



PETROLEUM DEVELOPMENT CORP Weld County CO

SEC.24-T5N-R65W

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

Maxey 24P-402

Wellbore #1

Survey: Survey #1

Standard Survey Report

19 May, 2014

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4652.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4652.0ft (RKB - 15')
Well:	Maxey 24P-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 24O-HZ Pad Sec.24-T5N-R65W			
Site Position:		Northing:	1,383,922.11 ft	Latitude:	40.383860
From:	Lat/Long	Easting:	3,247,656.08 ft	Longitude:	-104.610980
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.57 °

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

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/6/2014	8.39	66.96	52,836

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	101.57	

Survey Program	Date 5/19/2014				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
146.0	11,303.0	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
146.0	0.40	100.20	146.0	-0.1	0.5	0.5	0.27	0.27	0.00
238.0	0.70	181.50	238.0	-0.7	0.8	0.9	0.82	0.33	88.37
330.0	1.20	204.60	330.0	-2.1	0.4	0.8	0.67	0.54	25.11
421.0	2.40	195.30	420.9	-4.9	-0.5	0.5	1.35	1.32	-10.22
512.0	3.80	186.20	511.8	-9.7	-1.3	0.6	1.63	1.54	-10.00
603.0	5.10	195.50	602.5	-16.6	-2.7	0.6	1.63	1.43	10.22
695.0	6.00	205.90	694.1	-24.8	-5.9	-0.8	1.46	0.98	11.30
786.0	7.10	201.90	784.5	-34.3	-10.1	-3.0	1.31	1.21	-4.40
877.0	7.00	204.10	874.8	-44.6	-14.5	-5.2	0.32	-0.11	2.42
974.0	7.50	207.80	971.0	-55.6	-19.8	-8.3	0.71	0.52	3.81
1,065.0	8.60	211.80	1,061.1	-66.7	-26.2	-12.3	1.36	1.21	4.40

