



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24O-402

Wellbore #1

Survey: Survey #1

Standard Survey Report

26 June, 2014

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 240-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (Original Well Elev)
Site:	Maxey 240-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (Original Well Elev)
Well:	Maxey 240-402	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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

Well	Maxey 240-402					
Well Position	+N-S	0.0 ft	Northing:	1,383,919.36 ft	Latitude:	40.383850
	+E-W	0.0 ft	Easting:	3,247,745.25 ft	Longitude:	-104.610660
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,636.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/10/2014	8.38	66.96	52,826

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	89.53	

Survey Program	Date 6/26/2014				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
140.0	11,254.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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	160.90	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 2346'FSL & 2438'FEL, Sec.24									
140.0	0.20	160.90	140.0	-0.2	0.1	0.1	0.14	0.14	0.00
232.0	1.00	117.00	232.0	-0.7	0.8	0.8	0.94	0.87	-47.72
324.0	0.50	96.40	324.0	-1.2	2.0	2.0	0.61	-0.54	-22.39
415.0	0.70	96.70	415.0	-1.3	2.9	2.9	0.22	0.22	0.33
506.0	1.40	130.50	506.0	-2.1	4.3	4.3	1.00	0.77	37.14
597.0	1.30	122.90	596.9	-3.3	6.0	6.0	0.23	-0.11	-8.35
689.0	2.10	132.90	688.9	-5.0	8.1	8.1	0.92	0.87	10.87
780.0	1.00	145.40	779.9	-6.8	9.8	9.7	1.26	-1.21	13.74
891.0	1.40	110.10	890.8	-8.1	11.6	11.6	0.74	0.36	-31.80

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Design:	Wellbore #1	Database:	Landmark

