

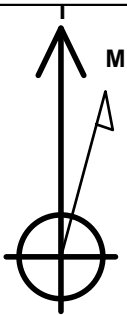
PETROLEUM DEVELOPMENT CORP Weld County CO

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 Point
SHL 340'FSL, 2483'FEL, SEC.24	1.0	0.0	0.0	Point
BHL 1098'FSL, 1800'FEL, SEC.19	6726.0	725.7	5886.9	Point

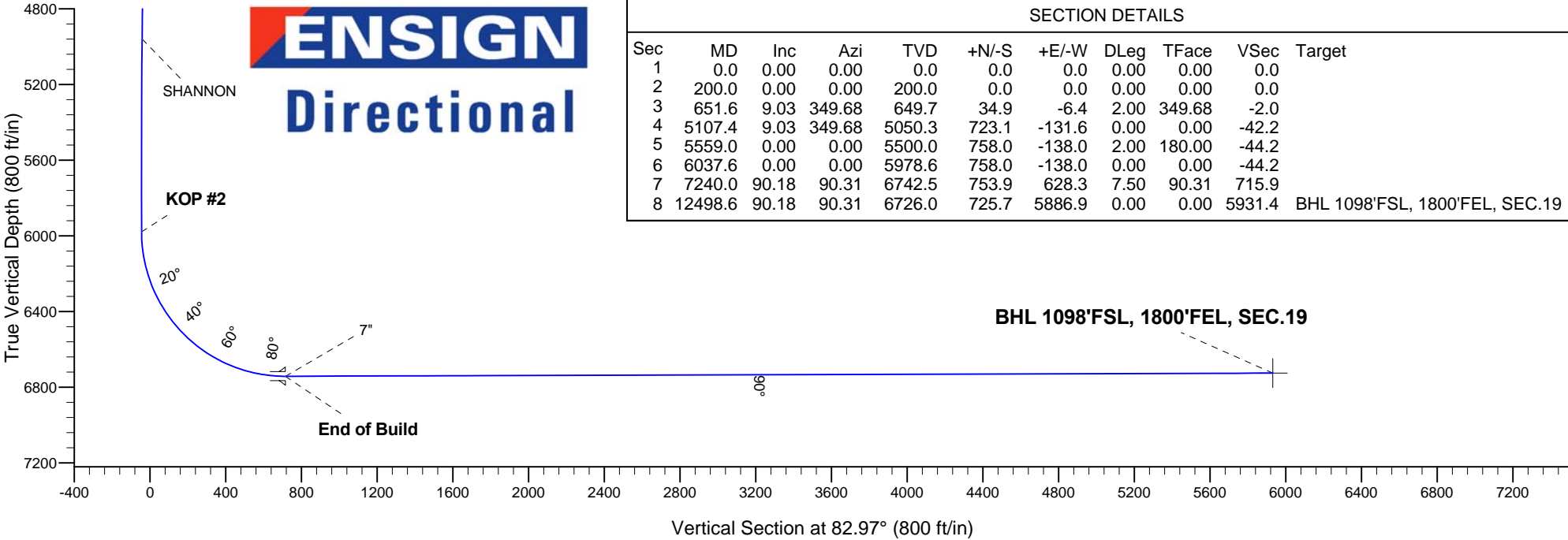
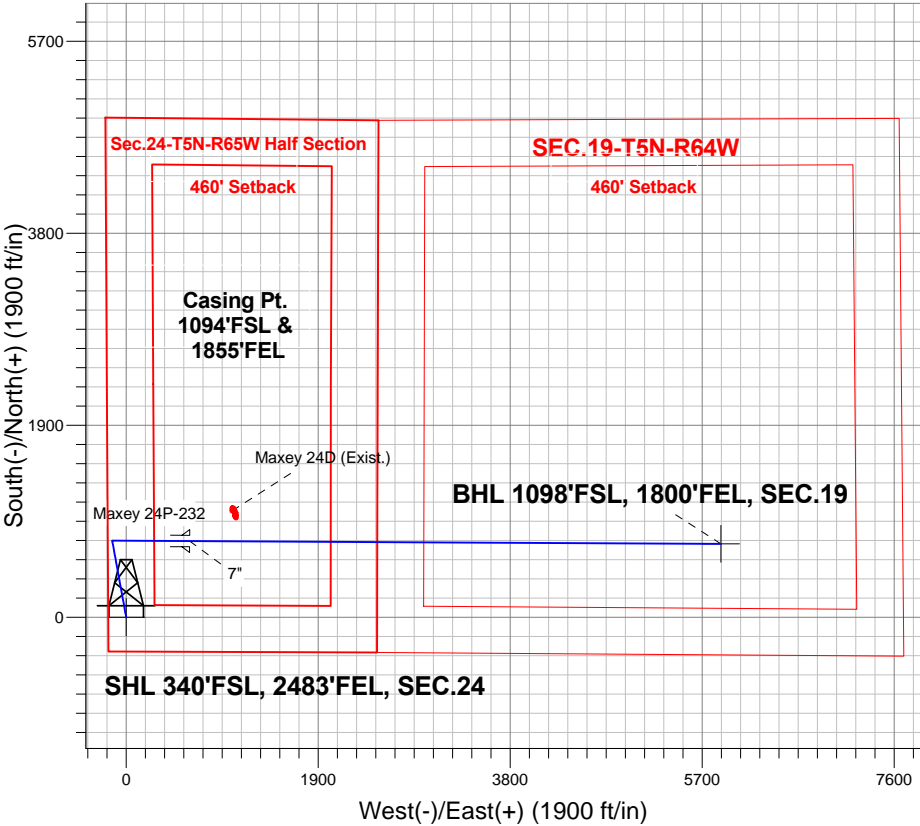


Azimuths to True North
Magnetic North: 8.43°
Magnetic Field
Strength: 52863.1nT
Dip Angle: 66.97°
Date: 1/22/2014
Model: IGRF2010

ANNOTATIONS

TVD	MD	Annotation
200.0	200.0	KOP #1
5978.6	6037.6	KOP #2
6742.5	7240.0	End of Build

Maxey 24Q-HZ Pad Sec.24-T5N-R65W
Maxey 24P-232
Plan #3 (1-22-14)
10:37, January 23 2014





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 #3 (1-22-14)

Standard Planning Report

23 January, 2014

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	
6,037.6	0.00	0.00	5,978.6	758.0	-138.0	0.00	0.00	0.00	0.00	
7,240.0	90.18	90.31	6,742.5	753.9	628.3	7.50	7.50	0.00	90.31	
12,498.6	90.18	90.31	6,726.0	725.7	5,886.9	0.00	0.00	0.00	0.00	BHL 1098'FSL, 180