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Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4652.0ft (RKB - 15')
Well:	Maxey 24P-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)
1,157.0	9.70	215.80	1,152.0	-78.8	-34.4	-17.9	1.38	1.20	4.35
1,252.0	10.70	213.30	1,245.5	-92.7	-43.9	-24.4	1.15	1.05	-2.63
1,347.0	11.60	209.50	1,338.7	-108.3	-53.4	-30.6	1.22	0.95	-4.00
1,442.0	11.40	202.50	1,431.8	-125.3	-61.7	-35.3	1.48	-0.21	-7.37
1,537.0	10.70	193.70	1,525.0	-142.6	-67.4	-37.4	1.92	-0.74	-9.26
1,632.0	10.50	188.30	1,618.4	-159.7	-70.7	-37.3	1.07	-0.21	-5.68
1,727.0	10.60	183.70	1,711.8	-177.0	-72.6	-35.6	0.89	0.11	-4.84
1,822.0	10.60	182.10	1,805.2	-194.4	-73.4	-32.9	0.31	0.00	-1.68
1,917.0	10.70	181.20	1,898.5	-212.0	-73.9	-29.9	0.20	0.11	-0.95
2,011.0	10.10	177.20	1,991.0	-228.9	-73.7	-26.3	1.00	-0.64	-4.26
2,106.0	10.50	178.10	2,084.5	-245.9	-73.0	-22.2	0.45	0.42	0.95
2,202.0	10.10	179.30	2,178.9	-263.1	-72.6	-18.4	0.47	-0.42	1.25
2,297.0	10.33	179.61	2,272.4	-279.9	-72.5	-14.8	0.25	0.24	0.33
2,392.0	11.60	173.00	2,365.7	-297.9	-71.3	-10.0	1.88	1.34	-6.96
2,486.0	10.90	169.10	2,457.9	-316.0	-68.4	-3.6	1.10	-0.74	-4.15
2,580.0	10.90	168.40	2,550.2	-333.5	-65.0	3.3	0.14	0.00	-0.74
2,676.0	11.50	170.50	2,644.3	-351.8	-61.6	10.3	0.76	0.63	2.19
2,771.0	11.10	174.30	2,737.5	-370.2	-59.1	16.4	0.89	-0.42	4.00
2,866.0	10.30	179.80	2,830.9	-387.8	-58.1	20.9	1.36	-0.84	5.79
2,961.0	10.00	180.30	2,924.4	-404.6	-58.2	24.2	0.33	-0.32	0.53
3,056.0	9.41	181.30	3,018.0	-420.6	-58.4	27.2	0.65	-0.62	1.05
3,151.0	7.00	175.80	3,112.0	-434.1	-58.1	30.2	2.67	-2.54	-5.79
3,247.0	6.60	181.30	3,207.4	-445.5	-57.8	32.7	0.80	-0.42	5.73
3,342.0	7.30	185.60	3,301.7	-456.9	-58.5	34.3	0.92	0.74	4.53
3,437.0	8.00	187.00	3,395.8	-469.5	-59.9	35.5	0.76	0.74	1.47
3,532.0	8.80	181.50	3,489.8	-483.3	-60.9	37.3	1.19	0.84	-5.79
3,627.0	11.50	184.20	3,583.3	-500.0	-61.8	39.8	2.89	2.84	2.84
3,722.0	12.70	184.60	3,676.2	-519.9	-63.3	42.3	1.27	1.26	0.42
3,818.0	11.80	183.90	3,770.0	-540.2	-64.9	44.9	0.95	-0.94	-0.73
3,913.0	11.80	183.90	3,863.0	-559.6	-66.2	47.4	0.00	0.00	0.00
4,007.0	11.20	184.90	3,955.1	-578.3	-67.6	49.8	0.67	-0.64	1.06
4,102.0	11.50	186.90	4,048.2	-596.9	-69.5	51.6	0.52	0.32	2.11
4,198.0	11.60	185.40	4,142.3	-616.0	-71.6	53.5	0.33	0.10	-1.56
4,292.0	11.30	184.60	4,234.4	-634.6	-73.2	55.6	0.36	-0.32	-0.85
4,387.0	11.60	184.90	4,327.5	-653.4	-74.8	57.8	0.32	0.32	0.32
4,482.0	12.10	181.70	4,420.5	-672.8	-75.9	60.6	0.87	0.53	-3.37
4,576.0	10.70	182.80	4,512.7	-691.4	-76.6	63.7	1.51	-1.49	1.17
4,671.0	10.20	187.80	4,606.1	-708.5	-78.2	65.6	1.09	-0.53	5.26
4,766.0	10.50	188.50	4,699.5	-725.4	-80.6	66.6	0.34	0.32	0.74
4,862.0	10.90	186.90	4,793.9	-743.1	-83.0	67.8	0.52	0.42	-1.67
4,957.0	10.30	186.20	4,887.3	-760.5	-85.0	69.3	0.65	-0.63	-0.74
5,052.0	11.00	183.20	4,980.6	-777.9	-86.4	71.4	0.94	0.74	-3.16
5,147.0	9.80	182.10	5,074.1	-795.1	-87.2	74.1	1.28	-1.26	-1.16
5,242.0	9.80	184.30	5,167.7	-811.2	-88.1	76.4	0.39	0.00	2.32
5,337.0	9.90	183.90	5,261.3	-827.4	-89.3	78.6	0.13	0.11	-0.42
5,432.0	9.70	186.40	5,354.9	-843.5	-90.7	80.4	0.49	-0.21	2.63
5,526.0	9.10	181.10	5,447.6	-858.8	-91.8	82.4	1.12	-0.64	-5.64
5,621.0	8.10	177.00	5,541.6	-873.0	-91.5	85.5	1.23	-1.05	-4.32
5,716.0	6.90	170.00	5,635.7	-885.3	-90.2	89.3	1.59	-1.26	-7.37
5,811.0	6.60	175.70	5,730.1	-896.4	-88.8	92.9	0.77	-0.32	6.00
5,907.0	4.50	181.60	5,825.6	-905.7	-88.5	95.0	2.26	-2.19	6.15
6,001.0	2.60	164.80	5,919.4	-911.4	-88.0	96.6	2.28	-2.02	-17.87
6,097.0	3.40	157.80	6,015.3	-916.1	-86.4	99.2	0.92	0.83	-7.29