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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)
968.0	1.40	95.50	967.8	-8.5	13.4	13.4	0.46	0.00	-18.96
1,060.0	1.10	46.10	1,059.8	-8.0	15.2	15.1	1.17	-0.33	-53.70
1,152.0	2.00	11.50	1,151.8	-5.8	16.2	16.1	1.37	0.98	-37.61
1,249.0	2.50	341.20	1,248.7	-2.2	15.8	15.8	1.31	0.52	-31.24
1,344.0	2.80	340.00	1,343.6	2.0	14.4	14.4	0.32	0.32	-1.26
1,439.0	2.40	346.90	1,438.5	6.1	13.1	13.2	0.53	-0.42	7.26
1,534.0	2.10	343.00	1,533.4	9.7	12.1	12.2	0.35	-0.32	-4.11
1,630.0	2.50	305.60	1,629.4	12.6	9.9	10.0	1.59	0.42	-38.96
1,724.0	3.80	289.00	1,723.2	14.8	5.3	5.4	1.68	1.38	-17.66
1,819.0	3.20	284.30	1,818.0	16.5	-0.2	-0.1	0.70	-0.63	-4.95
1,914.0	2.90	278.60	1,912.9	17.5	-5.2	-5.0	0.45	-0.32	-6.00
2,009.0	2.90	271.00	2,007.8	17.9	-10.0	-9.8	0.40	0.00	-8.00
2,104.0	3.60	271.30	2,102.6	18.0	-15.3	-15.2	0.74	0.74	0.32
2,199.0	4.30	274.30	2,197.4	18.3	-21.9	-21.7	0.77	0.74	3.16
2,294.0	4.30	276.80	2,292.1	19.0	-29.0	-28.8	0.20	0.00	2.63
2,389.0	4.50	283.80	2,386.8	20.3	-36.1	-35.9	0.60	0.21	7.37
2,484.0	5.80	293.50	2,481.5	23.1	-44.1	-43.9	1.64	1.37	10.21
2,579.0	5.60	295.70	2,576.0	27.1	-52.7	-52.5	0.31	-0.21	2.32
2,674.0	6.70	293.70	2,670.4	31.3	-62.0	-61.7	1.18	1.16	-2.11
2,769.0	6.90	283.80	2,764.8	34.9	-72.6	-72.3	1.25	0.21	-10.42
2,863.0	6.90	281.80	2,858.1	37.4	-83.6	-83.3	0.26	0.00	-2.13
2,958.0	6.60	281.70	2,952.4	39.7	-94.5	-94.2	0.32	-0.32	-0.11
3,053.0	6.10	284.50	3,046.9	42.0	-104.8	-104.4	0.62	-0.53	2.95
3,148.0	6.50	284.50	3,141.3	44.7	-114.9	-114.5	0.42	0.42	0.00
3,243.0	5.60	287.30	3,235.8	47.4	-124.5	-124.1	1.00	-0.95	2.95
3,338.0	6.00	277.70	3,330.3	49.4	-133.8	-133.4	1.10	0.42	-10.11
3,433.0	5.20	272.30	3,424.8	50.3	-143.1	-142.6	1.01	-0.84	-5.68
3,529.0	5.20	279.70	3,520.4	51.2	-151.7	-151.3	0.70	0.00	7.71
3,624.0	5.10	280.60	3,615.0	52.7	-160.1	-159.6	0.14	-0.11	0.95
3,719.0	4.60	272.70	3,709.7	53.6	-168.0	-167.6	0.88	-0.53	-8.32
3,814.0	4.80	271.10	3,804.4	53.9	-175.8	-175.4	0.25	0.21	-1.68
3,909.0	3.40	272.20	3,899.1	54.1	-182.6	-182.2	1.48	-1.47	1.16
4,004.0	3.20	270.70	3,994.0	54.2	-188.1	-187.6	0.23	-0.21	-1.58
4,099.0	2.20	266.50	4,088.9	54.1	-192.5	-192.1	1.07	-1.05	-4.42
4,193.0	2.30	262.80	4,182.8	53.8	-196.2	-195.8	0.19	0.11	-3.94
4,288.0	1.20	292.80	4,277.8	53.9	-199.0	-198.6	1.47	-1.16	31.58
4,383.0	1.20	305.80	4,372.7	54.9	-200.7	-200.3	0.29	0.00	13.68
4,478.0	0.90	309.20	4,467.7	56.0	-202.1	-201.7	0.32	-0.32	3.58
4,573.0	0.90	334.60	4,562.7	57.1	-203.0	-202.6	0.42	0.00	26.74
4,668.0	0.80	347.50	4,657.7	58.4	-203.5	-203.0	0.23	-0.11	13.58
4,763.0	0.90	349.20	4,752.7	59.8	-203.8	-203.3	0.11	0.11	1.79
4,859.0	1.00	339.40	4,848.7	61.3	-204.2	-203.7	0.20	0.10	-10.21
4,954.0	1.00	318.60	4,943.7	62.7	-205.1	-204.5	0.38	0.00	-21.89
5,049.0	1.00	311.70	5,038.6	63.9	-206.2	-205.7	0.13	0.00	-7.26
5,144.0	1.30	308.40	5,133.6	65.1	-207.7	-207.1	0.32	0.32	-3.47
5,239.0	0.40	349.80	5,228.6	66.1	-208.6	-208.0	1.09	-0.95	43.58
5,334.0	0.50	346.60	5,323.6	66.8	-208.7	-208.2	0.11	0.11	-3.37
5,429.0	0.70	343.30	5,418.6	67.8	-209.0	-208.4	0.21	0.21	-3.47
5,523.0	1.20	341.00	5,512.6	69.3	-209.5	-208.9	0.53	0.53	-2.45
5,618.0	1.20	355.20	5,607.6	71.2	-209.9	-209.3	0.31	0.00	14.95
5,713.0	1.00	11.50	5,702.6	73.0	-209.8	-209.2	0.39	-0.21	17.16
5,808.0	1.90	2.10	5,797.5	75.4	-209.6	-209.0	0.98	0.95	-9.89
5,903.0	2.70	15.30	5,892.4	79.1	-208.9	-208.3	1.00	0.84	13.89
5,998.0	1.60	21.90	5,987.4	82.5	-207.9	-207.2	1.18	-1.16	6.95