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 #3 (1-22-14)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 340°FSL, 2483°FEL, SEC.24									
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	-0.1	2.00	2.00	0.00
400.0	4.00	349.68	399.8	6.9	-1.2	-0.4	2.00	2.00	0.00
500.0	6.00	349.68	499.5	15.4	-2.8	-0.9	2.00	2.00	0.00
600.0	8.00	349.68	598.7	27.4	-5.0	-1.6	2.00	2.00	0.00
651.6	9.03	349.68	649.7	34.9	-6.4	-2.0	2.00	2.00	0.00
700.0	9.03	349.68	697.5	42.4	-7.7	-2.5	0.00	0.00	0.00
800.0	9.03	349.68	796.3	57.9	-10.5	-3.4	0.00	0.00	0.00
900.0	9.03	349.68	895.1	73.3	-13.3	-4.3	0.00	0.00	0.00
1,000.0	9.03	349.68	993.8	88.8	-16.2	-5.2	0.00	0.00	0.00
1,100.0	9.03	349.68	1,092.6	104.2	-19.0	-6.1	0.00	0.00	0.00
1,200.0	9.03	349.68	1,191.3	119.6	-21.8	-7.0	0.00	0.00	0.00
1,300.0	9.03	349.68	1,290.1	135.1	-24.6	-7.9	0.00	0.00	0.00
1,400.0	9.03	349.68	1,388.9	150.5	-27.4	-8.8	0.00	0.00	0.00
1,500.0	9.03	349.68	1,487.6	166.0	-30.2	-9.7	0.00	0.00	0.00
1,600.0	9.03	349.68	1,586.4	181.4	-33.0	-10.6	0.00	0.00	0.00
1,700.0	9.03	349.68	1,685.1	196.9	-35.8	-11.5	0.00	0.00	0.00
1,800.0	9.03	349.68	1,783.9	212.3	-38.6	-12.4	0.00	0.00	0.00
1,900.0	9.03	349.68	1,882.7	227.7	-41.5	-13.3	0.00	0.00	0.00
2,000.0	9.03	349.68	1,981.4	243.2	-44.3	-14.2	0.00	0.00	0.00
2,100.0	9.03	349.68	2,080.2	258.6	-47.1	-15.1	0.00	0.00	0.00
2,200.0	9.03	349.68	2,178.9	274.1	-49.9	-16.0	0.00	0.00	0.00
2,300.0	9.03	349.68	2,277.7	289.5	-52.7	-16.9	0.00	0.00	0.00
2,400.0	9.03	349.68	2,376.5	305.0	-55.5	-17.8	0.00	0.00	0.00
2,500.0	9.03	349.68	2,475.2	320.4	-58.3	-18.7	0.00	0.00	0.00
2,600.0	9.03	349.68	2,574.0	335.8	-61.1	-19.6	0.00	0.00	0.00
2,700.0	9.03	349.68	2,672.7	351.3	-64.0	-20.5	0.00	0.00	0.00
2,800.0	9.03	349.68	2,771.5	366.7	-66.8	-21.4	0.00	0.00	0.00
2,900.0	9.03	349.68	2,870.3	382.2	-69.6	-22.3	0.00	0.00	0.00
3,000.0	9.03	349.68	2,969.0	397.6	-72.4	-23.2	0.00	0.00	0.00
3,100.0	9.03	349.68	3,067.8	413.1	-75.2	-24.1	0.00	0.00	0.00
3,200.0	9.03	349.68	3,166.5	428.5	-78.0	-25.0	0.00	0.00	0.00
3,300.0	9.03	349.68	3,265.3	443.9	-80.8	-25.9	0.00	0.00	0.00
3,400.0	9.03	349.68	3,364.1	459.4	-83.6	-26.8	0.00	0.00	0.00
3,500.0	9.03	349.68	3,462.8	474.8	-86.4	-27.7	0.00	0.00	0.00
3,557.9	9.03	349.68	3,520.0	483.8	-88.1	-28.2	0.00	0.00	0.00
PARKMAN									
3,600.0	9.03	349.68	3,561.6	490.3	-89.3	-28.6	0.00	0.00	0.00
3,700.0	9.03	349.68	3,660.3	505.7	-92.1	-29.5	0.00	0.00	0.00
3,800.0	9.03	349.68	3,759.1	521.2	-94.9	-30.4	0.00	0.00	0.00
3,900.0	9.03	349.68	3,857.9	536.6	-97.7	-31.3	0.00	0.00	0.00
4,000.0	9.03	349.68	3,956.6	552.0	-100.5	-32.2	0.00	0.00	0.00
4,100.0	9.03	349.68	4,055.4	567.5	-103.3	-33.1	0.00	0.00	0.00
4,200.0	9.03	349.68	4,154.1	582.9	-106.1	-34.0	0.00	0.00	0.00
4,297.1	9.03	349.68	4,250.0	597.9	-108.9	-34.9	0.00	0.00	0.00
SUSSEX									
4,300.0	9.03	349.68	4,252.9	598.4	-108.9	-34.9	0.00	0.00	0.00
4,400.0	9.03	349.68	4,351.7	613.8	-111.7	-35.8	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 #3 (1-22-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.0	9.03	349.68	4,450.4	629.3	-114.6	-36.7	0.00	0.00	0.00
4,600.0	9.03	349.68	4,549.2	644.7	-117.4	-37.6	0.00	0.00	0.00
4,700.0	9.03	349.68	4,647.9	660.1	-120.2	-38.5	0.00	0.00	0.00
4,800.0	9.03	349.68	4,746.7	675.6	-123.0	-39.4	0.00	0.00	0.00
4,900.0	9.03	349.68	4,845.5	691.0	-125.8	-40.3	0.00	0.00	0.00
5,000.0	9.03	349.68	4,944.2	706.5	-128.6	-41.2	0.00	0.00	0.00
5,016.0	9.03	349.68	4,960.0	708.9	-129.1	-41.4	0.00	0.00	0.00
SHANNON									
5,100.0	9.03	349.68	5,043.0	721.9	-131.4	-42.1	0.00	0.00	0.00
5,107.4	9.03	349.68	5,050.3	723.1	-131.6	-42.2	0.00	0.00	0.00
5,200.0	7.18	349.68	5,142.0	735.9	-134.0	-42.9	2.00	-2.00	0.00
5,300.0	5.18	349.68	5,241.4	746.5	-135.9	-43.5	2.00	-2.00	0.00
5,400.0	3.18	349.68	5,341.1	753.7	-137.2	-44.0	2.00	-2.00	0.00
5,500.0	1.18	349.68	5,441.0	757.4	-137.9	-44.2	2.00	-2.00	0.00
5,559.0	0.00	0.00	5,500.0	758.0	-138.0	-44.2	2.00	-2.00	0.00
5,600.0	0.00	0.00	5,541.0	758.0	-138.0	-44.2	0.00	0.00	0.00
5,700.0	0.00	0.00	5,641.0	758.0	-138.0	-44.2	0.00	0.00	0.00
5,800.0	0.00	0.00	5,741.0	758.0	-138.0	-44.2	0.00	0.00	0.00
5,900.0	0.00	0.00	5,841.0	758.0	-138.0	-44.2	0.00	0.00	0.00
6,000.0	0.00	0.00	5,941.0	758.0	-138.0	-44.2	0.00	0.00	0.00
6,037.6	0.00	0.00	5,978.6	758.0	-138.0	-44.2	0.00	0.00	0.00
KOP #2									
6,100.0	4.68	90.31	6,041.0	758.0	-135.4	-41.7	7.51	7.51	0.00
6,200.0	12.18	90.31	6,139.8	757.9	-120.8	-27.2	7.50	7.50	0.00
6,300.0	19.68	90.31	6,235.9	757.8	-93.4	0.1	7.50	7.50	0.00
6,400.0	27.18	90.31	6,327.6	757.5	-53.6	39.5	7.50	7.50	0.00
6,500.0	34.68	90.31	6,413.3	757.3	-2.3	90.4	7.50	7.50	0.00
6,545.6	38.10	90.31	6,450.0	757.1	24.8	117.2	7.50	7.50	0.00
SHARON SPRINGS									
6,600.0	42.18	90.31	6,491.6	756.9	59.9	152.0	7.50	7.50	0.00
6,700.0	49.68	90.31	6,561.1	756.6	131.7	223.2	7.50	7.50	0.00
6,800.0	57.18	90.31	6,620.6	756.1	211.9	302.8	7.50	7.50	0.00
6,900.0	64.68	90.31	6,669.2	755.7	299.3	389.5	7.50	7.50	0.00
7,000.0	72.18	90.31	6,705.9	755.2	392.2	481.6	7.50	7.50	0.00
7,100.0	79.68	90.31	6,730.2	754.6	489.1	577.8	7.50	7.50	0.00
7,200.0	87.18	90.31	6,741.6	754.1	588.4	676.2	7.50	7.50	0.00
7,240.0	90.18	90.31	6,742.5	753.9	628.4	715.9	7.49	7.49	0.00
End of Build - 7"									
7,300.0	90.18	90.31	6,742.3	753.6	688.4	775.4	0.00	0.00	0.00
7,400.0	90.18	90.31	6,742.0	753.0	788.4	874.6	0.00	0.00	0.00
7,500.0	90.18	90.31	6,741.7	752.5	888.4	973.8	0.00	0.00	0.00
7,600.0	90.18	90.31	6,741.4	752.0	988.4	1,073.0	0.00	0.00	0.00
7,700.0	90.18	90.31	6,741.1	751.4	1,088.4	1,172.1	0.00	0.00	0.00
7,800.0	90.18	90.31	6,740.8	750.9	1,188.4	1,271.3	0.00	0.00	0.00
7,900.0	90.18	90.31	6,740.4	750.4	1,288.4	1,370.5	0.00	0.00	0.00
8,000.0	90.18	90.31	6,740.1	749.8	1,388.4	1,469.7	0.00	0.00	0.00
8,100.0	90.18	90.31	6,739.8	749.3	1,488.4	1,568.9	0.00	0.00	0.00
8,200.0	90.18	90.31	6,739.5	748.8	1,588.4	1,668.0	0.00	0.00	0.00
8,300.0	90.18	90.31	6,739.2	748.2	1,688.4	1,767.2	0.00	0.00	0.00
8,400.0	90.18	90.31	6,738.9	747.7	1,788.4	1,866.4	0.00	0.00	0.00
8,500.0	90.18	90.31	6,738.6	747.1	1,888.4	1,965.6	0.00	0.00	0.00
8,600.0	90.18	90.31	6,738.2	746.6	1,988.4	2,064.8	0.00	0.00	0.00

