8	9.2	6.9	-178.85	-178.85	155.8	-32.8	214.7	201.7	13.01	16.507	
2,900.0	2,870.3	2,900.9	2,892.1	9.6	7.1	-178.34	-178.34	165.2	-36.6	220.6	207.1	13.50	16.338	
3,000.0	2,969.0	3,000.7	2,991.3	9.9	7.4	-177.85	-177.85	174.6	-40.4	226.4	212.4	13.99	16.180	
3,100.0	3,067.8	3,100.5	3,090.6	10.3	7.7	-177.39	-177.39	184.0	-44.2	232.3	217.8	14.49	16.034	
3,200.0	3,166.5	3,200.3	3,189.9	10.7	8.0	-176.95	-176.95	193.3	-48.0	238.2	223.2	14.98	15.896	
3,300.0	3,265.3	3,300.1	3,289.2	11.0	8.3	-176.54	-176.54	202.7	-51.9	244.1	228.6	15.48	15.768	
3,400.0	3,364.1	3,399.9	3,388.5	11.4	8.6	-176.14	-176.14	212.1	-55.7	250.0	234.1	15.98	15.647	
3,500.0	3,462.8	3,499.7	3,487.8	11.8	8.8	-175.77	-175.77	221.5	-59.5	256.0	239.5	16.48	15.534	
3,600.0	3,561.6	3,599.6	3,587.1	12.1	9.1	-175.40	-175.40	230.9	-63.3	261.9	244.9	16.98	15.426	
3,700.0	3,660.3	3,699.4	3,686.4	12.5	9.4	-175.06	-175.06	240.3	-67.2	267.9	250.4	17.48	15.325	
3,800.0	3,759.1	3,799.2	3,785.7	12.9	9.7	-174.73	-174.73	249.7	-71.0	273.8	255.8	17.98	15.230	
3,900.0	3,857.9	3,899.0	3,885.0	13.2	10.0	-174.41	-174.41	259.1	-74.8	279.8	261.3	18.48	15.139	
4,000.0	3,956.6	3,998.8	3,984.3	13.6	10.3	-174.11	-174.11	268.5	-78.6	285.8	266.8	18.98	15.053	
4,100.0	4,055.4	4,098.6	4,083.6	13.9	10.6	-173.82	-173.82	277.9	-82.4	291.7	272.3	19.49	14.972	
4,200.0	4,154.1	4,198.4	4,182.9	14.3	10.9	-173.54	-173.54	287.3	-86.3	297.7	277.7	19.99	14.894	
4,300.0	4,252.9	4,298.2	4,282.2	14.7	11.1	-173.28	-173.28	296.6	-90.1	303.7	283.2	20.49	14.820	
4,400.0	4,351.7	4,398.0	4,381.5	15.0	11.4	-173.02	-173.02	306.0	-93.9	309.7	288.7	21.00	14.750	
4,500.0	4,450.4	4,497.8	4,480.8	15.4	11.7	-172.77	-172.77	315.4	-97.7	315.7	294.2	21.50	14.683	
4,600.0	4,549.2	4,597.7	4,580.0	15.8	12.0	-172.53	-172.53	324.8	-101.6	321.8	299.7	22.01	14.619	
4,700.0	4,647.9	4,697.5	4,679.3	16.1	12.3	-172.30	-172.30	334.2	-105.4	327.8	305.3	22.52	14.557	
4,800.0	4,746.7	4,797.3	4,778.6	16.5	12.6	-172.08	-172.08	343.6	-109.2	333.8	310.8	23.02	14.498	
4,900.0	4,845.5	4,897.1	4,877.9	16.9	12.9	-171.87	-171.87	353.0	-113.0	339.8	316.3	23.53	14.442	
5,000.0	4,944.2	4,996.9	4,977.2	17.2	13.2	-171.66	-171.66	362.4	-116.8	345.9	321.8	24.04	14.388	

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24P-332 - 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)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,043.0	5,096.7	5,076.5	17.6	13.4	-171.47		371.8	-120.7	351.9	327.4	24.55	14.336	
5,200.0	5,142.0	5,196.6	5,175.9	17.9	13.7	-171.25		381.2	-124.5	356.5	331.4	25.05	14.232	
5,300.0	5,241.4	5,289.6	5,268.5	18.2	14.0	-171.00		389.3	-127.8	358.3	332.8	25.45	14.077	
5,400.0	5,341.1	5,379.1	5,357.8	18.3	14.2	-170.84		394.8	-130.0	359.4	333.6	25.77	13.946	
5,500.0	5,441.0	5,468.6	5,447.2	18.5	14.3	-170.75		397.6	-131.2	359.9	333.9	26.04	13.825	
5,600.0	5,541.0	5,562.4	5,541.0	18.6	14.5	-178.94		398.0	-131.4	360.0	327.3	32.70	11.009	
5,700.0	5,641.0	5,662.4	5,641.0	18.8	14.6	-178.94		398.0	-131.4	360.0	327.0	33.03	10.902	