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6,129.0	2.10	135.00	6,047.3	-917.4	-85.6	100.2	5.23	-4.06	-71.25
6,160.0	3.10	103.00	6,078.2	-918.0	-84.4	101.5	5.57	3.23	-103.23
6,192.0	5.10	93.70	6,110.2	-918.3	-82.1	103.8	6.57	6.25	-29.06
6,223.0	7.40	90.80	6,141.0	-918.4	-78.8	107.1	7.49	7.42	-9.35
6,255.0	9.50	90.20	6,172.6	-918.5	-74.1	111.7	6.57	6.56	-1.88
6,287.0	11.40	90.40	6,204.1	-918.5	-68.3	117.4	5.94	5.94	0.63
6,318.0	13.20	90.80	6,234.4	-918.6	-61.7	123.9	5.81	5.81	1.29
6,350.0	14.90	91.40	6,265.4	-918.7	-53.9	131.5	5.33	5.31	1.88
6,381.0	16.60	91.60	6,295.3	-918.9	-45.5	139.8	5.49	5.48	0.65
6,413.0	18.30	91.40	6,325.8	-919.2	-35.9	149.3	5.32	5.31	-0.63
6,445.0	20.40	91.60	6,356.0	-919.5	-25.3	159.7	6.57	6.56	0.63
6,476.0	22.50	91.40	6,384.8	-919.8	-14.0	170.9	6.78	6.77	-0.65
6,508.0	24.60	90.60	6,414.2	-920.0	-1.2	183.4	6.64	6.56	-2.50
6,539.0	26.70	89.40	6,442.1	-920.0	12.2	196.6	6.98	6.77	-3.87
6,571.0	28.80	88.40	6,470.4	-919.7	27.1	211.1	6.72	6.56	-3.13
6,603.0	31.00	88.50	6,498.2	-919.3	43.1	226.7	6.88	6.88	0.31
6,635.0	33.10	89.20	6,525.3	-918.9	60.1	243.2	6.66	6.56	2.19
6,666.0	35.30	89.30	6,550.9	-918.7	77.5	260.2	7.10	7.10	0.32
6,698.0	37.60	90.10	6,576.7	-918.6	96.5	278.8	7.34	7.19	2.50
6,729.0	40.00	90.30	6,600.8	-918.7	115.9	297.9	7.75	7.74	0.65
6,761.0	42.20	89.70	6,624.9	-918.7	136.9	318.5	6.98	6.88	-1.88
6,793.0	44.50	89.50	6,648.2	-918.5	158.9	340.0	7.20	7.19	-0.63
6,824.0	46.90	89.40	6,669.8	-918.3	181.1	361.7	7.75	7.74	-0.32
6,856.0	48.90	89.00	6,691.3	-918.0	204.8	384.9	6.32	6.25	-1.25
6,888.0	51.60	88.50	6,711.8	-917.4	229.4	408.8	8.52	8.44	-1.56
6,920.0	54.90	88.10	6,730.9	-916.7	255.1	433.8	10.36	10.31	-1.25
6,951.0	57.50	87.60	6,748.1	-915.7	280.8	458.8	8.49	8.39	-1.61
6,983.0	59.90	87.10	6,764.8	-914.4	308.1	485.3	7.62	7.50	-1.56
7,015.0	61.80	86.50	6,780.4	-912.9	336.0	512.3	6.16	5.94	-1.88
7,046.0	63.50	86.30	6,794.6	-911.1	363.5	538.9	5.51	5.48	-0.65
7,078.0	66.00	86.80	6,808.2	-909.4	392.4	566.9	7.94	7.81	1.56
7,110.0	67.80	87.80	6,820.8	-908.0	421.8	595.4	6.32	5.63	3.13
7,141.0	69.50	88.60	6,832.1	-907.1	450.6	623.5	5.99	5.48	2.58
7,173.0	70.90	89.20	6,842.9	-906.5	480.7	652.9	4.72	4.38	1.88
7,204.0	72.60	89.70	6,852.6	-906.3	510.2	681.6	5.69	5.48	1.61
7,236.0	74.20	89.90	6,861.8	-906.1	540.8	711.7	5.04	5.00	0.63
7,267.0	75.90	90.10	6,869.8	-906.1	570.8	741.0	5.52	5.48	0.65
7,299.0	77.80	90.20	6,877.1	-906.2	601.9	771.5	5.95	5.94	0.31
7,331.0	79.60	90.70	6,883.3	-906.5	633.3	802.3	5.83	5.63	1.56
7,362.0	81.00	91.00	6,888.5	-906.9	663.9	832.4	4.62	4.52	0.97
7,394.0	82.50	91.40	6,893.1	-907.6	695.5	863.5	4.85	4.69	1.25
7,479.0	85.90	89.79	6,901.7	-908.5	780.1	946.5	4.42	4.00	-1.89
7,509.0	85.80	90.00	6,903.9	-908.4	810.0	975.8	0.77	-0.33	0.70
7,540.0	86.40	89.90	6,906.0	-908.4	840.9	1,006.1	1.96	1.94	-0.32
7,570.0	86.90	89.30	6,907.8	-908.2	870.9	1,035.4	2.60	1.67	-2.00
7,600.0	87.70	89.40	6,909.2	-907.8	900.8	1,064.7	2.69	2.67	0.33
7,631.0	88.60	89.40	6,910.2	-907.5	931.8	1,095.0	2.90	2.90	0.00
7,662.0	89.90	89.30	6,910.6	-907.2	962.8	1,125.3	4.21	4.19	-0.32
7,692.0	90.80	89.50	6,910.4	-906.8	992.8	1,154.6	3.07	3.00	0.67
7,723.0	91.00	89.30	6,909.9	-906.5	1,023.8	1,184.9	0.91	0.65	-0.65
7,753.0	90.50	89.10	6,909.5	-906.1	1,053.8	1,214.2	1.80	-1.67	-0.67
7,784.0	89.80	88.50	6,909.4	-905.4	1,084.8	1,244.4	2.97	-2.26	-1.94
7,814.0	89.60	88.40	6,909.6	-904.6	1,114.8	1,273.6	0.75	-0.67	-0.33
7,845.0	90.30	89.00	6,909.6	-903.9	1,145.8	1,303.9	2.97	2.26	1.94