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,700.0	90.18	90.31	6,737.9	746.1	2,088.4	2,163.9	0.00	0.00	0.00	
8,800.0	90.18	90.31	6,737.6	745.5	2,188.4	2,263.1	0.00	0.00	0.00	
8,900.0	90.18	90.31	6,737.3	745.0	2,288.3	2,362.3	0.00	0.00	0.00	
9,000.0	90.18	90.31	6,737.0	744.5	2,388.3	2,461.5	0.00	0.00	0.00	
9,100.0	90.18	90.31	6,736.7	743.9	2,488.3	2,560.7	0.00	0.00	0.00	
9,200.0	90.18	90.31	6,736.4	743.4	2,588.3	2,659.9	0.00	0.00	0.00	
9,300.0	90.18	90.31	6,736.0	742.9	2,688.3	2,759.0	0.00	0.00	0.00	
9,400.0	90.18	90.31	6,735.7	742.3	2,788.3	2,858.2	0.00	0.00	0.00	
9,500.0	90.18	90.31	6,735.4	741.8	2,888.3	2,957.4	0.00	0.00	0.00	
9,600.0	90.18	90.31	6,735.1	741.3	2,988.3	3,056.6	0.00	0.00	0.00	
9,700.0	90.18	90.31	6,734.8	740.7	3,088.3	3,155.8	0.00	0.00	0.00	
9,800.0	90.18	90.31	6,734.5	740.2	3,188.3	3,254.9	0.00	0.00	0.00	
9,900.0	90.18	90.31	6,734.2	739.6	3,288.3	3,354.1	0.00	0.00	0.00	
10,000.0	90.18	90.31	6,733.8	739.1	3,388.3	3,453.3	0.00	0.00	0.00	
10,100.0	90.18	90.31	6,733.5	738.6	3,488.3	3,552.5	0.00	0.00	0.00	
10,200.0	90.18	90.31	6,733.2	738.0	3,588.3	3,651.7	0.00	0.00	0.00	
10,300.0	90.18	90.31	6,732.9	737.5	3,688.3	3,750.8	0.00	0.00	0.00	
10,400.0	90.18	90.31	6,732.6	737.0	3,788.3	3,850.0	0.00	0.00	0.00	
10,500.0	90.18	90.31	6,732.3	736.4	3,888.3	3,949.2	0.00	0.00	0.00	
10,600.0	90.18	90.31	6,732.0	735.9	3,988.3	4,048.4	0.00	0.00	0.00	
10,700.0	90.18	90.31	6,731.7	735.4	4,088.3	4,147.6	0.00	0.00	0.00	
10,800.0	90.18	90.31	6,731.3	734.8	4,188.3	4,246.8	0.00	0.00	0.00	
10,900.0	90.18	90.31	6,731.0	734.3	4,288.3	4,345.9	0.00	0.00	0.00	
11,000.0	90.18	90.31	6,730.7	733.8	4,388.3	4,445.1	0.00	0.00	0.00	
11,100.0	90.18	90.31	6,730.4	733.2	4,488.3	4,544.3	0.00	0.00	0.00	
11,200.0	90.18	90.31	6,730.1	732.7	4,588.3	4,643.5	0.00	0.00	0.00	
11,300.0	90.18	90.31	6,729.8	732.1	4,688.3	4,742.7	0.00	0.00	0.00	
11,400.0	90.18	90.31	6,729.5	731.6	4,788.3	4,841.8	0.00	0.00	0.00	
11,500.0	90.18	90.31	6,729.1	731.1	4,888.3	4,941.0	0.00	0.00	0.00	
11,600.0	90.18	90.31	6,728.8	730.5	4,988.3	5,040.2	0.00	0.00	0.00	
11,700.0	90.18	90.31	6,728.5	730.0	5,088.3	5,139.4	0.00	0.00	0.00	
11,800.0	90.18	90.31	6,728.2	729.5	5,188.3	5,238.6	0.00	0.00	0.00	
11,900.0	90.18	90.31	6,727.9	728.9	5,288.3	5,337.7	0.00	0.00	0.00	
12,000.0	90.18	90.31	6,727.6	728.4	5,388.3	5,436.9	0.00	0.00	0.00	
12,100.0	90.18	90.31	6,727.3	727.9	5,488.3	5,536.1	0.00	0.00	0.00	
12,200.0	90.18	90.31	6,726.9	727.3	5,588.3	5,635.3	0.00	0.00	0.00	
12,300.0	90.18	90.31	6,726.6	726.8	5,688.3	5,734.5	0.00	0.00	0.00	
12,400.0	90.18	90.31	6,726.3	726.3	5,788.3	5,833.7	0.00	0.00	0.00	
12,498.6	90.18	90.31	6,726.0	725.7	5,886.9	5,931.4	0.00	0.00	0.00	
BHL 1098'FSL, 1800'FEL, SEC.19										

COMPASS 2003.21 Build 46

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 #3 (1-22-14)		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,557.9	3,520.0	PARKMAN				
4,297.1	4,250.0	SUSSEX				
5,016.0	4,960.0	SHANNON				
6,545.6	6,450.0	SHARON SPRINGS				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP #1	
6,037.6	5,978.6	758.0	-138.0	KOP #2	
7,240.0	6,742.5	753.9	628.4	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 #3 (1-22-14)