5,800.0	5,741.0	5,762.4	5,741.0	18.9	14.8	-178.94		398.0	-131.4	360.0	326.7	33.36	10.793	
5,900.0	5,841.0	5,862.4	5,841.0	19.1	15.0	-178.94		398.0	-131.4	360.0	326.3	33.69	10.686	
6,000.0	5,941.0	5,962.4	5,941.0	19.2	15.2	-178.94		398.0	-131.4	360.0	326.0	34.03	10.580	
6,100.0	6,041.0	6,062.3	6,041.0	19.3	15.4	-89.05		398.0	-131.4	360.0	331.6	28.38	12.683	
6,154.4	6,094.9	6,116.3	6,094.9	19.4	15.5	90.00		398.0	-130.9	359.9	331.3	28.63	12.572	
6,200.0	6,139.8	6,161.8	6,140.3	19.5	15.6	90.86		398.0	-128.0	360.0	331.1	28.83	12.486	
6,300.0	6,235.9	6,262.6	6,239.7	19.5	15.7	92.73		397.9	-111.9	360.4	331.1	29.23	12.328	
6,400.0	6,327.5	6,365.0	6,337.7	19.6	15.8	94.57		397.8	-82.3	361.1	331.5	29.60	12.201	
6,500.0	6,413.2	6,469.1	6,432.3	19.7	15.9	96.33		397.5	-39.1	362.2	332.2	29.98	12.079	
6,600.0	6,491.4	6,574.8	6,521.5	19.8	15.9	97.99		397.2	17.5	363.5	333.0	30.51	11.915	
6,700.0	6,560.8	6,682.1	6,603.2	19.9	16.0	99.51		396.8	87.0	365.0	333.7	31.34	11.647	
6,800.0	6,620.3	6,791.0	6,675.3	20.2	16.3	100.85		396.4	168.5	366.6	333.9	32.65	11.226	
6,900.0	6,668.7	6,901.3	6,735.7	20.6	17.2	102.00		395.9	260.6	368.1	333.4	34.63	10.629	
7,000.0	6,705.4	7,012.8	6,782.7	21.4	18.6	102.92		395.3	361.6	369.4	332.0	37.36	9.888	
7,100.0	6,729.6	7,125.2	6,814.7	22.7	20.4	103.60		394.7	469.2	370.4	329.6	40.80	9.078	
7,200.0	6,740.9	7,238.3	6,830.6	24.3	22.5	104.02		394.1	581.1	371.1	326.3	44.85	8.275	
7,300.0	6,741.6	7,345.8	6,831.6	26.2	24.7	104.04		393.5	688.5	371.1	322.1	49.09	7.560	
7,400.0	6,741.2	7,445.8	6,830.0	28.3	26.9	103.86		392.9	788.5	370.9	317.5	53.37	6.949	
7,500.0	6,740.8	7,545.8	6,828.4	30.5	29.2	103.68		392.4	888.5	370.6	312.8	57.86	6.405	
7,600.0	6,740.4	7,645.8	6,826.8	32.8	31.6	103.50		391.8	988.5	370.3	307.8	62.52	5.924	
7,700.0	6,740.0	7,745.7	6,825.2	35.2	34.0	103.32		391.3	1,088.4	370.1	302.8	67.31	5.499	
7,800.0	6,739.6	7,845.7	6,823.6	37.7	36.5	103.14		390.7	1,188.4	369.8	297.6	72.20	5.122	
7,900.0	6,739.2	7,945.7	6,822.1	40.1	39.0	102.96		390.2	1,288.4	369.6	292.4	77.19	4.788	
8,000.0	6,738.8	8,045.7	6,820.5	42.7	41.6	102.78		389.6	1,388.4	369.3	287.1	82.26	4.490	
8,100.0	6,738.4	8,145.7	6,818.9	45.2	44.2	102.60		389.1	1,488.4	369.1	281.7	87.38	4.224	
8,200.0	6,737.9	8,245.7	6,817.3	47.8	46.8	102.42		388.5	1,588.3	368.8	276.3	92.56	3.985	
8,300.0	6,737.5	8,345.7	6,815.7	50.4	49.5	102.24		388.0	1,688.3	368.6	270.8	97.79	3.769	
8,400.0	6,737.1	8,445.7	6,814.1	53.1	52.1	102.06		387.4	1,788.3	368.4	265.3	103.05	3.575	
8,500.0	6,736.7	8,545.7	6,812.5	55.7	54.8	101.88		386.9	1,888.3	368.1	259.8	108.35	3.398	
8,600.0	6,736.3	8,645.7	6,810.9	58.4	57.5	101.70		386.3	1,988.3	367.9	254.2	113.68	3.236	
8,700.0	6,735.9	8,745.7	6,809.4	61.1	60.2	101.52		385.8	2,088.2	367.7	248.6	119.04	3.089	
8,800.0	6,735.5	8,845.7	6,807.8	63.8	62.9	101.34		385.2	2,188.2	367.5	243.0	124.42	2.953	
8,900.0	6,735.1	8,945.7	6,806.2	66.5	65.6	101.15		384.7	2,288.2	367.2	237.4	129.82	2.829	
9,000.0	6,734.7	9,045.7	6,804.6	69.2	68.3	100.97		384.1	2,388.2	367.0	231.8	135.24	2.714	