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6,059.0	1.80	104.50	6,048.4	83.1	-206.6	-205.9	3.69	0.33	135.41
6,091.0	1.90	110.30	6,080.3	82.8	-205.6	-204.9	0.66	0.31	18.13
6,123.0	3.60	99.10	6,112.3	82.4	-204.1	-203.5	5.55	5.31	-35.00
6,155.0	5.90	90.00	6,144.2	82.3	-201.5	-200.8	7.54	7.19	-28.44
6,188.0	8.30	86.10	6,176.9	82.4	-197.4	-196.8	7.41	7.27	-11.82
6,220.0	10.50	87.20	6,208.5	82.7	-192.2	-191.5	6.90	6.88	3.44
6,252.0	12.50	89.10	6,239.9	82.9	-185.8	-185.2	6.36	6.25	5.94
6,283.0	14.40	92.00	6,270.0	82.8	-178.6	-177.9	6.50	6.13	9.35
6,315.0	15.90	93.40	6,300.9	82.4	-170.3	-169.6	4.82	4.69	4.38
6,347.0	17.50	93.90	6,331.5	81.9	-161.1	-160.4	5.02	5.00	1.56
6,378.0	19.30	94.20	6,361.0	81.2	-151.3	-150.7	5.81	5.81	0.97
6,410.0	20.80	93.20	6,391.0	80.5	-140.4	-139.7	4.81	4.69	-3.13
6,441.0	22.80	92.10	6,419.8	79.9	-128.9	-128.2	6.58	6.45	-3.55
6,473.0	25.20	90.50	6,449.0	79.6	-115.9	-115.2	7.77	7.50	-5.00
6,505.0	27.50	89.20	6,477.7	79.7	-101.7	-101.0	7.41	7.19	-4.06
6,536.0	30.30	88.10	6,504.8	80.0	-86.7	-86.1	9.19	9.03	-3.55
6,568.0	32.30	88.80	6,532.2	80.5	-70.1	-69.4	6.35	6.25	2.19
6,600.0	34.40	88.80	6,558.9	80.9	-52.5	-51.8	6.56	6.56	0.00
6,631.0	36.60	88.40	6,584.2	81.3	-34.5	-33.8	7.14	7.10	-1.29
6,663.0	38.60	89.20	6,609.5	81.7	-15.0	-14.3	6.43	6.25	2.50
6,695.0	41.10	90.50	6,634.1	81.8	5.5	6.2	8.23	7.81	4.06
6,727.0	43.60	91.10	6,657.7	81.5	27.1	27.7	7.91	7.81	1.88
6,758.0	47.00	90.10	6,679.5	81.2	49.1	49.8	11.20	10.97	-3.23
6,789.0	50.60	90.00	6,699.9	81.2	72.4	73.1	11.62	11.61	-0.32
6,821.0	54.30	89.80	6,719.4	81.3	97.8	98.4	11.57	11.56	-0.63
6,853.0	57.10	89.90	6,737.5	81.3	124.2	124.9	8.75	8.75	0.31
6,884.0	59.40	89.80	6,753.8	81.4	150.6	151.2	7.42	7.42	-0.32
6,916.0	60.70	89.80	6,769.8	81.5	178.3	179.0	4.06	4.06	0.00
6,948.0	62.60	89.90	6,784.9	81.6	206.5	207.1	5.94	5.94	0.31
6,980.0	64.50	90.00	6,799.2	81.6	235.1	235.8	5.94	5.94	0.31
7,011.0	66.50	89.90	6,812.1	81.6	263.3	264.0	6.46	6.45	-0.32
7,043.0	68.50	89.50	6,824.3	81.8	292.9	293.5	6.36	6.25	-1.25
7,075.0	70.40	89.60	6,835.5	82.0	322.8	323.5	5.94	5.94	0.31
7,106.0	72.10	89.90	6,845.5	82.1	352.2	352.9	5.56	5.48	0.97
7,138.0	74.20	89.60	6,854.8	82.3	382.8	383.5	6.62	6.56	-0.94
7,170.0	76.70	89.50	6,862.8	82.5	413.8	414.5	7.82	7.81	-0.31
7,201.0	79.10	89.90	6,869.3	82.7	444.1	444.8	7.84	7.74	1.29
7,232.0	80.00	89.50	6,874.9	82.8	474.6	475.2	3.17	2.90	-1.29
7,264.0	81.90	89.50	6,880.0	83.1	506.2	506.8	5.94	5.94	0.00
7,296.0	83.80	89.70	6,883.9	83.3	537.9	538.6	5.97	5.94	0.63
7,383.0	86.50	89.70	6,891.3	83.8	624.6	625.3	3.10	3.10	0.00
7,414.0	86.60	90.00	6,893.2	83.9	655.6	656.2	1.02	0.32	0.97
7,444.0	87.00	90.00	6,894.8	83.9	685.5	686.2	1.33	1.33	0.00
7,474.0	87.10	90.30	6,896.4	83.8	715.5	716.1	1.05	0.33	1.00
7,504.0	87.40	90.30	6,897.8	83.6	745.4	746.1	1.00	1.00	0.00
7,534.0	87.40	90.20	6,899.2	83.5	775.4	776.1	0.33	0.00	-0.33
7,565.0	87.20	90.20	6,900.6	83.4	806.4	807.0	0.65	-0.65	0.00
7,595.0	87.50	90.50	6,902.0	83.2	836.3	837.0	1.41	1.00	1.00
7,625.0	87.90	90.40	6,903.2	83.0	866.3	867.0	1.37	1.33	-0.33
7,656.0	87.90	90.10	6,904.4	82.8	897.3	897.9	0.97	0.00	-0.97
7,686.0	87.70	90.10	6,905.5	82.8	927.3	927.9	0.67	-0.67	0.00
7,716.0	86.80	89.70	6,907.0	82.8	957.2	957.9	3.28	-3.00	-1.33
7,747.0	86.00	89.50	6,908.9	83.0	988.2	988.8	2.66	-2.58	-0.65

