



PRODIRECTIONAL

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DISTRICT II-ARTESIA O.C.D.



Patriot No. 8 (SWD) 30-015-45301

Eddy County, NM

June 14, 2019

Job No. LNM5208219

Certified Report

ORIGINAL



PRO DIRECTIONAL

Survey Certification Letter

June 14, 2019



Operator Name: Matador Resources
Well Name: Patriot SWD No. 8
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 274
Job Number: LNM5208219

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

Surveyor	Surveyed Depths	Projection to Bit	Dates Performed	Type of Survey
ProDirectional	458' MD – 13,887' MD	13,944' MD	04/26/19 – 05/17/19	MWD-OWSG

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

850 Conroe Park West Drive | Conroe, TX 77303 | Phone: 936.441.7266

prodirectional.com

The Standard of Excellence in Directional Supervision



Matador Resources

Eddy County, NM

Patriot SWD(Rustler Breaks)

No. 8

OH

Survey: ProDirectional

Survey Report

14 June, 2019





ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 8
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3165.50usft
Site:	Patriot SWD(Rustler Breaks)	MD Reference:	Well @ 3165.50usft
Well:	No. 8	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD	Database:	WellPlanner1

Project:	Eddy County, NM (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Patriot SWD(Rustler Breaks)				
Site Position:		Northing:	477,479.70 usft	Latitude:	32.312591
From:	Map	Easting:	583,380.30 usft	Longitude:	-104.197242
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.07 °

Well:	No. 8, LNM5208219					
Well Position	+N/-S	0.00 usft	Northing:	477,479.70 usft	Latitude:	32.312591
	+E/-W	0.00 usft	Easting:	583,380.30 usft	Longitude:	-104.197242
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,137.00 usft	

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	4/24/2019	7.23	60.00	47,896.40

Design:	Gyro-MWD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	0.00	



ProDirectional
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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD	Database:	WellPlanner1

Survey Program		Date 6/14/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
61.61	408.00	Survey #1 (OH)	GYRO-NS-CT	OWSG XYZ Accel with XY Static and Continuous Gyro	
458.00	13,944.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HRGM	

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	477,479.70	583,380.30
61.61	0.76	149.52	61.61	-0.35	-0.35	0.21	0.41	149.52	477,479.35	583,380.51
156.08	1.51	135.83	156.06	-1.78	-1.78	1.39	2.26	142.04	477,477.92	583,381.69
250.55	1.97	139.80	250.49	-3.92	-3.92	3.31	5.13	139.83	477,475.78	583,383.61
345.02	2.28	136.07	344.89	-6.51	-6.51	5.66	8.63	139.00	477,473.19	583,385.96
408.00	1.96	134.93	407.83	-8.17	-8.17	7.29	10.95	138.27	477,471.53	583,387.59
458.00	2.30	138.00	457.79	-9.52	-9.52	8.57	12.81	138.02	477,470.18	583,388.87
Pro MWD First Survey: 458' MD										
519.00	2.30	143.50	518.74	-11.42	-11.42	10.11	15.25	138.46	477,468.28	583,390.41
611.00	1.00	154.40	610.70	-13.63	-13.63	11.56	17.87	139.69	477,466.07	583,391.86
704.00	1.00	295.30	703.70	-14.01	-14.01	11.18	17.92	141.42	477,465.69	583,391.48
796.00	2.20	314.80	795.66	-12.42	-12.42	9.20	15.46	143.48	477,467.28	583,389.50
888.00	2.80	324.20	887.57	-9.36	-9.36	6.63	11.47	144.68	477,470.34	583,386.93
980.00	2.40	322.50	979.48	-6.01	-6.01	4.14	7.30	145.40	477,473.69	583,384.44
1,073.00	2.20	326.30	1,072.40	-2.98	-2.98	1.97	3.57	146.52	477,476.72	583,382.27
1,165.00	1.90	332.60	1,164.34	-0.15	-0.15	0.29	0.32	118.06	477,479.55	583,380.59
1,256.00	1.10	348.10	1,255.31	2.04	2.04	-0.59	2.12	343.92	477,481.74	583,379.71
1,352.00	0.80	35.60	1,351.30	3.49	3.49	-0.39	3.51	353.65	477,483.19	583,379.91
1,447.00	0.90	42.00	1,446.29	4.58	4.58	0.50	4.61	6.19	477,484.28	583,380.80
1,543.00	1.10	46.40	1,542.28	5.78	5.78	1.67	6.01	16.11	477,485.48	583,381.97
1,639.00	1.20	57.60	1,638.26	6.95	6.95	3.18	7.65	24.61	477,486.65	583,383.48