Anticollision Report

23 January, 2014

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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #3 (1-22-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	1/23/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,498.6	Plan #3 (1-22-14) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	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)	6,117.9	6,138.0	331.4	302.1	11.317	CC
Maxey 24P-402 - Wellbore #1 - Plan #2 (8-9-13)	11,200.0	11,349.1	377.9	148.0	1.644	ES, SF
Maxey 24Q-HZ Pad Sec.24-T5N-R65W						
Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1	7,660.5	6,746.9	306.7	259.3	6.472	CC, ES
Maxey 24D (Exist.) - Wellbore #1 - Wellbore #1	7,700.0	6,746.7	309.2	260.8	6.395	SF
Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)	200.0	200.0	30.6	30.0	45.451	CC
Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)	300.0	300.0	31.0	29.9	27.592	ES
Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)	12,498.6	12,544.0	363.3	34.4	1.105	Level 2, SF
Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)	200.0	200.0	61.3	60.6	90.901	CC
Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)	300.0	300.0	61.6	60.5	54.848	ES
Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)	12,498.6	12,324.5	703.5	378.0	2.161	SF
Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)	200.0	200.0	91.9	91.3	136.352	CC
Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)	300.0	300.0	92.3	91.1	82.117	ES
Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)	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)											
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)
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
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
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
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
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
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
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
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
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
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
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
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 #3 (1-22-14)	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		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
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	11.893	
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	10.947	
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	29.04	10.099	
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	29.50	9.250	
6,100.0	6,041.0	6,120.1	6,043.0	19.3	22.0	-89.71	1,089.4	-132.0	331.4	302.2	29.93	8.401	
6,117.9	6,058.8	6,138.0	6,060.8	19.4	22.0	-90.00	1,089.4	-132.0	331.4	302.1	29.93	11.317 CC	
6,200.0	6,139.8	6,219.1	6,141.9	19.5	22.1	-92.19	1,089.4	-132.0	331.7	302.1	29.93	11.227	
6,300.0	6,235.9	6,320.0	6,242.5	19.5	22.2	-95.65	1,089.4	-124.8	333.1	303.2	29.93	11.130	
6,400.0	6,327.6	6,423.9	6,344.1	19.6	22.3	-99.02	1,089.2	-103.6	335.7	305.4	30.34	11.065	
6,500.0	6,413.3	6,530.9	6,444.7	19.7	22.4	-102.24	1,089.0	-67.5	339.4	308.7	30.75	11.038	
6,600.0	6,491.6	6,641.1	6,542.1	19.8	22.5	-105.22	1,088.8	-16.1	343.9	312.7	31.17	11.032	
6,700.0	6,561.1	6,754.5	6,633.5	19.9	22.6	-107.91	1,088.4	50.9	348.7	317.1	31.69	11.004	
6,800.0	6,620.6	6,811.1	6,716.1	20.2	22.9	-110.25	1,088.0	133.1	353.7	321.2	32.50	10.882	
6,900.0	6,669.2	6,990.7	6,786.8	20.6	23.2	-112.19	1,087.5	229.3	358.3	324.5	33.82	10.594	
7,000.0	6,705.9	7,112.8	6,842.6	21.4	23.8	-113.69	1,086.9	337.8	362.1	326.3	35.87	10.097	
7,100.0	6,730.2	7,236.8	6,880.9	22.7	24.7	-114.73	1,086.3	455.6	365.0	326.2	38.74	9.421	
7,200.0	6,741.6	7,356.6	6,899.6	24.3	26.1	-115.29	1,085.6	573.8	366.7	324.4	42.29	8.670	
7,300.0	6,742.3	7,464.1	6,909.5	26.2	27.8	-116.49	1,085.0	680.8	370.4	324.6	45.80	8.087	
7,400.0	6,742.0	7,573.4	6,911.3	28.3	29.8	-116.79	1,084.5	790.1	371.3	321.5	49.81	7.453	
7,500.0	6,741.7	7,673.4	6,911.4	30.5	31.9	-116.83	1,083.9	890.1	371.4	317.5	53.92	6.889	
7,600.0	6,741.4	7,773.4	6,911.4	32.8	34.0	-116.88	1,083.4	990.1	371.6	313.4	58.16	6.388	
7,700.0	6,741.1	7,873.4	6,911.4	35.2	36.3	-116.92	1,082.9	1,090.1	371.7	309.2	62.52	5.945	
7,800.0	6,740.8	7,973.4	6,911.4	37.6	38.7	-116.97	1,082.3	1,190.1	371.9	304.9	66.98	5.552	
7,900.0	6,740.4	8,073.4	6,911.4	40.1	41.1	-117.01	1,081.8	1,290.1	372.0	300.5	71.50	5.203	
8,000.0	6,740.1	8,173.4	6,911.4	42.7	43.6	-117.06	1,081.3	1,390.1	372.2	296.1	76.08	4.892	
8,100.0	6,739.8	8,273.4	6,911.5	45.2	46.1	-117.11	1,080.7	1,490.1	372.3	291.6	80.72	4.613	
8,200.0	6,739.5	8,373.4	6,911.5	47.8	48.6	-117.15	1,080.2	1,590.1	372.5	287.1	85.39	4.362	
8,300.0	6,739.2	8,473.4	6,911.5	50.4	51.2	-117.20	1,079.7	1,690.1	372.6	282.5	90.09	4.136	
8,400.0	6,738.9	8,573.4	6,911.5	53.1	53.8	-117.24	1,079.1	1,790.1	372.8	278.0	94.82	3.931	
8,500.0	6,738.6	8,673.4	6,911.5	55.7	56.4	-117.29	1,078.6	1,890.1	372.9	273.4	99.58	3.745	
8,600.0	6,738.2	8,773.4	6,911.6	58.4	59.1	-117.33	1,078.0	1,990.1	373.1	268.7	104.35	3.575	
8,700.0	6,737.9	8,873.4	6,911.6	61.1	61.7	-117.38	1,077.5	2,090.1	373.2	264.1	109.15	3.420	
8,800.0	6,737.6	8,973.4	6,911.6	63.8	64.4	-117.42	1,077.0	2,190.1	373.4	259.4	113.95	3.277	
8,900.0	6,737.3	9,073.4	6,911.6	66.5	67.1	-117.47	1,076.4	2,290.1	373.6	254.8	118.77	3.145	
9,000.0	6,737.0	9,173.4	6,911.6	69.2	69.8	-117.51	1,075.9	2,390.1	373.7	250.1	123.59	3.024	
9,100.0	6,736.7	9,273.4	6,911.6	71.9	72.5	-117.56	1,075.4	2,490.1	373.9	245.4	128.43	2.911	
9,200.0	6,736.4	9,373.4	6,911.7	74.6	75.2	-117.60	1,074.8	2,590.1	374.0	240.7	133.27	2.807	
9,300.0	6,736.0	9,473.4	6,911.7	77.3	77.9	-117.65	1,074.3	2,690.1	374.2	236.1	138.11	2.709	
9,400.0	6,735.7	9,573.4	6,911.7	80.1	80.6	-117.69	1,073.8	2,790.1	374.3	231.4	142.97	2.618	
9,500.0	6,735.4	9,673.4	6,911.7	82.8	83.4	-117.74	1,073.2	2,890.1	374.5	226.7	147.82	2.533	
9,600.0	6,735.1	9,773.4	6,911.7	85.6	86.1	-117.78	1,072.7	2,990.1	374.6	222.0	152.68	2.454	