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7,777.0	85.40	89.80	6,911.2	83.2	1,018.1	1,018.7	2.23	-2.00	1.00
7,807.0	84.80	90.40	6,913.7	83.2	1,048.0	1,048.6	2.82	-2.00	2.00
7,837.0	84.70	90.40	6,916.5	83.0	1,077.8	1,078.5	0.33	-0.33	0.00
7,868.0	84.30	90.50	6,919.4	82.7	1,108.7	1,109.3	1.33	-1.29	0.32
7,898.0	84.10	91.50	6,922.5	82.2	1,138.5	1,139.2	3.38	-0.67	3.33
7,928.0	85.30	92.10	6,925.2	81.3	1,168.4	1,169.0	4.47	4.00	2.00
7,958.0	89.60	92.10	6,926.6	80.2	1,198.3	1,199.0	14.33	14.33	0.00
7,988.0	93.50	91.40	6,925.8	79.3	1,228.3	1,228.9	13.21	13.00	-2.33
8,018.0	97.00	90.50	6,923.0	78.8	1,258.2	1,258.8	12.04	11.67	-3.00
8,049.0	97.60	90.10	6,919.1	78.6	1,288.9	1,289.5	2.32	1.94	-1.29
8,079.0	96.90	89.20	6,915.3	78.8	1,318.7	1,319.3	3.78	-2.33	-3.00
8,110.0	95.60	89.20	6,911.9	79.2	1,349.5	1,350.1	4.19	-4.19	0.00
8,141.0	95.40	89.70	6,909.0	79.5	1,380.4	1,381.0	1.73	-0.65	1.61
8,173.0	95.30	89.60	6,906.0	79.7	1,412.2	1,412.8	0.44	-0.31	-0.31
8,204.0	94.60	90.00	6,903.3	79.8	1,443.1	1,443.7	2.60	-2.26	1.29
8,236.0	94.00	89.60	6,900.9	79.9	1,475.0	1,475.6	2.25	-1.88	-1.25
8,268.0	92.40	90.10	6,899.1	80.0	1,507.0	1,507.6	5.24	-5.00	1.56
8,299.0	91.80	91.10	6,898.0	79.7	1,537.9	1,538.5	3.76	-1.94	3.23
8,331.0	91.90	91.20	6,896.9	79.0	1,569.9	1,570.5	0.44	0.31	0.31
8,363.0	92.20	91.80	6,895.8	78.2	1,601.9	1,602.5	2.10	0.94	1.88
8,394.0	91.80	91.80	6,894.7	77.2	1,632.8	1,633.4	1.29	-1.29	0.00
8,426.0	90.90	92.00	6,894.0	76.2	1,664.8	1,665.4	2.88	-2.81	0.63
8,458.0	90.90	91.80	6,893.5	75.1	1,696.8	1,697.4	0.62	0.00	-0.63
8,489.0	90.00	92.10	6,893.2	74.0	1,727.8	1,728.3	3.06	-2.90	0.97
8,521.0	89.80	92.30	6,893.3	72.8	1,759.8	1,760.3	0.88	-0.63	0.63
8,553.0	90.30	92.80	6,893.2	71.4	1,791.7	1,792.2	2.21	1.56	1.56