ProDirectional
Survey Report



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Well:	No. 8	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD	Database:	WellPlanner1

Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
1,733.00	1.70	67.90	1,732.23	8.00	8.00	5.31	9.60	33.55	477,487.70	583,385.61
1,836.00	1.90	69.50	1,835.18	9.18	9.18	8.32	12.39	42.21	477,488.88	583,388.62
1,920.00	1.20	71.60	1,919.14	9.94	9.94	10.46	14.43	46.46	477,489.64	583,390.76
2,007.00	0.80	55.40	2,006.13	10.57	10.57	11.83	15.86	48.20	477,490.27	583,392.13
2,102.00	0.60	40.00	2,101.12	11.33	11.33	12.69	17.01	48.24	477,491.03	583,392.99
2,197.00	0.50	54.50	2,196.12	11.95	11.95	13.35	17.92	48.16	477,491.65	583,393.65
2,292.00	0.50	64.50	2,291.12	12.37	12.37	14.06	18.73	48.65	477,492.07	583,394.36
2,388.00	0.20	65.50	2,387.11	12.62	12.62	14.59	19.29	49.14	477,492.32	583,394.89
2,483.00	0.30	79.70	2,482.11	12.74	12.74	14.99	19.67	49.64	477,492.44	583,395.29
2,578.00	0.30	58.30	2,577.11	12.91	12.91	15.44	20.13	50.10	477,492.61	583,395.74
2,673.00	0.20	44.80	2,672.11	13.16	13.16	15.77	20.54	50.16	477,492.86	583,396.07
2,769.00	0.20	38.60	2,768.11	13.41	13.41	15.99	20.87	50.02	477,493.11	583,396.29
2,863.00	0.30	37.80	2,862.11	13.73	13.73	16.25	21.27	49.80	477,493.43	583,396.55
2,959.00	0.30	6.00	2,958.11	14.18	14.18	16.43	21.70	49.20	477,493.88	583,396.73
3,054.00	0.30	2.80	3,053.11	14.68	14.68	16.47	22.06	48.29	477,494.38	583,396.77
3,150.00	0.50	4.00	3,149.10	15.35	15.35	16.51	22.54	47.09	477,495.05	583,396.81
3,245.00	0.70	2.50	3,244.10	16.34	16.34	16.56	23.26	45.39	477,496.04	583,396.86
3,340.00	0.70	356.60	3,339.09	17.50	17.50	16.55	24.09	43.41	477,497.20	583,396.85
3,435.00	0.60	343.60	3,434.09	18.55	18.55	16.38	24.75	41.43	477,498.25	583,396.68
3,530.00	0.80	331.00	3,529.08	19.61	19.61	15.92	25.26	39.06	477,499.31	583,396.22
3,624.00	0.80	316.50	3,623.07	20.66	20.66	15.15	25.62	36.24	477,500.36	583,395.45
3,720.00	1.30	277.30	3,719.05	21.29	21.29	13.60	25.26	32.58	477,500.99	583,393.90
3,815.00	1.90	262.20	3,814.02	21.21	21.21	10.97	23.88	27.36	477,500.91	583,391.27
3,909.00	2.10	261.20	3,907.96	20.73	20.73	7.73	22.13	20.44	477,500.43	583,388.03
4,004.00	2.10	262.10	4,002.90	20.23	20.23	4.28	20.68	11.96	477,499.93	583,384.58
4,099.00	2.20	259.00	4,097.83	19.64	19.64	0.77	19.66	2.25	477,499.34	583,381.07
4,194.00	2.20	260.50	4,192.76	18.99	18.99	-2.82	19.20	351.56	477,498.69	583,377.48