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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)
7,875.0	90.60	89.40	6,909.4	-903.5	1,175.8	1,333.2	1.67	1.00	1.33
7,906.0	91.70	89.60	6,908.8	-903.2	1,206.8	1,363.5	3.61	3.55	0.65
7,936.0	92.10	89.50	6,907.8	-903.0	1,236.8	1,392.8	1.37	1.33	-0.33
7,967.0	92.00	89.30	6,906.7	-902.7	1,267.7	1,423.1	0.72	-0.32	-0.65
7,997.0	90.50	88.20	6,906.0	-902.0	1,297.7	1,452.3	6.20	-5.00	-3.67
8,028.0	89.40	87.70	6,906.0	-900.9	1,328.7	1,482.4	3.90	-3.55	-1.61
8,058.0	88.60	88.20	6,906.6	-899.8	1,358.7	1,511.6	3.14	-2.67	1.67
8,089.0	88.40	88.30	6,907.4	-898.9	1,389.6	1,541.7	0.72	-0.65	0.32
8,119.0	88.30	88.00	6,908.2	-897.9	1,419.6	1,570.9	1.05	-0.33	-1.00
8,149.0	88.40	87.80	6,909.1	-896.8	1,449.6	1,600.1	0.75	0.33	-0.67
8,180.0	88.40	88.30	6,910.0	-895.8	1,480.6	1,630.2	1.61	0.00	1.61
8,210.0	88.70	88.00	6,910.7	-894.8	1,510.5	1,659.4	1.41	1.00	-1.00
8,240.0	89.10	88.20	6,911.3	-893.8	1,540.5	1,688.5	1.49	1.33	0.67
8,272.0	89.60	88.30	6,911.7	-892.8	1,572.5	1,719.7	1.59	1.56	0.31
8,303.0	89.90	88.40	6,911.8	-891.9	1,603.5	1,749.8	1.02	0.97	0.32
8,335.0	89.80	88.30	6,911.9	-891.0	1,635.5	1,781.0	0.44	-0.31	-0.31
8,367.0	90.00	88.40	6,911.9	-890.1	1,667.4	1,812.1	0.70	0.63	0.31
8,398.0	89.90	88.40	6,912.0	-889.2	1,698.4	1,842.3	0.32	-0.32	0.00
8,430.0	89.60	88.10	6,912.1	-888.3	1,730.4	1,873.5	1.33	-0.94	-0.94
8,461.0	89.50	87.80	6,912.3	-887.2	1,761.4	1,903.6	1.02	-0.32	-0.97
8,493.0	89.40	87.90	6,912.6	-886.0	1,793.4	1,934.7	0.44	-0.31	0.31
8,525.0	88.60	87.90	6,913.2	-884.8	1,825.4	1,965.8	2.50	-2.50	0.00
8,557.0	88.70	88.70	6,914.0	-883.8	1,857.3	1,996.9	2.52	0.31	2.50
8,588.0	89.10	89.00	6,914.6	-883.2	1,888.3	2,027.1	1.61	1.29	0.97
8,620.0	88.30	88.60	6,915.3	-882.5	1,920.3	2,058.3	2.79	-2.50	-1.25
8,652.0	88.00	88.90	6,916.3	-881.8	1,952.3	2,089.5	1.33	-0.94	0.94