8,584.0	90.00	92.20	6,893.2	70.0	1,822.7	1,823.2	2.16	-0.97	-1.94
8,616.0	89.90	91.50	6,893.2	69.0	1,854.7	1,855.2	2.21	-0.31	-2.19
8,648.0	89.70	90.80	6,893.3	68.4	1,886.7	1,887.2	2.28	-0.63	-2.19
8,679.0	90.50	91.50	6,893.2	67.7	1,917.7	1,918.1	3.43	2.58	2.26
8,711.0	90.80	91.30	6,892.9	67.0	1,949.6	1,950.1	1.13	0.94	-0.63
8,742.0	89.80	90.60	6,892.7	66.4	1,980.6	1,981.1	3.94	-3.23	-2.26
8,774.0	88.90	89.90	6,893.1	66.3	2,012.6	2,013.1	3.56	-2.81	-2.19
8,806.0	89.20	90.00	6,893.6	66.3	2,044.6	2,045.1	0.99	0.94	0.31
8,837.0	89.60	91.20	6,893.9	66.0	2,075.6	2,076.1	4.08	1.29	3.87
8,869.0	90.70	92.50	6,893.9	65.0	2,107.6	2,108.1	5.32	3.44	4.06
8,901.0	89.80	89.70	6,893.7	64.4	2,139.6	2,140.1	9.19	-2.81	-8.75
8,932.0	90.10	90.30	6,893.7	64.4	2,170.6	2,171.1	2.16	0.97	1.94
8,964.0	90.50	89.30	6,893.6	64.5	2,202.6	2,203.1	3.37	1.25	-3.13
8,996.0	89.80	88.00	6,893.5	65.2	2,234.6	2,235.1	4.61	-2.19	-4.06
9,027.0	91.20	88.90	6,893.2	66.1	2,265.6	2,266.0	5.37	4.52	2.90
9,059.0	90.60	88.20	6,892.7	66.9	2,297.6	2,298.0	2.88	-1.88	-2.19
9,091.0	91.00	89.00	6,892.3	67.7	2,329.6	2,330.0	2.79	1.25	2.50
9,122.0	91.10	88.70	6,891.7	68.3	2,360.5	2,361.0	1.02	0.32	-0.97
9,154.0	91.20	88.60	6,891.1	69.0	2,392.5	2,393.0	0.44	0.31	-0.31
9,186.0	91.10	87.90	6,890.4	70.0	2,424.5	2,425.0	2.21	-0.31	-2.19
9,217.0	90.90	88.20	6,889.9	71.1	2,455.5	2,456.0	1.16	-0.65	0.97
9,249.0	90.20	87.20	6,889.6	72.4	2,487.5	2,488.0	3.81	-2.19	-3.13
9,281.0	89.40	86.80	6,889.7	74.0	2,519.4	2,519.9	2.80	-2.50	-1.25
9,312.0	91.00	89.20	6,889.6	75.1	2,550.4	2,550.9	9.30	5.16	7.74
9,344.0	91.10	90.40	6,889.0	75.2	2,582.4	2,582.9	3.76	0.31	3.75
9,376.0	91.30	90.40	6,888.3	75.0	2,614.4	2,614.9	0.63	0.63	0.00
9,407.0	91.40	90.30	6,887.6	74.8	2,645.4	2,645.9	0.46	0.32	-0.32