ProDirectional Survey Report



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Design:	Gyro-MWD	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
4,289.00	1.00	255.50	4,287.72	18.48	18.48	-5.42	19.26	343.66	477,498.18	583,374.88	
4,384.00	0.50	251.20	4,382.71	18.14	18.14	-6.61	19.31	339.97	477,497.84	583,373.69	
4,479.00	0.70	248.80	4,477.71	17.80	17.80	-7.55	19.33	337.02	477,497.50	583,372.75	
4,575.00	0.70	252.40	4,573.70	17.41	17.41	-8.65	19.44	333.57	477,497.11	583,371.65	
4,670.00	0.80	246.80	4,668.69	16.97	16.97	-9.82	19.61	329.96	477,496.67	583,370.48	
4,766.00	0.80	245.90	4,764.68	16.44	16.44	-11.04	19.80	326.10	477,496.14	583,369.26	
4,861.00	0.90	252.60	4,859.67	15.94	15.94	-12.36	20.17	322.21	477,495.64	583,367.94	
4,957.00	0.90	244.80	4,955.66	15.39	15.39	-13.76	20.65	318.21	477,495.09	583,366.54	
5,052.00	1.00	250.10	5,050.65	14.80	14.80	-15.22	21.22	314.20	477,494.50	583,365.08	
5,148.00	1.10	244.90	5,146.63	14.12	14.12	-16.84	21.97	309.98	477,493.82	583,363.46	
5,243.00	1.20	240.20	5,241.61	13.24	13.24	-18.53	22.77	305.55	477,492.94	583,361.77	
5,338.00	0.90	245.40	5,336.60	12.43	12.43	-20.07	23.61	301.78	477,492.13	583,360.23	
5,434.00	0.90	262.50	5,432.58	12.02	12.02	-21.50	24.63	299.21	477,491.72	583,358.80	
5,529.00	0.70	283.60	5,527.58	12.06	12.06	-22.81	25.80	297.87	477,491.76	583,357.49	
5,624.00	0.80	308.60	5,622.57	12.61	12.61	-23.89	27.01	297.83	477,492.31	583,356.41	
5,719.00	0.30	285.60	5,717.56	13.09	13.09	-24.65	27.91	297.97	477,492.79	583,355.65	
5,814.00	0.30	91.30	5,812.56	13.15	13.15	-24.64	27.93	298.09	477,492.85	583,355.66	
5,910.00	0.20	65.30	5,908.56	13.22	13.22	-24.23	27.60	298.61	477,492.92	583,356.07	
6,005.00	0.60	162.90	6,003.56	12.81	12.81	-23.94	27.15	298.15	477,492.51	583,356.36	
6,101.00	1.00	151.30	6,099.55	11.59	11.59	-23.39	26.10	296.37	477,491.29	583,356.91	
6,195.00	1.30	121.50	6,193.53	10.32	10.32	-22.08	24.38	295.04	477,490.02	583,358.22	
6,290.00	1.30	116.60	6,288.51	9.27	9.27	-20.20	22.23	294.66	477,488.97	583,360.10	
6,385.00	1.10	119.80	6,383.49	8.34	8.34	-18.45	20.24	294.32	477,488.04	583,361.85	
6,477.00	1.20	114.80	6,475.47	7.49	7.49	-16.81	18.40	294.03	477,487.19	583,363.49	
6,572.00	0.70	104.70	6,570.45	6.93	6.93	-15.34	16.83	294.31	477,486.63	583,364.96	
6,668.00	0.30	147.60	6,666.45	6.57	6.57	-14.64	16.05	294.16	477,486.27	583,365.66	
6,763.00	0.60	223.10	6,761.45	6.00	6.00	-14.85	16.01	291.99	477,485.70	583,365.45	