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 #3 (1-22-14)	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 (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	
9,700.0	6,734.8	9,873.4	6,911.7	88.3	88.9	-117.83	1,072.2	3,090.1	374.8	217.3	157.54	2.379		
9,800.0	6,734.5	9,973.4	6,911.8	91.1	91.6	-117.87	1,071.6	3,190.1	374.9	212.5	162.40	2.309		
9,900.0	6,734.2	10,073.4	6,911.8	93.8	94.3	-117.92	1,071.1	3,290.1	375.1	207.8	167.27	2.243		
10,000.0	6,733.8	10,173.4	6,911.8	96.6	97.1	-117.96	1,070.6	3,390.1	375.3	203.1	172.13	2.180		
10,100.0	6,733.5	10,273.4	6,911.8	99.3	99.9	-118.01	1,070.0	3,490.1	375.4	198.4	177.00	2.121		
10,200.0	6,733.2	10,373.4	6,911.8	102.1	102.6	-118.05	1,069.5	3,590.1	375.6	193.7	181.86	2.065		
10,300.0	6,732.9	10,473.4	6,911.8	104.9	105.4	-118.09	1,069.0	3,690.1	375.7	189.0	186.73	2.012		
10,400.0	6,732.6	10,573.4	6,911.9	107.6	108.1	-118.14	1,068.4	3,790.1	375.9	184.3	191.60	1.962		
10,500.0	6,732.3	10,673.4	6,911.9	110.4	110.9	-118.18	1,067.9	3,890.1	376.0	179.6	196.46	1.914		
10,600.0	6,732.0	10,773.4	6,911.9	113.2	113.7	-118.23	1,067.4	3,990.1	376.2	174.9	201.32	1.869		
10,700.0	6,731.7	10,873.4	6,911.9	116.0	116.4	-118.27	1,066.8	4,090.1	376.4	170.2	206.19	1.825		
10,800.0	6,731.3	10,973.4	6,911.9	118.7	119.2	-118.32	1,066.3	4,190.1	376.5	165.5	211.05	1.784		
10,900.0	6,731.0	11,073.4	6,912.0	121.5	122.0	-118.36	1,065.7	4,290.1	376.7	160.8	215.91	1.745		
11,000.0	6,730.7	11,173.4	6,912.0	124.3	124.8	-118.41	1,065.2	4,390.0	376.8	156.1	220.77	1.707		
11,100.0	6,730.4	11,273.4	6,912.0	127.1	127.5	-118.45	1,064.7	4,490.0	377.0	151.4	225.62	1.671		
11,148.4	6,730.2	11,321.8	6,912.0	128.4	128.9	-118.47	1,064.4	4,538.4	377.1	149.1	227.97	1.654		
11,200.0	6,730.1	11,349.1	6,912.0	129.9	129.6	-118.48	1,064.3	4,565.7	377.9	148.0	229.90	1.644 ES, SF		
11,300.0	6,729.8	11,349.1	6,912.0	132.6	129.6	-118.48	1,064.3	4,565.7	397.3	164.9	232.37	1.710		
11,400.0	6,729.5	11,349.1	6,912.0	135.4	129.6	-118.48	1,064.3	4,565.7	439.1	204.3	234.85	1.870		
11,500.0	6,729.1	11,349.1	6,912.0	138.2	129.6	-118.48	1,064.3	4,565.7	497.8	260.5	237.32	2.098		
11,600.0	6,728.8	11,349.1	6,912.0	141.0	129.6	-118.48	1,064.3	4,565.7	568.1	328.4	239.80	2.369		
11,700.0	6,728.5	11,349.1	6,912.0	143.8	129.6	-118.48	1,064.3	4,565.7	646.4	404.1	242.27	2.668		
11,800.0	6,728.2	11,349.1	6,912.0	146.6	129.6	-118.48	1,064.3	4,565.7	729.9	485.2	244.75	2.982		
11,900.0	6,727.9	11,349.1	6,912.0	149.4	129.6	-118.48	1,064.3	4,565.7	817.2	569.9	247.23	3.305		
12,000.0	6,727.6	11,349.1	6,912.0	152.1	129.6	-118.48	1,064.3	4,565.7	907.1	657.4	249.70	3.633		
12,100.0	6,727.3	11,349.1	6,912.0	154.9	129.6	-118.48	1,064.3	4,565.7	998.9	746.7	252.18	3.961		

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 #3 (1-22-14)	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							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)					
6,700.0	6,561.1	6,557.9	6,556.0	19.9	14.1	-28.22	1,066.6	1,051.2	970.5	944.9	25.59	37.927				
6,800.0	6,620.6	6,622.8	6,620.8	20.2	14.1	-35.27	1,064.2	1,051.3	894.2	869.1	25.14	35.567				
6,900.0	6,669.2	6,678.9	6,676.8	20.6	14.2	-45.83	1,061.6	1,051.0	811.9	785.1	26.80	30.294				
7,000.0	6,705.9	6,716.1	6,714.0	21.4	14.2	-59.70	1,059.5	1,050.7	725.8	695.2	30.59	23.729				
7,100.0	6,730.2	6,738.0	6,735.9	22.7	14.2	-75.23	1,058.3	1,050.6	638.6	603.9	34.68	18.414				
7,200.0	6,741.6	6,748.4	6,746.3	24.3	14.2	-89.25	1,057.7	1,050.5	553.2	516.0	37.20	14.871				
7,300.0	6,742.3	6,748.9	6,746.7	26.2	14.2	-93.65	1,057.7	1,050.5	473.2	434.2	39.01	12.131				
7,400.0	6,742.0	6,748.3	6,746.2	28.3	14.2	-93.55	1,057.7	1,050.5	402.3	361.1	41.21	9.763				
7,500.0	6,741.7	6,747.8	6,745.7	30.5	14.2	-93.45	1,057.7	1,050.5	346.1	302.6	43.52	7.953				
7,600.0	6,741.4	6,747.3	6,745.1	32.8	14.2	-93.35	1,057.8	1,050.5	312.6	266.7	45.90	6.809				
7,660.5	6,741.2	6,746.9	6,744.8	34.3	14.2	-93.29	1,057.8	1,050.5	306.7	259.3	47.38	6.472 CC, ES				
7,700.0	6,741.1	6,746.7	6,744.6	35.2	14.2	-93.25	1,057.8	1,050.5	309.2	260.8	48.35	6.395 SF				
7,800.0	6,740.8	6,746.1	6,744.0	37.6	14.2	-93.14	1,057.8	1,050.5	336.9	286.1	50.86	6.625				
7,900.0	6,740.4	6,745.5	6,743.4	40.1	14.2	-93.03	1,057.9	1,050.5	389.1	335.7	53.40	7.287				
8,000.0	6,740.1	6,744.9	6,742.8	42.7	14.2	-92.91	1,057.9	1,050.5	457.5	401.5	55.98	8.172				
8,100.0	6,739.8	6,744.3	6,742.1	45.2	14.2	-92.79	1,057.9	1,050.5	535.9	477.3	58.59	9.147				
8,200.0	6,739.5	6,743.6	6,741.5	47.8	14.2	-92.67	1,058.0	1,050.5	620.6	559.4	61.23	10.136				
8,300.0	6,739.2	6,742.9	6,740.8	50.4	14.2	-92.54	1,058.0	1,050.5	709.2	645.4	63.88	11.103				
8,400.0	6,738.9	6,742.2	6,740.1	53.1	14.2	-92.41	1,058.1	1,050.5	800.6	734.0	66.55	12.029				
8,500.0	6,738.6	6,741.5	6,739.4	55.7	14.2	-92.28	1,058.1	1,050.5	893.8	824.5	69.24	12.908				
8,600.0	6,738.2	6,740.8	6,738.6	58.4	14.2	-92.14	1,058.1	1,050.5	988.3	916.4	71.94	13.738				

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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (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	89.96	0.0	30.6	30.6					
100.0	100.0	100.0	100.0	0.1	0.1	89.96	0.0	30.6	30.6	30.4	0.22	136.352		
200.0	200.0	200.0	200.0	0.3	0.3	89.96	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	103.45	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	112.38	0.0	30.6	32.6	31.0	1.58	20.644		
500.0	499.5	499.5	499.5	1.0	1.0	124.91	0.0	30.6	36.8	34.8	2.05	17.955		
600.0	598.7	598.7	598.7	1.3	1.2	137.60	0.0	30.6	45.0	42.4	2.53	17.755		
700.0	697.5	697.5	697.5	1.6	1.5	147.85	0.0	30.6	57.2	54.2	3.01	19.024		
800.0	796.3	796.3	796.3	2.0	1.7	154.59	0.0	30.6	71.0	67.5	3.47	20.471		
900.0	895.1	895.1	895.1	2.3	1.9	159.11	0.0	30.6	85.5	81.5	3.93	21.756		
1,000.0	993.8	993.8	993.8	2.7	2.1	162.30	0.0	30.6	100.3	95.9	4.39	22.855		
1,100.0	1,092.6	1,096.4	1,096.4	3.0	2.4	164.70	1.5	30.0	113.8	109.0	4.85	23.454		
1,200.0	1,191.3	1,200.1	1,200.0	3.4	2.6	166.55	6.5	28.0	123.9	118.6	5.32	23.298		
1,300.0	1,290.1	1,303.9	1,303.4	3.8	2.8	168.11	14.9	24.6	130.5	124.7	5.79	22.544		
1,400.0	1,388.9	1,403.7	1,402.6	4.1	3.1	169.47	24.3	20.8	135.8	129.5	6.26	21.695		
1,500.0	1,487.6	1,503.5	1,501.9	4.5	3.3	170.73	33.7	16.9	141.2	134.4	6.73	20.970		
1,600.0	1,586.4	1,603.3	1,601.2	4.8	3.6	171.90	43.1	13.1	146.6	139.4	7.20	20.344		
1,700.0	1,685.1	1,703.2	1,700.5	5.2	3.8	172.98	52.5	9.3	152.0	144.4	7.68	19.798		
1,800.0	1,783.9	1,803.0	1,799.8	5.6	4.1	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	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	80.6	-2.2	168.8	159.6	9.11	18.514		
2,100.0	2,080.2	2,102.4	2,097.7	6.7	4.9	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	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	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	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	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	137.0	-25.1	203.1	191.1	12.03	16.887		
2,700.0	2,672.7	2,701.3	2,693.5	8.8	6.6	-179.38	146.4	-28.9	208.9	196.4	12.52	16.690		
2,800.0	2,771.5	2,801.1	2,792.8	9.2	6.9	-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	-178.33	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	174.6	-40.4	226.4	212.4	13.99	16.181		
3,100.0	3,067.8	3,100.5	3,090.6	10.3	7.7	-177.39	183.9	-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	193.3	-48.0	238.2	223.2	14.98	15.897		
3,300.0	3,265.3	3,300.1	3,289.2	11.0	8.3	-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	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	-175.76	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	230.9	-63.3	261.9	244.9	16.98	15.427		
3,700.0	3,660.3	3,699.4	3,686.4	12.5	9.4	-175.06	240.3	-67.2	267.9	250.4	17.48	15.326		
3,800.0	3,759.1	3,799.2	3,785.7	12.9	9.7	-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	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	268.5	-78.6	285.8	266.8	18.98	15.054		
4,100.0	4,055.4	4,098.6	4,083.6	13.9	10.6	-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	287.2	-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	296.6	-90.1	303.7	283.2	20.49	14.821		
4,400.0	4,351.7	4,398.0	4,381.5	15.0	11.4	-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	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	324.8	-101.6	321.8	299.8	22.01	14.619		
4,700.0	4,647.9	4,697.5	4,679.3	16.1	12.3	-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	343.6	-109.2	333.8	310.8	23.02	14.499		
4,900.0	4,845.5	4,897.1	4,877.9	16.9	12.9	-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	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

Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,100.0	5,043.0	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	14.233		
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	394.7	-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	10.685		
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	10.579		
6,100.0	6,041.0	6,062.3	6,041.0	19.3	15.4	89.04	398.0	-131.4	360.0	331.6	28.38	12.683		
6,155.0	6,095.6	6,117.0	6,095.6	19.4	15.5	90.00	398.0	-130.9	359.9	331.3	28.63	12.571		
6,200.0	6,139.8	6,161.8	6,140.3	19.5	15.6	90.85	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	92.72	397.9	-112.1	360.4	331.1	29.23	12.328		
6,400.0	6,327.6	6,365.0	6,337.7	19.6	15.8	94.57	397.8	-82.6	361.1	331.5	29.60	12.201		
6,500.0	6,413.3	6,469.0	6,432.4	19.7	15.9	96.33	397.5	-39.6	362.2	332.2	29.98	12.079		
6,600.0	6,491.6	6,574.8	6,521.7	19.8	15.9	98.00	397.2	17.0	363.5	333.0	30.51	11.916		
6,700.0	6,561.1	6,682.1	6,603.4	19.9	16.0	99.52	396.8	86.4	365.0	333.7	31.34	11.649		
6,800.0	6,620.6	6,791.0	6,675.6	20.2	16.3	100.86	396.4	167.8	366.6	333.9	32.64	11.230		
6,900.0	6,669.2	6,901.3	6,736.2	20.6	17.2	102.01	395.9	259.8	368.1	333.5	34.61	10.635		
7,000.0	6,705.9	7,012.8	6,783.3	21.4	18.6	102.94	395.3	360.8	369.4	332.1	37.33	9.894		
7,100.0	6,730.2	7,125.2	6,815.4	22.7	20.4	103.62	394.7	468.4	370.4	329.7	40.78	9.084		
7,200.0	6,741.6	7,238.3	6,831.5	24.3	22.5	104.04	394.1	580.3	371.1	326.3	44.82	8.281		
7,300.0	6,742.3	7,345.6	6,832.7	26.2	24.7	104.08	393.5	687.5	371.2	322.1	49.05	7.567		
7,400.0	6,742.0	7,445.6	6,831.4	28.3	26.9	103.95	393.0	787.5	371.0	317.7	53.32	6.957		
7,500.0	6,741.7	7,545.6	6,830.2	30.5	29.2	103.82	392.4	887.5	370.8	313.0	57.80	6.415		
7,600.0	6,741.4	7,645.6	6,829.0	32.8	31.6	103.68	391.9	987.5	370.6	308.1	62.45	5.934		
7,700.0	6,741.1	7,745.6	6,827.8	35.2	34.0	103.55	391.3	1,087.4	370.4	303.2	67.23	5.510		
7,800.0	6,740.8	7,845.6	6,826.6	37.6	36.5	103.41	390.8	1,187.4	370.2	298.1	72.11	5.133		
7,900.0	6,740.4	7,945.6	6,825.4	40.1	39.0	103.28	390.3	1,287.4	370.0	292.9	77.09	4.800		
8,000.0	6,740.1	8,045.6	6,824.2	42.7	41.6	103.14	389.7	1,387.4	369.8	287.7	82.14	4.502		
8,100.0	6,739.8	8,145.6	6,823.0	45.2	44.2	103.01	389.2	1,487.4	369.6	282.4	87.25	4.237		
8,200.0	6,739.5	8,245.6	6,821.8	47.8	46.8	102.87	388.6	1,587.4	369.4	277.0	92.41	3.998		
8,300.0	6,739.2	8,345.6	6,820.6	50.4	49.4	102.74	388.1	1,687.4	369.2	271.6	97.61	3.783		
8,400.0	6,738.9	8,445.6	6,819.4	53.1	52.1	102.60	387.5	1,787.4	369.1	266.2	102.86	3.588		
8,500.0	6,738.6	8,545.6	6,818.2	55.7	54.8	102.47	387.0	1,887.3	368.9	260.7	108.13	3.411		
8,600.0	6,738.2	8,645.6	6,817.0	58.4	57.5	102.33	386.4	1,987.3	368.7	255.3	113.44	3.250		
8,700.0	6,737.9	8,745.6	6,815.8	61.1	60.2	102.20	385.9	2,087.3	368.5	249.7	118.77	3.103		
8,800.0	6,737.6	8,845.6	6,814.6	63.8	62.9	102.06	385.3	2,187.3	368.3	244.2	124.13	2.967		
8,900.0	6,737.3	8,945.6	6,813.4	66.5	65.6	101.93	384.8	2,287.3	368.2	238.7	129.51	2.843		
9,000.0	6,737.0	9,045.5	6,812.2	69.2	68.3	101.79	384.2	2,387.3	368.0	233.1	134.91	2.728		
9,100.0	6,736.7	9,145.5	6,811.0	71.9	71.0	101.65	383.7	2,487.3	367.8	227.5	140.32	2.621		
9,200.0	6,736.4	9,245.5	6,809.8	74.6	73.8	101.52	383.1	2,587.3	367.7	221.9	145.75	2.523		
9,300.0	6,736.0	9,345.5	6,808.6	77.3	76.5	101.38	382.6	2,687.2	367.5	216.3	151.19	2.431		
9,400.0	6,735.7	9,445.5	6,807.4	80.1	79.3	101.25	382.0	2,787.2	367.3	210.7	156.65	2.345		
9,500.0	6,735.4	9,545.5	6,806.2	82.8	82.0	101.11	381.5	2,887.2	367.2	205.1	162.12	2.265		
9,600.0	6,735.1	9,645.5	6,805.0	85.6	84.8	100.97	380.9	2,987.2	367.0	199.4	167.60	2.190		
9,700.0	6,734.8	9,745.5	6,803.8	88.3	87.5	100.83	380.4	3,087.2	366.9	193.8	173.09	2.119		
9,800.0	6,734.5	9,845.5	6,802.5	91.1	90.3	100.70	379.8	3,187.2	366.7	188.1	178.59	2.053		
9,900.0	6,734.2	9,945.5	6,801.3	93.8	93.1	100.56	379.3	3,287.2	366.6	182.4	184.11	1.991		
10,000.0	6,733.8	10,045.5	6,800.1	96.6	95.8	100.42	378.8	3,387.2	366.4	176.8	189.62	1.932		