9,100.0	6,734.3	9,145.7	6,803.0	71.9	71.1	100.79		383.6	2,488.2	366.8	226.1	140.68	2.607	
9,200.0	6,733.9	9,245.6	6,801.4	74.6	73.8	100.61		383.0	2,588.1	366.6	220.5	146.14	2.509	
9,300.0	6,733.5	9,345.6	6,799.8	77.3	76.5	100.42		382.4	2,688.1	366.4	214.8	151.61	2.417	
9,400.0	6,733.1	9,445.6	6,798.2	80.1	79.3	100.24		381.9	2,788.1	366.2	209.1	157.10	2.331	
9,500.0	6,732.7	9,545.6	6,796.7	82.8	82.0	100.06		381.3	2,888.1	366.0	203.4	162.60	2.251	
9,600.0	6,732.3	9,645.6	6,795.1	85.6	84.8	99.87		380.8	2,988.0	365.8	197.7	168.11	2.176	
9,700.0	6,731.9	9,745.6	6,793.5	88.3	87.5	99.69		380.2	3,088.0	365.7	192.0	173.63	2.106	
9,800.0	6,731.5	9,845.6	6,791.9	91.1	90.3	99.51		379.7	3,188.0	365.5	186.3	179.16	2.040	
9,900.0	6,731.1	9,945.6	6,790.3	93.8	93.1	99.32		379.1	3,288.0	365.3	180.6	184.70	1.978	
10,000.0	6,730.7	10,045.6	6,788.7	96.6	95.8	99.14		378.6	3,388.0	365.1	174.9	190.25	1.919	

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24P-332 - 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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.0	6,730.3	10,145.6	6,787.1	99.3	98.6	98.95	378.0	3,487.9	364.9	169.1	195.81	1.864	
10,200.0	6,729.9	10,245.6	6,785.5	102.1	101.4	98.77	377.5	3,587.9	364.8	163.4	201.37	1.811	
10,300.0	6,729.5	10,345.6	6,783.9	104.9	104.1	98.59	376.9	3,687.9	364.6	157.7	206.95	1.762	
10,400.0	6,729.1	10,445.6	6,782.4	107.6	106.9	98.40	376.4	3,787.9	364.5	151.9	212.53	1.715	
10,500.0	6,728.7	10,545.6	6,780.8	110.4	109.7	98.22	375.8	3,887.9	364.3	146.2	218.11	1.670	
10,600.0	6,728.3	10,645.5	6,779.2	113.2	112.5	98.03	375.3	3,987.8	364.1	140.4	223.70	1.628	
10,700.0	6,727.9	10,745.5	6,777.6	116.0	115.3	97.84	374.7	4,087.8	364.0	134.7	229.30	1.587	
10,800.0	6,727.5	10,845.5	6,776.0	118.7	118.0	97.66	374.2	4,187.8	363.9	129.0	234.90	1.549	
10,900.0	6,727.1	10,945.5	6,774.4	121.5	120.8	97.47	373.6	4,287.8	363.7	123.2	240.51	1.512	
11,000.0	6,726.7	11,045.5	6,772.8	124.3	123.6	97.29	373.1	4,387.8	363.6	117.5	246.12	1.477	Level 3
11,100.0	6,726.3	11,145.5	6,771.2	127.1	126.4	97.10	372.5	4,487.7	363.4	111.7	251.74	1.444	Level 3
11,176.8	6,726.0	11,222.3	6,770.0	129.2	128.5	96.96	372.1	4,564.5	363.3	107.3	256.05	1.419	Level 3, SF

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24Q-112 - 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)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.98	0.0	61.3	61.3					
100.0	100.0	100.0	100.0	0.1	0.1	89.98	0.0	61.3	61.3	61.1	0.22	272.703		
200.0	200.0	200.0	200.0	0.3	0.3	89.98	0.0	61.3	61.3	60.6	0.67	90.901 CC		
300.0	300.0	300.0	300.0	0.6	0.6	101.89	0.0	61.3	61.6	60.5	1.12	54.848 ES		
400.0	399.8	399.8	399.8	0.8	0.8	106.53	0.0	61.3	62.9	61.3	1.58	39.833		
500.0	499.5	499.5	499.5	1.0	1.0	113.73	0.0	61.3	65.9	63.9	2.05	32.131		
600.0	598.7	598.7	598.7	1.3	1.2	122.53	0.0	61.3	71.7	69.2	2.54	28.203		
700.0	697.5	697.5	697.5	1.6	1.5	131.53	0.0	61.3	81.0	78.0	3.04	26.634		
800.0	796.3	796.3	796.3	2.0	1.7	138.81	0.0	61.3	92.2	88.7	3.53	26.151		