8,683.0	87.60	88.60	6,917.5	-881.2	1,983.2	2,119.7	1.61	-1.29	-0.97
8,714.0	87.70	88.50	6,918.8	-880.4	2,014.2	2,149.9	0.46	0.32	-0.32
8,746.0	88.00	88.90	6,920.0	-879.7	2,046.2	2,181.1	1.56	0.94	1.25
8,777.0	88.60	89.20	6,920.9	-879.1	2,077.2	2,211.3	2.16	1.94	0.97
8,809.0	89.00	89.70	6,921.6	-878.8	2,109.2	2,242.6	2.00	1.25	1.56
8,840.0	90.00	90.20	6,921.8	-878.8	2,140.1	2,273.0	3.61	3.23	1.61
8,872.0	90.40	90.40	6,921.7	-879.0	2,172.1	2,304.3	1.40	1.25	0.63
8,905.0	90.50	90.60	6,921.5	-879.3	2,205.1	2,336.7	0.68	0.30	0.61
8,936.0	90.90	91.30	6,921.1	-879.8	2,236.1	2,367.2	2.60	1.29	2.26
8,968.0	90.20	91.20	6,920.8	-880.5	2,268.1	2,398.7	2.21	-2.19	-0.31
8,999.0	90.50	91.40	6,920.6	-881.2	2,299.1	2,429.2	1.16	0.97	0.65
9,031.0	91.00	91.90	6,920.2	-882.1	2,331.1	2,460.7	2.21	1.56	1.56
9,063.0	90.70	91.70	6,919.7	-883.1	2,363.1	2,492.2	1.13	-0.94	-0.63
9,094.0	91.20	92.00	6,919.2	-884.1	2,394.1	2,522.8	1.88	1.61	0.97
9,126.0	91.00	92.10	6,918.6	-885.3	2,426.0	2,554.3	0.70	-0.63	0.31
9,158.0	89.90	92.10	6,918.3	-886.4	2,458.0	2,585.9	3.44	-3.44	0.00
9,189.0	89.50	92.70	6,918.5	-887.7	2,489.0	2,616.5	2.33	-1.29	1.94
9,221.0	90.10	92.90	6,918.6	-889.3	2,520.9	2,648.1	1.98	1.88	0.63
9,253.0	90.80	92.70	6,918.3	-890.8	2,552.9	2,679.7	2.28	2.19	-0.63
9,284.0	91.30	92.90	6,917.8	-892.4	2,583.9	2,710.4	1.74	1.61	0.65
9,316.0	91.30	92.80	6,917.0	-894.0	2,615.8	2,742.0	0.31	0.00	-0.31
9,348.0	91.70	92.40	6,916.2	-895.4	2,647.8	2,773.6	1.77	1.25	-1.25
9,379.0	91.70	92.60	6,915.3	-896.8	2,678.7	2,804.2	0.64	0.00	0.65
9,411.0	91.30	92.70	6,914.5	-898.2	2,710.7	2,835.8	1.29	-1.25	0.31
9,443.0	91.30	92.10	6,913.7	-899.6	2,742.7	2,867.4	1.87	0.00	-1.88
9,475.0	89.60	91.20	6,913.5	-900.5	2,774.6	2,898.9	6.01	-5.31	-2.81
9,506.0	88.70	90.70	6,913.9	-901.0	2,805.6	2,929.4	3.32	-2.90	-1.61