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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24P-332 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	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	6,733.5	10,145.5	6,798.9	99.3	98.6	100.29	378.2	3,487.1	366.3	171.1	195.15	1.877		
10,200.0	6,733.2	10,245.5	6,797.7	102.1	101.4	100.15	377.7	3,587.1	366.1	165.4	200.69	1.824		
10,300.0	6,732.9	10,345.5	6,796.5	104.9	104.1	100.01	377.1	3,687.1	366.0	159.7	206.23	1.775		
10,400.0	6,732.6	10,445.5	6,795.3	107.6	106.9	99.87	376.6	3,787.1	365.8	154.0	211.78	1.727		
10,500.0	6,732.3	10,545.5	6,794.1	110.4	109.7	99.74	376.0	3,887.1	365.7	148.3	217.34	1.683		
10,600.0	6,732.0	10,645.5	6,792.9	113.2	112.5	99.60	375.5	3,987.1	365.5	142.6	222.90	1.640		
10,700.0	6,731.7	10,745.5	6,791.7	116.0	115.3	99.46	374.9	4,087.1	365.4	136.9	228.47	1.599		
10,800.0	6,731.3	10,845.5	6,790.5	118.7	118.0	99.32	374.4	4,187.1	365.3	131.2	234.04	1.561		
10,900.0	6,731.0	10,945.5	6,789.3	121.5	120.8	99.18	373.8	4,287.0	365.1	125.5	239.62	1.524		
11,000.0	6,730.7	11,045.5	6,788.1	124.3	123.6	99.05	373.3	4,387.0	365.0	119.8	245.21	1.489 Level 3		
11,100.0	6,730.4	11,145.5	6,786.9	127.1	126.4	98.91	372.7	4,487.0	364.9	114.1	250.80	1.455 Level 3		
11,200.0	6,730.1	11,245.5	6,785.7	129.9	129.2	98.77	372.2	4,587.0	364.8	108.4	256.39	1.423 Level 3		
11,300.0	6,729.8	11,345.5	6,784.5	132.6	132.0	98.63	371.6	4,687.0	364.6	102.7	261.99	1.392 Level 3		
11,400.0	6,729.5	11,445.5	6,783.3	135.4	134.7	98.49	371.1	4,787.0	364.5	96.9	267.59	1.362 Level 3		
11,500.0	6,729.1	11,545.4	6,782.1	138.2	137.5	98.35	370.5	4,887.0	364.4	91.2	273.20	1.334 Level 3		
11,600.0	6,728.8	11,645.4	6,780.9	141.0	140.3	98.21	370.0	4,986.9	364.3	85.5	278.81	1.307 Level 3		
11,700.0	6,728.5	11,745.4	6,779.7	143.8	143.1	98.08	369.4	5,086.9	364.2	79.7	284.42	1.280 Level 3		
11,800.0	6,728.2	11,845.4	6,778.5	146.6	145.9	97.94	368.9	5,186.9	364.1	74.0	290.04	1.255 Level 3		
11,900.0	6,727.9	11,945.4	6,777.3	149.4	148.7	97.80	368.4	5,286.9	363.9	68.3	295.66	1.231 Level 2		
12,000.0	6,727.6	12,045.4	6,776.1	152.1	151.5	97.66	367.8	5,386.9	363.8	62.6	301.28	1.208 Level 2		
12,100.0	6,727.3	12,145.4	6,774.9	154.9	154.3	97.52	367.3	5,486.9	363.7	56.8	306.91	1.185 Level 2		
12,200.0	6,726.9	12,245.4	6,773.6	157.7	157.1	97.38	366.7	5,586.9	363.6	51.1	312.54	1.163 Level 2		
12,300.0	6,726.6	12,345.4	6,772.4	160.5	159.9	97.24	366.2	5,686.9	363.5	45.4	318.17	1.143 Level 2		
12,400.0	6,726.3	12,445.4	6,771.2	163.3	162.7	97.10	365.6	5,786.8	363.4	39.6	323.81	1.122 Level 2		
12,498.6	6,726.0	12,544.0	6,770.1	166.1	165.0	96.96	365.1	5,885.4	363.3	34.4	328.93	1.105 Level 2, 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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWDD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	89.98	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	32.132		
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	26.348		
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	26.980		
1,300.0	1,290.1	1,290.1	1,290.1	3.8	2.8	157.62	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	27.632		
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	24.903		
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	23.926		
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	406.5	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	24.593		
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	25.509		
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	25.901		
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	561.4	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	592.2	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	584.9	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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+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	27.221		
5,300.0	5,241.4	5,251.8	5,241.4	18.2	11.9	-170.51	68.0	-125.7	678.6	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	22.030		
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	178.72	68.0	-122.5	690.2	658.1	32.04	21.539		
6,100.0	6,041.0	6,045.7	6,034.0	19.3	13.5	87.37	67.9	-107.9	690.7	662.8	27.90	24.753		
6,200.0	6,139.8	6,140.1	6,124.7	19.5	13.7	86.29	67.8	-82.0	691.4	663.3	28.12	24.584		
6,300.0	6,235.9	6,233.1	6,210.2	19.5	13.8	85.28	67.6	-45.7	692.3	664.0	28.36	24.415		
6,400.0	6,327.6	6,324.8	6,289.7	19.6	13.9	84.35	67.3	0.0	693.4	664.7	28.67	24.186		
6,500.0	6,413.3	6,415.5	6,362.4	19.7	14.2	83.52	67.0	54.2	694.5	665.3	29.14	23.828		
6,600.0	6,491.6	6,505.3	6,427.5	19.8	14.6	82.79	66.6	115.9	695.5	665.7	29.89	23.269		
6,700.0	6,561.1	6,594.3	6,484.4	19.9	15.2	82.17	66.2	184.3	696.5	665.5	31.02	22.453		
6,800.0	6,620.6	6,682.8	6,532.8	20.2	16.1	81.67	65.8	258.3	697.4	664.8	32.63	21.373		
6,900.0	6,669.2	6,770.7	6,572.0	20.6	17.2	81.31	65.4	337.0	698.1	663.4	34.75	20.087		
7,000.0	6,705.9	6,858.4	6,601.9	21.4	18.6	81.07	64.9	419.3	698.6	661.2	37.39	18.682		
7,100.0	6,730.2	6,945.9	6,622.1	22.7	20.1	80.97	64.4	504.4	698.8	658.3	40.50	17.254		
7,200.0	6,741.6	7,033.3	6,632.5	24.3	21.8	81.00	63.9	591.2	698.8	654.8	43.99	15.885		
7,276.8	6,743.8	7,102.6	6,633.8	25.8	23.3	80.94	63.5	660.5	698.9	652.0	46.94	14.891		
7,300.0	6,742.3	7,125.9	6,633.6	26.2	23.8	81.05	63.4	683.7	698.7	650.8	47.92	14.581		
7,400.0	6,742.0	7,225.9	6,633.0	28.3	26.0	81.02	62.8	783.7	698.8	646.5	52.28	13.367		
7,500.0	6,741.7	7,325.9	6,632.3	30.5	28.3	81.00	62.2	883.7	698.9	642.1	56.84	12.295		
7,600.0	6,741.4	7,425.9	6,631.7	32.8	30.7	80.97	61.7	983.7	699.0	637.4	61.57	11.353		
7,700.0	6,741.1	7,525.9	6,631.1	35.2	33.2	80.94	61.1	1,083.7	699.1	632.7	66.42	10.525		
7,800.0	6,740.8	7,625.9	6,630.4	37.6	35.7	80.92	60.5	1,183.7	699.2	627.8	71.38	9.795		
7,900.0	6,740.4	7,725.9	6,629.8	40.1	38.3	80.89	59.9	1,283.7	699.3	622.8	76.41	9.151		
8,000.0	6,740.1	7,825.9	6,629.1	42.7	40.9	80.87	59.4	1,383.7	699.3	617.8	81.51	8.580		
8,100.0	6,739.8	7,925.9	6,628.5	45.2	43.5	80.84	58.8	1,483.7	699.4	612.8	86.67	8.070		
8,200.0	6,739.5	8,025.9	6,627.8	47.8	46.1	80.81	58.2	1,583.7	699.5	607.7	91.87	7.615		
8,300.0	6,739.2	8,125.9	6,627.2	50.4	48.8	80.79	57.6	1,683.7	699.6	602.5	97.10	7.205		
8,400.0	6,738.9	8,225.9	6,626.5	53.1	51.5	80.76	57.1	1,783.7	699.7	597.3	102.37	6.835		
8,500.0	6,738.6	8,325.9	6,625.9	55.7	54.1	80.73	56.5	1,883.7	699.8	592.1	107.67	6.500		
8,600.0	6,738.2	8,425.9	6,625.2	58.4	56.8	80.71	55.9	1,983.7	699.9	586.9	112.99	6.194		
8,700.0	6,737.9	8,525.9	6,624.6	61.1	59.6	80.68	55.4	2,083.7	700.0	581.6	118.32	5.916		
8,800.0	6,737.6	8,625.9	6,624.0	63.8	62.3	80.66	54.8	2,183.7	700.1	576.4	123.68	5.660		
8,900.0	6,737.3	8,725.9	6,623.3	66.5	65.0	80.63	54.2	2,283.7	700.2	571.1	129.05	5.426		
9,000.0	6,737.0	8,825.9	6,622.7	69.2	67.7	80.60	53.6	2,383.6	700.2	565.8	134.43	5.209		
9,100.0	6,736.7	8,925.9	6,622.0	71.9	70.5	80.58	53.1	2,483.6	700.3	560.5	139.82	5.009		
9,200.0	6,736.4	9,025.9	6,621.4	74.6	73.2	80.55	52.5	2,583.6	700.4	555.2	145.23	4.823		
9,300.0	6,736.0	9,125.9	6,620.7	77.3	76.0	80.52	51.9	2,683.6	700.5	549.9	150.64	4.650		
9,400.0	6,735.7	9,225.9	6,620.1	80.1	78.7	80.50	51.3	2,783.6	700.6	544.6	156.06	4.489		
9,500.0	6,735.4	9,325.9	6,619.4	82.8	81.5	80.47	50.8	2,883.6	700.7	539.2	161.49	4.339		
9,600.0	6,735.1	9,425.9	6,618.8	85.6	84.3	80.45	50.2	2,983.6	700.8	533.9	166.92	4.198		
9,700.0	6,734.8	9,525.9	6,618.1	88.3	87.0	80.42	49.6	3,083.6	700.9	528.5	172.36	4.066		
9,800.0	6,734.5	9,625.9	6,617.5	91.1	89.8	80.39	49.0	3,183.6	701.0	523.2	177.80	3.942		
9,900.0	6,734.2	9,725.9	6,616.8	93.8	92.6	80.37	48.5	3,283.6	701.1	517.8	183.25	3.826		
10,000.0	6,733.8	9,825.9	6,616.2	96.6	95.3	80.34	47.9	3,383.6	701.2	512.5	188.70	3.716		