900.0	895.1	895.1	895.1	2.3	1.9	144.46	0.0	61.3	104.6	100.6	4.00	26.140		
1,000.0	993.8	993.8	993.8	2.7	2.1	148.89	0.0	61.3	117.8	113.3	4.47	26.347		
1,100.0	1,092.6	1,092.6	1,092.6	3.0	2.3	152.41	0.0	61.3	131.5	126.6	4.94	26.648		
1,200.0	1,191.3	1,191.3	1,191.3	3.4	2.6	155.27	0.0	61.3	145.6	140.2	5.40	26.979		
1,300.0	1,290.1	1,290.1	1,290.1	3.8	2.8	157.61	0.0	61.3	160.1	154.2	5.86	27.312		
1,400.0	1,388.9	1,388.9	1,388.9	4.1	3.0	159.57	0.0	61.3	174.7	168.4	6.32	27.631		
1,500.0	1,487.6	1,487.6	1,487.6	4.5	3.2	161.23	0.0	61.3	189.5	182.7	6.78	27.931		
1,600.0	1,586.4	1,591.1	1,591.1	4.8	3.5	162.98	0.5	59.9	203.4	196.2	7.24	28.083		
1,700.0	1,685.1	1,695.7	1,695.5	5.2	3.7	165.22	2.3	55.0	215.0	207.3	7.69	27.951		
1,800.0	1,783.9	1,800.3	1,799.8	5.6	3.9	167.93	5.4	46.5	224.3	216.2	8.14	27.553		
1,900.0	1,882.7	1,900.3	1,899.1	5.9	4.1	170.76	9.2	36.1	232.5	223.9	8.59	27.056		
2,000.0	1,981.4	1,999.3	1,997.6	6.3	4.4	173.38	12.9	25.8	241.2	232.2	9.06	26.624		
2,100.0	2,080.2	2,098.4	2,096.0	6.7	4.6	175.81	16.7	15.5	250.4	240.9	9.54	26.246		
2,200.0	2,178.9	2,197.4	2,194.4	7.0	4.9	178.07	20.4	5.1	260.0	250.0	10.03	25.913		
2,300.0	2,277.7	2,296.4	2,292.8	7.4	5.2	-179.83	24.2	-5.2	270.0	259.4	10.54	25.617		
2,400.0	2,376.5	2,395.5	2,391.2	7.7	5.4	-177.89	28.0	-15.5	280.3	269.2	11.05	25.353		
2,500.0	2,475.2	2,494.5	2,489.6	8.1	5.7	-176.08	31.7	-25.9	290.9	279.3	11.58	25.116		
2,600.0	2,574.0	2,593.5	2,588.1	8.5	6.0	-174.40	35.5	-36.2	301.7	289.6	12.12	24.902		
2,700.0	2,672.7	2,692.5	2,686.5	8.8	6.2	-172.84	39.2	-46.5	312.8	300.2	12.66	24.710		
2,800.0	2,771.5	2,791.6	2,784.9	9.2	6.5	-171.38	43.0	-56.9	324.2	311.0	13.21	24.536		
2,900.0	2,870.3	2,890.6	2,883.3	9.6	6.8	-170.03	46.7	-67.2	335.7	321.9	13.77	24.378		
3,000.0	2,969.0	2,989.6	2,981.7	9.9	7.1	-168.76	50.5	-77.5	347.4	333.0	14.33	24.235		
3,100.0	3,067.8	3,088.7	3,080.1	10.3	7.4	-167.58	54.3	-87.9	359.2	344.3	14.90	24.105		
3,200.0	3,166.5	3,187.7	3,178.6	10.7	7.6	-166.47	58.0	-98.2	371.2	355.7	15.48	23.987		
3,300.0	3,265.3	3,286.7	3,277.0	11.0	7.9	-165.43	61.8	-108.5	383.3	367.3	16.05	23.879		
3,400.0	3,364.1	3,382.5	3,372.3	11.4	8.1	-164.69	64.9	-117.2	396.0	379.4	16.55	23.925		
3,500.0	3,462.8	3,478.1	3,467.7	11.8	8.3	-164.43	67.0	-122.8	409.5	392.5	17.01	24.074		
3,600.0	3,561.6	3,573.4	3,563.0	12.1	8.5	-164.61	67.9	-125.5	423.9	406.4	17.44	24.310		
3,700.0	3,660.3	3,670.8	3,660.3	12.5	8.7	-165.11	68.0	-125.7	439.0	421.1	17.85	24.592		
3,800.0	3,759.1	3,769.5	3,759.1	12.9	8.9	-165.62	68.0	-125.7	454.2	435.9	18.28	24.844		
3,900.0	3,857.9	3,868.3	3,857.9	13.2	9.1	-166.09	68.0	-125.7	469.4	450.7	18.72	25.077		
4,000.0	3,956.6	3,967.0	3,956.6	13.6	9.3	-166.54	68.0	-125.7	484.7	465.5	19.16	25.298		
4,100.0	4,055.4	4,065.8	4,055.4	13.9	9.5	-166.96	68.0	-125.7	500.0	480.4	19.60	25.508		
4,200.0	4,154.1	4,164.6	4,154.1	14.3	9.7	-167.35	68.0	-125.7	515.3	495.2	20.04	25.709		
4,300.0	4,252.9	4,263.3	4,252.9	14.7	9.9	-167.72	68.0	-125.7	530.6	510.1	20.49	25.900		