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4652.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4652.0ft (RKB - 15')
Well:	Maxey 24P-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)
9,538.0	88.70	90.70	6,914.7	-901.4	2,837.6	2,960.8	0.00	0.00	0.00
9,570.0	88.90	90.80	6,915.3	-901.8	2,869.6	2,992.2	0.70	0.63	0.31
9,601.0	89.10	91.20	6,915.9	-902.4	2,900.6	3,022.7	1.44	0.65	1.29
9,632.0	89.50	91.30	6,916.3	-903.0	2,931.6	3,053.2	1.33	1.29	0.32
9,664.0	89.40	90.90	6,916.6	-903.7	2,963.6	3,084.6	1.29	-0.31	-1.25
9,696.0	89.30	90.60	6,916.9	-904.1	2,995.6	3,116.1	0.99	-0.31	-0.94
9,728.0	89.20	90.60	6,917.3	-904.4	3,027.6	3,147.5	0.31	-0.31	0.00
9,759.0	89.30	91.00	6,917.7	-904.8	3,058.6	3,177.9	1.33	0.32	1.29
9,791.0	89.30	91.20	6,918.1	-905.5	3,090.6	3,209.4	0.62	0.00	0.63
9,823.0	89.30	90.90	6,918.5	-906.0	3,122.5	3,240.8	0.94	0.00	-0.94
9,854.0	89.70	91.10	6,918.8	-906.6	3,153.5	3,271.3	1.44	1.29	0.65
9,886.0	89.70	90.90	6,919.0	-907.1	3,185.5	3,302.8	0.62	0.00	-0.63
9,918.0	90.10	91.00	6,919.0	-907.7	3,217.5	3,334.2	1.29	1.25	0.31
9,950.0	90.50	90.80	6,918.9	-908.2	3,249.5	3,365.7	1.40	1.25	-0.63
9,981.0	90.70	90.80	6,918.5	-908.6	3,280.5	3,396.1	0.65	0.65	0.00
10,013.0	90.90	91.30	6,918.1	-909.2	3,312.5	3,427.6	1.68	0.63	1.56
10,044.0	90.70	91.00	6,917.6	-909.8	3,343.5	3,458.1	1.16	-0.65	-0.97
10,076.0	90.90	90.80	6,917.2	-910.3	3,375.5	3,489.5	0.88	0.63	-0.63
10,108.0	91.00	91.40	6,916.7	-910.9	3,407.5	3,521.0	1.90	0.31	1.88
10,140.0	91.30	91.40	6,916.0	-911.7	3,439.5	3,552.5	0.94	0.94	0.00
10,171.0	91.40	91.30	6,915.3	-912.4	3,470.5	3,583.0	0.46	0.32	-0.32
10,203.0	91.50	91.40	6,914.5	-913.2	3,502.4	3,614.4	0.44	0.31	0.31
10,235.0	92.10	91.40	6,913.5	-914.0	3,534.4	3,645.9	1.88	1.88	0.00
10,266.0	92.10	91.30	6,912.3	-914.7	3,565.4	3,676.4	0.32	0.00	-0.32
10,298.0	91.90	90.90	6,911.2	-915.3	3,597.4	3,707.9	1.40	-0.63	-1.25
10,330.0	91.30	90.80	6,910.3	-915.8	3,629.3	3,739.3	1.90	-1.88	-0.31
10,361.0	91.30	90.70	6,909.6	-916.2	3,660.3	3,769.7	0.32	0.00	-0.32
10,393.0	91.30	90.80	6,908.9	-916.6	3,692.3	3,801.1	0.31	0.00	0.31
10,425.0	91.70	91.40	6,908.1	-917.2	3,724.3	3,832.6	2.25	1.25	1.88
10,456.0	92.30	91.30	6,907.0	-918.0	3,755.3	3,863.1	1.96	1.94	-0.32