ProDirectional
Survey Report



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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V- Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
6,858.00	1.40	231.50	6,856.43	4.91	4.91	-16.09	16.83	286.96	477,484.61	583,364.21	
6,953.00	1.80	216.10	6,951.40	2.98	2.98	-17.88	18.13	279.47	477,482.68	583,362.42	
7,048.00	1.90	225.10	7,046.35	0.66	0.66	-19.88	19.89	271.91	477,480.36	583,360.42	
7,144.00	1.60	234.30	7,142.30	-1.24	-1.24	-22.09	22.13	266.78	477,478.46	583,358.21	
7,239.00	1.50	249.80	7,237.27	-2.44	-2.44	-24.34	24.46	264.26	477,477.26	583,355.96	
7,334.00	1.30	254.90	7,332.24	-3.15	-3.15	-26.54	26.73	263.22	477,476.55	583,353.76	
7,429.00	1.30	261.60	7,427.22	-3.59	-3.59	-28.65	28.87	262.85	477,476.11	583,351.65	
7,524.00	1.10	272.20	7,522.20	-3.72	-3.72	-30.63	30.85	263.08	477,475.98	583,349.67	
7,619.00	1.10	293.50	7,617.18	-3.32	-3.32	-32.37	32.54	264.15	477,476.38	583,347.93	
7,715.00	1.50	290.30	7,713.15	-2.51	-2.51	-34.40	34.49	265.82	477,477.19	583,345.90	
7,810.00	1.70	268.60	7,808.12	-2.12	-2.12	-36.97	37.03	266.72	477,477.58	583,343.33	
7,905.00	0.70	263.60	7,903.09	-2.22	-2.22	-38.96	39.02	266.75	477,477.48	583,341.34	
8,001.00	1.10	208.90	7,999.08	-3.09	-3.09	-39.99	40.11	265.58	477,476.61	583,340.31	
8,096.00	1.80	193.70	8,094.05	-5.34	-5.34	-40.78	41.13	262.55	477,474.36	583,339.52	
8,192.00	2.80	191.00	8,189.98	-9.10	-9.10	-41.59	42.57	257.65	477,470.60	583,338.71	
8,287.00	3.20	199.90	8,284.85	-13.87	-13.87	-42.93	45.12	252.09	477,465.83	583,337.37	
8,382.00	2.30	204.10	8,379.73	-18.11	-18.11	-44.61	48.15	247.91	477,461.59	583,335.69	
8,476.00	2.00	210.80	8,473.67	-21.24	-21.24	-46.22	50.87	245.32	477,458.46	583,334.08	
8,572.00	1.50	210.30	8,569.62	-23.76	-23.76	-47.71	53.30	243.53	477,455.94	583,332.59	
8,667.00	1.00	197.30	8,664.60	-25.63	-25.63	-48.59	54.93	242.19	477,454.07	583,331.71	
8,762.00	0.80	193.00	8,759.59	-27.06	-27.06	-48.98	55.96	241.08	477,452.64	583,331.32	
8,857.00	0.70	197.10	8,854.58	-28.26	-28.26	-49.30	56.83	240.17	477,451.44	583,331.00	
8,952.00	0.60	201.40	8,949.58	-29.28	-29.28	-49.65	57.65	239.47	477,450.42	583,330.65	
9,047.00	0.70	193.10	9,044.57	-30.31	-30.31	-49.97	58.44	238.76	477,449.39	583,330.33	
9,142.00	0.40	214.80	9,139.56	-31.15	-31.15	-50.29	59.15	238.23	477,448.55	583,330.01	
9,238.00	0.40	248.90	9,235.56	-31.54	-31.54	-50.79	59.79	238.16	477,448.16	583,329.51	
9,333.00	0.70	256.10	9,330.56	-31.80	-31.80	-51.67	60.67	238.39	477,447.90	583,328.63	