4,400.0	4,351.7	4,362.1	4,351.7	15.0	10.1	-168.07	68.0	-125.7	546.0	525.0	20.93	26.083		
4,500.0	4,450.4	4,460.8	4,450.4	15.4	10.3	-168.40	68.0	-125.7	561.3	540.0	21.38	26.257		
4,600.0	4,549.2	4,559.6	4,549.2	15.8	10.5	-168.72	68.0	-125.7	576.7	554.9	21.83	26.424		
4,700.0	4,647.9	4,658.4	4,647.9	16.1	10.7	-169.01	68.0	-125.7	592.1	569.9	22.28	26.583		
4,800.0	4,746.7	4,757.1	4,746.7	16.5	10.9	-169.30	68.0	-125.7	607.6	584.8	22.73	26.736		
4,900.0	4,845.5	4,855.9	4,845.5	16.9	11.1	-169.56	68.0	-125.7	623.0	599.8	23.18	26.882		
5,000.0	4,944.2	4,954.7	4,944.2	17.2	11.3	-169.82	68.0	-125.7	638.5	614.8	23.63	27.022		

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24Q-112 - 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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,043.0	5,053.4	5,043.0	17.6	11.5	-170.06	68.0	-125.7	653.9	629.8	24.08	27.156	
5,200.0	5,142.0	5,152.4	5,142.0	17.9	11.7	-170.32	68.0	-125.7	667.9	643.4	24.54	27.220	
5,300.0	5,241.4	5,251.8	5,241.4	18.2	11.9	-170.51	68.0	-125.7	678.5	653.6	24.94	27.206	
5,400.0	5,341.1	5,351.5	5,341.1	18.3	12.2	-170.63	68.0	-125.7	685.7	660.4	25.31	27.089	
5,500.0	5,441.0	5,451.5	5,441.0	18.5	12.4	-170.69	68.0	-125.7	689.5	663.8	25.66	26.874	
5,600.0	5,541.0	5,551.5	5,541.0	18.6	12.6	178.98	68.0	-125.7	690.1	659.5	30.60	22.553	
5,700.0	5,641.0	5,651.5	5,641.0	18.8	12.8	178.98	68.0	-125.7	690.1	659.1	30.96	22.289	
5,800.0	5,741.0	5,751.5	5,741.0	18.9	13.0	178.98	68.0	-125.7	690.1	658.8	31.32	22.031	
5,900.0	5,841.0	5,851.5	5,841.0	19.1	13.2	178.98	68.0	-125.7	690.1	658.4	31.69	21.777	
6,000.0	5,941.0	5,950.0	5,939.5	19.2	13.4	178.71	68.0	-122.5	690.2	658.1	32.04	21.539	
6,100.0	6,041.0	6,045.8	6,034.1	19.3	13.5	87.36	67.9	-107.8	690.6	662.7	27.90	24.753	
6,200.0	6,139.8	6,140.2	6,124.8	19.5	13.7	86.29	67.8	-81.8	691.4	663.2	28.12	24.583	
6,300.0	6,235.9	6,233.2	6,210.4	19.5	13.8	85.28	67.6	-45.5	692.3	663.9	28.36	24.413	
6,400.0	6,327.5	6,325.1	6,289.9	19.6	13.9	84.36	67.4	0.3	693.3	664.6	28.67	24.182	
6,500.0	6,413.2	6,415.8	6,362.5	19.7	14.2	83.53	67.1	54.6	694.3	665.2	29.15	23.821	
6,600.0	6,491.4	6,505.7	6,427.6	19.8	14.6	82.80	66.8	116.5	695.4	665.5	29.90	23.258	
6,700.0	6,560.8	6,594.7	6,484.5	19.9	15.2	82.18	66.4	184.9	696.3	665.3	31.03	22.439	
6,800.0	6,620.3	6,683.2	6,532.8	20.2	16.1	81.69	66.1	259.0	697.1	664.5	32.64	21.355	
6,900.0	6,668.7	6,771.2	6,572.0	20.6	17.2	81.32	65.7	337.8	697.8	663.0	34.77	20.065	
7,000.0	6,705.4	6,858.9	6,601.8	21.4	18.6	81.09	65.2	420.2	698.2	660.8	37.42	18.658	
7,100.0	6,729.6	6,946.5	6,621.9	22.7	20.1	80.99	64.8	505.3	698.3	657.8	40.53	17.230	
7,200.0	6,740.9	7,033.9	6,632.2	24.3	21.8	81.02	64.4	592.2	698.3	654.2	44.02	15.861	
7,290.0	6,743.1	7,116.4	6,633.3	26.1	23.6	80.95	64.0	674.6	698.4	650.9	47.52	14.697	
7,300.0	6,741.6	7,126.5	6,633.2	26.2	23.8	81.07	63.9	684.7	698.1	650.2	47.95	14.559	
7,400.0	6,741.2	7,226.5	6,632.3	28.3	26.0	81.03	63.4	784.7	698.2	645.9	52.31	13.347	