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 240-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (Original Well Elev)
Site:	Maxey 240-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (Original Well Elev)
Well:	Maxey 240-402	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
9,439.0	91.00	90.00	6,886.9	74.7	2,677.4	2,677.9	1.56	-1.25	-0.94
9,471.0	90.90	90.20	6,886.4	74.7	2,709.4	2,709.9	0.70	-0.31	0.63
9,502.0	91.00	90.70	6,885.9	74.4	2,740.3	2,740.9	1.64	0.32	1.61
9,534.0	90.80	91.80	6,885.4	73.7	2,772.3	2,772.8	3.49	-0.63	3.44
9,566.0	91.00	91.30	6,884.9	72.9	2,804.3	2,804.8	1.68	0.63	-1.56
9,597.0	90.50	91.70	6,884.5	72.1	2,835.3	2,835.8	2.07	-1.61	1.29
9,629.0	90.20	92.70	6,884.3	70.8	2,867.3	2,867.8	3.26	-0.94	3.13
9,661.0	90.50	92.90	6,884.1	69.3	2,899.2	2,899.7	1.13	0.94	0.63
9,693.0	91.00	92.90	6,883.6	67.6	2,931.2	2,931.7	1.56	1.56	0.00
9,724.0	90.20	92.50	6,883.3	66.2	2,962.2	2,962.6	2.89	-2.58	-1.29
9,756.0	89.10	92.60	6,883.5	64.8	2,994.1	2,994.6	3.45	-3.44	0.31
9,788.0	89.10	92.10	6,884.0	63.4	3,026.1	3,026.5	1.56	0.00	-1.56
9,819.0	88.70	92.10	6,884.6	62.3	3,057.1	3,057.5	1.29	-1.29	0.00
9,851.0	88.70	91.90	6,885.3	61.2	3,089.0	3,089.4	0.62	0.00	-0.63
9,883.0	88.70	91.90	6,886.1	60.1	3,121.0	3,121.4	0.00	0.00	0.00
9,914.0	88.60	92.10	6,886.8	59.0	3,152.0	3,152.4	0.72	-0.32	0.65
9,946.0	88.60	91.90	6,887.6	57.9	3,184.0	3,184.3	0.62	0.00	-0.63
9,977.0	88.20	91.70	6,888.4	57.0	3,214.9	3,215.3	1.44	-1.29	-0.65
10,009.0	89.60	91.50	6,889.1	56.1	3,246.9	3,247.3	4.42	4.38	-0.63
10,041.0	90.40	90.80	6,889.1	55.4	3,278.9	3,279.3	3.32	2.50	-2.19
10,073.0	90.40	90.90	6,888.8	54.9	3,310.9	3,311.2	0.31	0.00	0.31
10,105.0	90.20	90.50	6,888.7	54.6	3,342.9	3,343.2	1.40	-0.63	-1.25
10,136.0	89.90	90.70	6,888.6	54.2	3,373.9	3,374.2	1.16	-0.97	0.65
10,168.0	89.80	90.10	6,888.7	54.0	3,405.9	3,406.2	1.90	-0.31	-1.88
10,200.0	89.10	89.80	6,889.0	54.0	3,437.9	3,438.2	2.38	-2.19	-0.94
10,231.0	88.60	89.40	6,889.7	54.3	3,468.9	3,469.2	2.07	-1.61	-1.29
10,263.0	88.50	89.30	6,890.5	54.6	3,500.9	3,501.2	0.44	-0.31	-0.31
10,295.0	88.00	88.80	6,891.4	55.1	3,532.9	3,533.2	2.21	-1.56	-1.56
10,326.0	87.80	88.40	6,892.6	55.9	3,563.8	3,564.2	1.44	-0.65	-1.29
10,358.0	87.40	87.80	6,893.9	57.0	3,595.8	3,596.1	2.25	-1.25	-1.88