ProDirectional
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9,428.00	0.80	276.40	9,425.55	-31.87	-31.87	-52.89	61.75	238.93	477,447.83	583,327.41	
9,523.00	0.90	278.20	9,520.54	-31.69	-31.69	-54.28	62.86	239.73	477,448.01	583,326.02	
9,593.00	1.40	274.60	9,590.53	-31.54	-31.54	-55.68	63.99	240.47	477,448.16	583,324.62	
9,621.00	1.30	120.50	9,618.52	-31.67	-31.67	-55.75	64.12	240.40	477,448.03	583,324.55	
9,716.00	1.10	276.50	9,713.51	-32.12	-32.12	-55.73	64.32	240.04	477,447.58	583,324.57	
9,811.00	0.70	275.50	9,808.50	-31.96	-31.96	-57.21	65.53	240.81	477,447.74	583,323.09	
9,906.00	0.70	282.40	9,903.50	-31.78	-31.78	-58.35	66.45	241.43	477,447.92	583,321.95	
10,002.00	0.90	281.00	9,999.49	-31.51	-31.51	-59.67	67.48	242.16	477,448.19	583,320.63	
10,097.00	0.80	290.70	10,094.48	-31.13	-31.13	-61.02	68.50	242.97	477,448.57	583,319.28	
10,192.00	0.90	273.90	10,189.47	-30.85	-30.85	-62.38	69.59	243.69	477,448.85	583,317.92	
10,287.00	1.30	278.90	10,284.45	-30.63	-30.63	-64.19	71.13	244.49	477,449.07	583,316.11	
10,383.00	1.50	288.30	10,380.42	-30.07	-30.07	-66.46	72.95	245.66	477,449.63	583,313.84	
10,478.00	1.50	281.40	10,475.39	-29.43	-29.43	-68.86	74.89	246.86	477,450.27	583,311.44	
10,574.00	1.60	284.00	10,571.35	-28.86	-28.86	-71.39	77.01	247.99	477,450.84	583,308.91	
10,669.00	1.60	287.40	10,666.31	-28.14	-28.14	-73.95	79.12	249.17	477,451.56	583,306.35	
10,764.00	1.60	284.40	10,761.28	-27.41	-27.41	-76.50	81.26	250.28	477,452.29	583,303.80	
10,860.00	1.60	285.50	10,857.24	-26.72	-26.72	-79.09	83.48	251.33	477,452.98	583,301.21	
10,955.00	1.60	282.30	10,952.20	-26.09	-26.09	-81.66	85.73	252.28	477,453.61	583,298.64	
11,050.00	1.50	289.60	11,047.17	-25.39	-25.39	-84.13	87.87	253.21	477,454.31	583,296.17	
11,144.00	1.60	285.10	11,141.13	-24.63	-24.63	-86.55	89.99	254.11	477,455.07	583,293.75	
11,239.00	1.70	286.90	11,236.09	-23.88	-23.88	-89.18	92.32	255.01	477,455.82	583,291.12	
11,334.00	1.60	284.40	11,331.06	-23.14	-23.14	-91.82	94.69	255.86	477,456.56	583,288.48	
11,429.00	1.70	284.70	11,426.02	-22.45	-22.45	-94.46	97.09	256.63	477,457.25	583,285.84	
11,525.00	1.80	283.60	11,521.97	-21.73	-21.73	-97.31	99.70	257.41	477,457.97	583,282.99	
11,620.00	1.80	287.60	11,616.92	-20.93	-20.93	-100.18	102.34	258.20	477,458.77	583,280.12	
11,715.00	1.90	291.30	11,711.87	-19.91	-19.91	-103.07	104.97	259.07	477,459.79	583,277.23	
11,810.00	1.90	292.90	11,806.82	-18.72	-18.72	-105.99	107.63	259.98	477,460.98	583,274.31	