7,500.0	6,740.8	7,326.5	6,631.5	30.5	28.3	80.99	62.9	884.6	698.2	641.4	56.87	12.277	
7,600.0	6,740.4	7,426.5	6,630.6	32.8	30.7	80.96	62.4	984.6	698.3	636.7	61.60	11.336	
7,700.0	6,740.0	7,526.4	6,629.8	35.2	33.2	80.92	61.9	1,084.6	698.3	631.9	66.45	10.509	
7,800.0	6,739.6	7,626.4	6,628.9	37.7	35.7	80.88	61.4	1,184.6	698.4	627.0	71.40	9.781	
7,900.0	6,739.2	7,726.4	6,628.0	40.1	38.3	80.85	60.9	1,284.6	698.4	622.0	76.43	9.138	
8,000.0	6,738.8	7,826.4	6,627.2	42.7	40.9	80.81	60.3	1,384.6	698.4	616.9	81.53	8.567	
8,100.0	6,738.4	7,926.4	6,626.3	45.2	43.5	80.77	59.8	1,484.6	698.5	611.8	86.68	8.058	
8,200.0	6,737.9	8,026.4	6,625.5	47.8	46.1	80.73	59.3	1,584.6	698.5	606.7	91.87	7.603	
8,300.0	6,737.5	8,126.4	6,624.6	50.4	48.8	80.70	58.8	1,684.6	698.6	601.5	97.10	7.194	
8,400.0	6,737.1	8,226.4	6,623.8	53.1	51.5	80.66	58.3	1,784.6	698.6	596.3	102.37	6.825	
8,500.0	6,736.7	8,326.4	6,622.9	55.7	54.2	80.62	57.8	1,884.6	698.7	591.0	107.66	6.490	
8,600.0	6,736.3	8,426.4	6,622.1	58.4	56.9	80.59	57.3	1,984.6	698.7	585.7	112.97	6.185	
8,700.0	6,735.9	8,526.4	6,621.2	61.1	59.6	80.55	56.8	2,084.6	698.8	580.5	118.30	5.907	
8,800.0	6,735.5	8,626.4	6,620.3	63.8	62.3	80.51	56.3	2,184.6	698.8	575.2	123.65	5.652	
8,900.0	6,735.1	8,726.4	6,619.5	66.5	65.0	80.47	55.8	2,284.6	698.9	569.8	129.01	5.417	
9,000.0	6,734.7	8,826.4	6,618.6	69.2	67.8	80.44	55.3	2,384.6	698.9	564.5	134.39	5.201	
9,100.0	6,734.3	8,926.4	6,617.8	71.9	70.5	80.40	54.8	2,484.6	698.9	559.2	139.77	5.001	
9,200.0	6,733.9	9,026.4	6,616.9	74.6	73.2	80.36	54.2	2,584.5	699.0	553.8	145.17	4.815	
9,300.0	6,733.5	9,126.4	6,616.1	77.3	76.0	80.33	53.7	2,684.5	699.0	548.5	150.57	4.643	
9,400.0	6,733.1	9,226.4	6,615.2	80.1	78.7	80.29	53.2	2,784.5	699.1	543.1	155.98	4.482	
9,500.0	6,732.7	9,326.4	6,614.4	82.8	81.5	80.25	52.7	2,884.5	699.1	537.7	161.40	4.332	
9,600.0	6,732.3	9,426.4	6,613.5	85.6	84.3	80.21	52.2	2,984.5	699.2	532.4	166.82	4.191	
9,700.0	6,731.9	9,526.4	6,612.6	88.3	87.0	80.18	51.7	3,084.5	699.2	527.0	172.25	4.059	
9,800.0	6,731.5	9,626.4	6,611.8	91.1	89.8	80.14	51.2	3,184.5	699.3	521.6	177.68	3.936	
9,900.0	6,731.1	9,726.4	6,610.9	93.8	92.6	80.10	50.7	3,284.5	699.3	516.2	183.12	3.819	
10,000.0	6,730.7	9,826.4	6,610.1	96.6	95.3	80.07	50.2	3,384.5	699.4	510.8	188.56	3.709	

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24Q-112 - 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)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.0	6,730.3	9,926.4	6,609.2	99.3	98.1	80.03	49.7	3,484.5	699.4	505.4	194.01	3.605	
10,200.0	6,729.9	10,026.4	6,608.4	102.1	100.9	79.99	49.2	3,584.5	699.5	500.0	199.45	3.507	
10,300.0	6,729.5	10,126.4	6,607.5	104.9	103.7	79.96	48.7	3,684.5	699.5	494.6	204.90	3.414	
10,400.0	6,729.1	10,226.4	6,606.7	107.6	106.4	79.92	48.1	3,784.5	699.6	489.2	210.35	3.326	
10,500.0	6,728.7	10,326.4	6,605.8	110.4	109.2	79.88	47.6	3,884.5	699.6	483.8	215.81	3.242	
10,600.0	6,728.3	10,426.4	6,604.9	113.2	112.0	79.84	47.1	3,984.5	699.7	478.4	221.26	3.162	