10,389.0	87.20	87.70	6,895.4	58.2	3,626.7	3,627.1	0.72	-0.65	-0.32
10,421.0	87.50	87.60	6,896.9	59.5	3,658.7	3,659.0	0.99	0.94	-0.31
10,453.0	87.80	87.70	6,898.2	60.8	3,690.6	3,691.0	0.99	0.94	0.31
10,484.0	88.00	87.10	6,899.3	62.2	3,721.6	3,721.9	2.04	0.65	-1.94
10,516.0	88.00	87.10	6,900.4	63.8	3,753.5	3,753.9	0.00	0.00	0.00
10,547.0	88.10	87.10	6,901.5	65.4	3,784.4	3,784.8	0.32	0.32	0.00
10,579.0	88.30	87.20	6,902.5	67.0	3,816.4	3,816.8	0.70	0.63	0.31
10,611.0	88.50	87.40	6,903.4	68.5	3,848.3	3,848.8	0.88	0.63	0.63
10,642.0	88.50	87.50	6,904.2	69.9	3,879.3	3,879.7	0.32	0.00	0.32
10,674.0	89.00	87.80	6,904.9	71.2	3,911.3	3,911.7	1.82	1.56	0.94
10,705.0	88.90	87.90	6,905.5	72.3	3,942.2	3,942.7	0.46	-0.32	0.32
10,737.0	88.40	88.40	6,906.2	73.4	3,974.2	3,974.7	2.21	-1.56	1.56
10,769.0	87.70	89.30	6,907.3	74.0	4,006.2	4,006.6	3.56	-2.19	2.81
10,800.0	87.80	89.70	6,908.5	74.3	4,037.2	4,037.6	1.33	0.32	1.29
10,832.0	87.80	90.00	6,909.7	74.4	4,069.1	4,069.6	0.94	0.00	0.94
10,863.0	87.80	89.90	6,910.9	74.4	4,100.1	4,100.6	0.32	0.00	-0.32
10,895.0	87.60	90.00	6,912.2	74.4	4,132.1	4,132.6	0.70	-0.63	0.31
10,927.0	87.40	90.20	6,913.6	74.4	4,164.1	4,164.5	0.88	-0.63	0.63
10,958.0	87.30	90.30	6,915.0	74.2	4,195.0	4,195.5	0.46	-0.32	0.32
10,990.0	87.30	90.20	6,916.6	74.1	4,227.0	4,227.4	0.31	0.00	-0.31
11,022.0	87.50	90.90	6,918.0	73.8	4,258.9	4,259.4	2.27	0.63	2.19
11,053.0	88.10	91.00	6,919.2	73.3	4,289.9	4,290.4	1.96	1.94	0.32
11,085.0	88.40	91.40	6,920.2	72.6	4,321.9	4,322.3	1.56	0.94	1.25
11,116.0	88.70	91.70	6,921.0	71.8	4,352.9	4,353.3	1.37	0.97	0.97

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24O-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4651.0ft (Original Well Elev)
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4651.0ft (Original Well Elev)
Well:	Maxey 24O-402	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

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)
11,148.0	89.50	91.40	6,921.5	70.9	4,384.9	4,385.3	2.67	2.50	-0.94
11,180.0	90.00	91.50	6,921.6	70.1	4,416.8	4,417.3	1.59	1.56	0.31
11,200.0	90.20	91.50	6,921.6	69.6	4,436.8	4,437.3	1.00	1.00	0.00
11,254.0	90.20	91.50	6,921.4	68.2	4,490.8	4,491.2	0.00	0.00	0.00
BHL 2406'FSL & 2081'FWL, Sec.19									

Checked By: _____	Approved By: _____	Date: _____
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