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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-112 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	6,733.5	9,925.9	6,615.6	99.3	98.1	80.31	47.3	3,483.6	701.3	507.1	194.16	3.612		
10,200.0	6,733.2	10,025.9	6,614.9	102.1	100.9	80.29	46.8	3,583.6	701.3	501.7	199.62	3.513		
10,300.0	6,732.9	10,125.9	6,614.3	104.9	103.7	80.26	46.2	3,683.6	701.4	496.4	205.08	3.420		
10,400.0	6,732.6	10,225.9	6,613.6	107.6	106.4	80.24	45.6	3,783.6	701.5	491.0	210.54	3.332		
10,500.0	6,732.3	10,325.9	6,613.0	110.4	109.2	80.21	45.0	3,883.6	701.6	485.6	216.01	3.248		
10,600.0	6,732.0	10,425.9	6,612.3	113.2	112.0	80.18	44.5	3,983.6	701.7	480.2	221.48	3.168		
10,700.0	6,731.7	10,525.9	6,611.7	116.0	114.8	80.16	43.9	4,083.6	701.8	474.9	226.95	3.092		
10,800.0	6,731.3	10,625.9	6,611.0	118.7	117.6	80.13	43.3	4,183.6	701.9	469.5	232.42	3.020		
10,900.0	6,731.0	10,725.9	6,610.4	121.5	120.4	80.11	42.7	4,283.6	702.0	464.1	237.90	2.951		
11,000.0	6,730.7	10,825.9	6,609.7	124.3	123.1	80.08	42.2	4,383.6	702.1	458.7	243.37	2.885		
11,100.0	6,730.4	10,925.9	6,609.1	127.1	125.9	80.05	41.6	4,483.6	702.2	453.3	248.85	2.822		
11,200.0	6,730.1	11,025.9	6,608.5	129.9	128.7	80.03	41.0	4,583.6	702.3	448.0	254.32	2.761		
11,300.0	6,729.8	11,125.9	6,607.8	132.6	131.5	80.00	40.5	4,683.6	702.4	442.6	259.80	2.704		
11,400.0	6,729.5	11,225.9	6,607.2	135.4	134.3	79.97	39.9	4,783.5	702.5	437.2	265.28	2.648		
11,500.0	6,729.1	11,325.9	6,606.5	138.2	137.1	79.95	39.3	4,883.5	702.6	431.8	270.76	2.595		
11,600.0	6,728.8	11,425.9	6,605.9	141.0	139.9	79.92	38.7	4,983.5	702.7	426.4	276.24	2.544		
11,700.0	6,728.5	11,525.9	6,605.2	143.8	142.7	79.90	38.2	5,083.5	702.8	421.0	281.72	2.495		
11,800.0	6,728.2	11,625.9	6,604.6	146.6	145.5	79.87	37.6	5,183.5	702.9	415.7	287.20	2.447		
11,900.0	6,727.9	11,725.9	6,603.9	149.4	148.3	79.84	37.0	5,283.5	702.9	410.3	292.68	2.402		
12,000.0	6,727.6	11,825.9	6,603.3	152.1	151.1	79.82	36.4	5,383.5	703.0	404.9	298.16	2.358		
12,100.0	6,727.3	11,925.9	6,602.6	154.9	153.9	79.79	35.9	5,483.5	703.1	399.5	303.65	2.316		
12,200.0	6,726.9	12,025.9	6,602.0	157.7	156.7	79.77	35.3	5,583.5	703.2	394.1	309.13	2.275		
12,300.0	6,726.6	12,125.9	6,601.4	160.5	159.5	79.74	34.7	5,683.5	703.3	388.7	314.61	2.236		
12,400.0	6,726.3	12,225.9	6,600.7	163.3	162.2	79.71	34.1	5,783.5	703.4	383.3	320.09	2.198		
12,498.6	6,726.0	12,324.5	6,600.1	166.1	165.0	79.69	33.6	5,882.1	703.5	378.0	325.50	2.161 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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (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	90.00	0.0	91.9	91.9					
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	91.9	91.9	91.7	0.22	409.055		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	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	104.50	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	35.402		
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	143.19	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	30.752		
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	314.1	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	455.1	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	-102.7	6.9	523.7	509.7	14.03	37.333		
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	37.678		
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	39.353		
3,900.0	3,857.9	3,811.4	3,799.1	13.2	9.0	-173.43	-170.6	-49.3	711.3	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	786.5	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	40.876		
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 #3 (1-22-14)	Offset TVD Reference:	Offset Datum

Offset Design Maxey 24Q-HZ Pad Sec.24-T5N-R65W - Maxey 24Q-302 - Wellbore #1 - Plan #3 (1-22-14)												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	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 #3 (1-22-14)	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 #3 (1-22-14)	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°