10,700.0	6,727.9	10,526.4	6,604.1	116.0	114.8	79.81	46.6	4,084.5	699.7	473.0	226.72	3.086	
10,800.0	6,727.5	10,626.4	6,603.2	118.7	117.6	79.77	46.1	4,184.5	699.8	467.6	232.17	3.014	
10,900.0	6,727.1	10,726.4	6,602.4	121.5	120.4	79.73	45.6	4,284.4	699.8	462.2	237.63	2.945	
11,000.0	6,726.7	10,826.4	6,601.5	124.3	123.1	79.70	45.1	4,384.4	699.9	456.8	243.09	2.879	
11,100.0	6,726.3	10,926.4	6,600.7	127.1	125.9	79.66	44.6	4,484.4	700.0	451.4	248.55	2.816	
11,176.8	6,726.0	11,003.2	6,600.0	129.2	128.1	79.63	44.2	4,561.2	700.0	447.2	252.74	2.770 SF	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24Q-302 - 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)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.99	0.0	91.9	91.9					
100.0	100.0	100.0	100.0	0.1	0.1	89.99	0.0	91.9	91.9	91.7	0.22	409.055		
200.0	200.0	200.0	200.0	0.3	0.3	89.99	0.0	91.9	91.9	91.3	0.67	136.352 CC		
300.0	300.0	300.0	300.0	0.6	0.6	101.37	0.0	91.9	92.3	91.1	1.12	82.117 ES		
400.0	399.8	399.8	399.8	0.8	0.8	104.49	0.0	91.9	93.4	91.9	1.58	59.166		
500.0	499.5	499.5	499.5	1.0	1.0	109.47	0.0	91.9	96.0	93.9	2.05	46.781		
600.0	598.7	598.7	598.7	1.3	1.2	115.89	0.0	91.9	100.7	98.2	2.55	39.538		
700.0	697.5	697.5	697.5	1.6	1.5	123.04	0.0	91.9	108.3	105.3	3.06	35.401		
800.0	796.3	796.3	796.3	2.0	1.7	129.42	0.0	91.9	117.7	114.1	3.56	33.014		
900.0	895.1	895.1	895.1	2.3	1.9	134.81	0.0	91.9	128.3	124.2	4.06	31.610		
1,000.0	893.8	893.8	893.8	2.7	2.1	139.35	0.0	91.9	139.9	135.3	4.54	30.789		
1,100.0	1,092.6	1,092.6	1,092.6	3.0	2.3	143.18	0.0	91.9	152.2	147.2	5.02	30.319		
1,200.0	1,191.3	1,191.3	1,191.3	3.4	2.6	146.44	0.0	91.9	165.1	159.6	5.49	30.065		
1,300.0	1,290.1	1,290.1	1,290.1	3.8	2.8	149.22	0.0	91.9	178.4	172.4	5.96	29.945		
1,400.0	1,388.9	1,388.9	1,388.9	4.1	3.0	151.61	0.0	91.9	192.1	185.7	6.42	29.909 SF		
1,500.0	1,487.6	1,487.6	1,487.6	4.5	3.2	153.68	0.0	91.9	206.1	199.2	6.89	29.926		
1,600.0	1,586.4	1,586.4	1,586.4	4.8	3.5	155.49	0.0	91.9	220.3	212.9	7.35	29.976		
1,700.0	1,685.1	1,685.1	1,685.1	5.2	3.7	157.07	0.0	91.9	234.7	226.9	7.81	30.045		
1,800.0	1,783.9	1,781.6	1,781.6	5.6	3.9	158.70	-0.9	91.2	249.6	241.4	8.24	30.279		
1,900.0	1,882.7	1,876.9	1,876.7	5.9	4.0	160.77	-4.2	88.5	265.9	257.3	8.65	30.751		
2,000.0	1,981.4	1,971.1	1,970.7	6.3	4.2	163.18	-9.9	83.8	283.8	274.8	9.04	31.382		
2,100.0	2,080.2	2,065.9	2,064.9	6.7	4.4	165.82	-17.8	77.2	303.4	294.0	9.45	32.119		
2,200.0	2,178.9	2,162.8	2,161.2	7.0	4.6	168.28	-26.2	70.2	323.9	314.0	9.87	32.830		
2,300.0	2,277.7	2,259.8	2,257.6	7.4	4.8	170.45	-34.7	63.2	344.9	334.6	10.30	33.492		
2,400.0	2,376.5	2,356.8	2,353.9	7.7	5.1	172.37	-43.2	56.1	366.3	355.6	10.74	34.106		
2,500.0	2,475.2	2,453.7	2,450.3	8.1	5.3	174.08	-51.7	49.1	388.1	376.9	11.19	34.675		
2,600.0	2,574.0	2,550.7	2,546.6	8.5	5.5	175.61	-60.2	42.1	410.2	398.5	11.65	35.201		
2,700.0	2,672.7	2,647.7	2,643.0	8.8	5.8	176.98	-68.7	35.0	432.5	420.4	12.12	35.691		
2,800.0	2,771.5	2,744.7	2,739.3	9.2	6.0	178.22	-77.2	28.0	455.0	442.5	12.59	36.146		