10,488.0	92.30	91.20	6,905.7	-918.7	3,787.2	3,894.5	0.31	0.00	-0.31
10,520.0	92.60	91.50	6,904.3	-919.4	3,819.2	3,926.0	1.33	0.94	0.94
10,551.0	92.70	91.10	6,902.9	-920.1	3,850.2	3,956.5	1.33	0.32	-1.29
10,583.0	92.70	90.90	6,901.4	-920.7	3,882.1	3,987.9	0.62	0.00	-0.63
10,614.0	93.50	91.00	6,899.7	-921.2	3,913.1	4,018.3	2.60	2.58	0.32
10,646.0	94.50	90.70	6,897.5	-921.7	3,945.0	4,049.7	3.26	3.13	-0.94
10,678.0	95.10	90.50	6,894.8	-922.0	3,976.9	4,081.0	1.98	1.88	-0.63
10,709.0	95.20	90.20	6,892.0	-922.2	4,007.7	4,111.3	1.02	0.32	-0.97
10,741.0	94.80	90.20	6,889.2	-922.3	4,039.6	4,142.5	1.25	-1.25	0.00
10,773.0	94.70	90.70	6,886.6	-922.5	4,071.5	4,173.8	1.59	-0.31	1.56
10,804.0	94.10	90.30	6,884.2	-922.8	4,102.4	4,204.2	2.32	-1.94	-1.29
10,836.0	93.80	90.50	6,882.0	-923.0	4,134.3	4,235.5	1.13	-0.94	0.63
10,868.0	93.10	90.10	6,880.1	-923.2	4,166.3	4,266.8	2.52	-2.19	-1.25
10,899.0	92.40	90.40	6,878.6	-923.3	4,197.3	4,297.2	2.46	-2.26	0.97
10,931.0	91.60	90.30	6,877.5	-923.5	4,229.2	4,328.5	2.52	-2.50	-0.31
10,963.0	91.30	90.30	6,876.7	-923.7	4,261.2	4,359.9	0.94	-0.94	0.00
10,994.0	91.30	90.60	6,876.0	-923.9	4,292.2	4,390.3	0.97	0.00	0.97
11,026.0	90.90	90.60	6,875.3	-924.3	4,324.2	4,421.7	1.25	-1.25	0.00
11,058.0	90.60	90.40	6,874.9	-924.6	4,356.2	4,453.1	1.13	-0.94	-0.63
11,090.0	90.20	90.10	6,874.7	-924.7	4,388.2	4,484.5	1.56	-1.25	-0.94
11,122.0	89.00	89.70	6,874.9	-924.6	4,420.2	4,515.8	3.95	-3.75	-1.25
11,154.0	88.60	89.70	6,875.6	-924.5	4,452.2	4,547.1	1.25	-1.25	0.00
11,185.0	89.30	90.00	6,876.2	-924.4	4,483.2	4,577.5	2.46	2.26	0.97

Company:	PETROLEUM DEVELOPMENT CORP Weld County CO	Local Co-ordinate Reference:	Well Maxey 24P-402
Project:	SEC.24-T5N-R65W	TVD Reference:	WELL @ 4652.0ft (RKB - 15')
Site:	Maxey 24O-HZ Pad Sec.24-T5N-R65W	MD Reference:	WELL @ 4652.0ft (RKB - 15')
Well:	Maxey 24P-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)
11,217.0	88.60	89.00	6,876.8	-924.1	4,515.2	4,608.8	3.81	-2.19	-3.13
11,249.0	89.90	91.10	6,877.2	-924.1	4,547.2	4,640.1	7.72	4.06	6.56
11,303.0	89.90	91.10	6,877.3	-925.2	4,601.2	4,693.2	0.00	0.00	0.00
BHL 1428'FSL & 2081'FWL, Sec.19									

Checked By: _____	Approved By: _____	Date: _____
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