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 8
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3165.50usft
Site:	Patriot SWD(Rustler Breaks)	MD Reference:	Well @ 3165.50usft
Well:	No. 8	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD	Database:	WellPlanner1

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
11,905.00	1.70	289.30	11,901.78	-17.65	-17.65	-108.77	110.19	260.79	477,462.05	583,271.53	
11,999.00	1.80	286.90	11,995.73	-16.76	-16.76	-111.49	112.75	261.45	477,462.94	583,268.81	
12,094.00	1.90	280.00	12,090.68	-16.05	-16.05	-114.47	115.59	262.02	477,463.65	583,265.83	
12,190.00	1.90	275.20	12,186.63	-15.63	-15.63	-117.63	118.66	262.43	477,464.07	583,262.67	
12,284.00	1.90	274.60	12,280.58	-15.36	-15.36	-120.73	121.70	262.75	477,464.34	583,259.57	
12,380.00	1.80	272.50	12,376.53	-15.17	-15.17	-123.82	124.75	263.02	477,464.53	583,256.48	
12,475.00	1.60	277.80	12,471.49	-14.92	-14.92	-126.63	127.50	263.28	477,464.78	583,253.67	
12,570.00	1.60	281.30	12,566.45	-14.48	-14.48	-129.24	130.05	263.61	477,465.22	583,251.06	
12,665.00	1.70	282.00	12,661.41	-13.93	-13.93	-131.92	132.65	263.97	477,465.77	583,248.38	
12,760.00	1.50	294.20	12,756.37	-13.13	-13.13	-134.43	135.07	264.42	477,466.57	583,245.87	
12,855.00	1.80	289.20	12,851.33	-12.13	-12.13	-136.98	137.51	264.94	477,467.57	583,243.32	
12,951.00	1.70	294.60	12,947.29	-11.04	-11.04	-139.70	140.13	265.48	477,468.66	583,240.60	
13,014.00	2.20	303.80	13,010.25	-9.98	-9.98	-141.55	141.90	265.97	477,469.72	583,238.75	
13,036.00	2.50	306.70	13,032.23	-9.45	-9.45	-142.29	142.60	266.20	477,470.25	583,238.01	
13,138.00	3.10	304.40	13,134.11	-6.57	-6.57	-146.34	146.49	267.43	477,473.13	583,233.96	
13,233.00	2.30	294.40	13,229.01	-4.33	-4.33	-150.20	150.26	268.35	477,475.37	583,230.10	
13,329.00	2.50	317.90	13,324.92	-1.98	-1.98	-153.36	153.37	269.26	477,477.72	583,226.94	
13,424.00	2.50	321.50	13,419.83	1.18	1.18	-156.04	156.04	270.43	477,480.88	583,224.26	
13,519.00	2.50	328.60	13,514.74	4.57	4.57	-158.41	158.47	271.65	477,484.27	583,221.89	
13,615.00	3.00	332.50	13,610.63	8.59	8.59	-160.66	160.89	273.06	477,488.29	583,219.64	
13,709.00	2.90	335.00	13,704.51	12.92	12.92	-162.80	163.31	274.54	477,492.62	583,217.50	
13,805.00	3.20	331.10	13,800.37	17.47	17.47	-165.12	166.04	276.04	477,497.17	583,215.18	
13,887.00	3.30	335.60	13,882.24	21.62	21.62	-167.20	168.59	277.37	477,501.32	583,213.10	
Last Survey: 13887' MD											
13,944.00	3.30	335.60	13,939.15	24.61	24.61	-168.56	170.34	278.31	477,504.31	583,211.74	
PTB: 13944' MD											



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 8
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3165.50usft
Site:	Patriot SWD(Rustler Breaks)	MD Reference:	Well @ 3165.50usft
Well:	No. 8	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD	Database:	WellPlanner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
13,887.00	13,882.24	21.62	-167.20	Last Survey: 13887' MD
13,944.00	13,939.15	24.61	-168.56	PTB: 13944' MD