2,900.0	2,870.3	2,841.6	2,835.6	9.6	6.3	179.35	-85.7	21.0	477.8	464.7	13.07	36.569		
3,000.0	2,969.0	2,938.6	2,932.0	9.9	6.5	-179.63	-94.2	13.9	500.7	487.1	13.54	36.964		
3,100.0	3,067.8	3,035.6	3,028.3	10.3	6.8	-178.70	-102.6	6.9	523.7	509.7	14.03	37.332		
3,200.0	3,166.5	3,132.6	3,124.7	10.7	7.1	-177.84	-111.1	-0.1	546.8	532.3	14.51	37.677		
3,300.0	3,265.3	3,229.5	3,221.0	11.0	7.4	-177.06	-119.6	-7.1	570.1	555.1	15.00	38.001		
3,400.0	3,364.1	3,326.5	3,317.4	11.4	7.6	-176.33	-128.1	-14.2	593.4	577.9	15.49	38.305		
3,500.0	3,462.8	3,423.5	3,413.7	11.8	7.9	-175.66	-136.6	-21.2	616.9	600.9	15.98	38.590		
3,600.0	3,561.6	3,520.4	3,510.0	12.1	8.2	-175.04	-145.1	-28.2	640.4	623.9	16.48	38.859		
3,700.0	3,660.3	3,617.4	3,606.4	12.5	8.5	-174.47	-153.6	-35.3	663.9	647.0	16.97	39.113		
3,800.0	3,759.1	3,714.4	3,702.7	12.9	8.7	-173.93	-162.1	-42.3	687.6	670.1	17.47	39.352		
3,900.0	3,857.9	3,811.4	3,799.1	13.2	9.0	-173.43	-170.6	-49.3	711.2	693.3	17.97	39.579		
4,000.0	3,956.6	3,908.3	3,895.4	13.6	9.3	-172.96	-179.1	-56.4	735.0	716.5	18.47	39.794		
4,100.0	4,055.4	4,005.3	3,991.8	13.9	9.6	-172.52	-187.5	-63.4	758.8	739.8	18.97	39.998		
4,200.0	4,154.1	4,102.3	4,088.1	14.3	9.9	-172.10	-196.0	-70.4	782.6	763.1	19.47	40.191		
4,300.0	4,252.9	4,199.2	4,184.5	14.7	10.2	-171.72	-204.5	-77.5	806.4	786.4	19.97	40.375		
4,400.0	4,351.7	4,296.2	4,280.8	15.0	10.5	-171.35	-213.0	-84.5	830.3	809.8	20.48	40.550		
4,500.0	4,450.4	4,393.2	4,377.1	15.4	10.8	-171.00	-221.5	-91.5	854.2	833.2	20.98	40.717		
4,600.0	4,549.2	4,490.2	4,473.5	15.8	11.1	-170.67	-230.0	-98.6	878.2	856.7	21.48	40.875		
4,700.0	4,647.9	4,587.1	4,569.8	16.1	11.3	-170.36	-238.5	-105.6	902.1	880.1	21.99	41.027		
4,800.0	4,746.7	4,684.1	4,666.2	16.5	11.6	-170.07	-247.0	-112.6	926.1	903.6	22.49	41.172		
4,900.0	4,845.5	4,811.3	4,792.8	16.9	11.9	-169.80	-256.2	-120.3	948.7	925.7	23.02	41.205		
5,000.0	4,944.2	4,943.4	4,924.7	17.2	12.2	-169.77	-261.2	-124.4	967.9	944.4	23.54	41.121		

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 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 24Q-302 - 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
5,100.0	5,043.0	5,061.7	5,043.0	17.6	12.4	-169.93	-262.0	-125.1	983.9	959.9	24.01	40.976	
5,200.0	5,142.0	5,160.7	5,142.0	17.9	12.6	-170.12	-262.0	-125.1	997.9	973.5	24.48	40.768	

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 @ 4650.0ft (RKB - 15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

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



Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-232
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4650.0ft (RKB - 15')
Reference Site:	Maxey 24Q-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4650.0ft (RKB - 15')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Maxey 24P-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 @ 4650.0ft (RKB - 15')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

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

