



PRODIRECTIONAL

30015-45960



Dr. Scrivner Fed Com No. 227H

Eddy County, NM

July 19, 2019

Job No. LNM5212019

ORIGINAL

Certified Report



PRODIRECTIONAL

Survey Certification Letter

July 19, 2019



NM OIL CONSERVATION
ARTESIA DISTRICT
OCT 11 2019

RECEIVED

Operator Name: Matador Resources
Well Name: Dr. Scrivner Fed Com No. 227H
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 274
Job Number: LNM5212019

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	426' MD – 15,560' MD	15,626' MD	05/27/19 – 06/25/19	MWD

Sincerely,

Mike Coats

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
Dr. Scrivner Fed Com
No. 227H
OH**

Survey: ProDirectional

Survey Report

19 July, 2019

**NM OIL CONSERVATION
ARTESTA DISTRICT
OCT 11 2019**

RECEIVED





ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 227H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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:	Dr. Scrivner Fed Com				
Site Position:	From: Map	Northing:	453,251.00 usft	Latitude:	32.245709
		Easting:	633,824.00 usft	Longitude:	-104.034178
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.16 °

Well:	No. 227H					
Well Position	+N/-S	0.00 usft	Northing:	453,221.00 usft	Latitude:	32.245626
	+E/-W	0.00 usft	Easting:	633,824.00 usft	Longitude:	-104.034179
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,987.00 usft	

Wellbore:	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	5/29/2019	7.05	59.98	47,904.10

Design:	Gyro-MWD-91'-15560, PTB: 15626'				
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	269.74	



ProDirectional Survey Report



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Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560; PTB: 15626'	Database:	WellPlanner1

Survey Program		Date: 7/19/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
91.00	336.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM
426.00	15,626.00	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	453,221.00	633,824.00
	91.00	0.11	179.78	91.00	0.00	-0.09	0.00	0.09	179.78	453,220.91	633,824.00
	182.00	0.21	238.94	182.00	0.14	-0.26	-0.14	0.30	208.60	453,220.74	633,823.86
	273.00	0.41	297.04	273.00	0.58	-0.20	-0.58	0.61	250.93	453,220.80	633,823.42
	336.00	0.46	315.41	336.00	0.95	0.08	-0.95	0.96	275.02	453,221.08	633,823.05
	426.00	0.80	294.80	425.99	1.77	0.60	-1.78	1.88	288.79	453,221.60	633,822.22
Pro MWD First Survey: 426' MD											
	519.00	0.70	296.20	518.98	2.87	1.13	-2.88	3.09	291.41	453,222.13	633,821.12
	611.00	0.50	286.20	610.98	3.76	1.49	-3.77	4.05	291.56	453,222.49	633,820.23
	703.00	0.50	303.30	702.97	4.48	1.82	-4.49	4.84	292.08	453,222.82	633,819.51
	798.00	0.70	330.00	797.97	5.11	2.55	-5.12	5.72	296.46	453,223.55	633,818.88
	893.00	0.80	323.60	892.96	5.79	3.59	-5.81	6.83	301.70	453,224.59	633,818.19
	988.00	0.40	304.60	987.96	6.45	4.31	-6.47	7.78	303.65	453,225.31	633,817.53
	1,083.00	1.70	132.50	1,082.94	5.69	3.55	-5.71	6.72	301.84	453,224.55	633,818.29
	1,178.00	5.40	126.00	1,177.75	1.05	-0.04	-1.05	1.05	268.06	453,220.96	633,822.95
	1,273.00	6.80	123.30	1,272.21	-7.24	-5.75	7.27	9.27	128.36	453,215.25	633,831.27
	1,368.00	6.30	129.30	1,366.59	-15.95	-12.14	16.00	20.09	127.19	453,208.86	633,840.00
	1,463.00	5.40	131.80	1,461.09	-23.28	-18.42	23.37	29.76	128.25	453,202.58	633,847.37
	1,559.00	6.80	127.70	1,556.55	-31.12	-24.91	31.23	39.95	128.57	453,196.09	633,855.23
	1,654.00	7.60	128.40	1,650.80	-40.46	-32.25	40.61	51.85	128.46	453,188.75	633,864.61
	1,749.00	6.60	134.60	1,745.07	-49.23	-39.99	49.42	63.57	128.98	453,181.01	633,873.42



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 227H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560', PTB: 15626'	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)	
1,845.00	5.60	138.00	1,840.52	-56.26	-47.34	56.48	73.70	129.97	453,173.66	633,880.48	
1,940.00	6.90	137.60	1,934.96	-63.18	-55.00	63.43	83.95	130.93	453,166.00	633,887.43	
2,035.00	8.40	135.80	2,029.11	-71.82	-64.19	72.11	96.54	131.67	453,156.81	633,896.11	
2,130.00	8.90	132.10	2,123.03	-82.07	-74.09	82.41	110.82	131.96	453,146.91	633,906.41	
2,226.00	9.00	130.40	2,217.86	-93.25	-83.94	93.63	125.75	131.87	453,137.06	633,917.63	
2,321.00	8.20	131.10	2,311.79	-103.97	-93.21	104.40	139.95	131.76	453,127.79	633,928.40	
2,416.00	8.70	135.60	2,405.76	-114.06	-102.79	114.53	153.89	131.91	453,118.21	633,938.53	
2,512.00	9.10	137.10	2,500.60	-124.26	-113.54	124.78	168.70	132.30	453,107.46	633,948.78	
2,607.00	8.00	137.10	2,594.55	-133.83	-123.89	134.39	182.78	132.67	453,097.11	633,958.39	
2,702.00	6.70	139.70	2,688.76	-141.87	-132.96	142.48	194.88	133.02	453,088.04	633,966.48	
2,733.00	6.40	139.60	2,719.56	-144.15	-135.65	144.77	198.39	133.14	453,085.35	633,968.77	
2,874.00	5.90	141.40	2,859.75	-153.71	-147.30	154.38	213.38	133.66	453,073.70	633,978.38	
2,969.00	6.00	122.90	2,954.25	-160.90	-153.81	161.60	223.10	133.59	453,067.19	633,985.60	
3,064.00	6.10	140.20	3,048.73	-168.27	-160.39	169.00	232.99	133.50	453,060.61	633,993.00	
3,160.00	8.20	135.60	3,143.98	-176.28	-169.20	177.05	244.90	133.70	453,051.80	634,001.05	
3,255.00	9.10	133.40	3,237.89	-186.44	-179.20	187.25	259.18	133.74	453,041.80	634,011.25	
3,349.00	9.90	132.10	3,330.60	-197.79	-189.73	198.65	274.70	133.68	453,031.27	634,022.65	
3,444.00	10.10	132.30	3,424.16	-209.96	-200.81	210.87	291.19	133.60	453,020.19	634,034.87	
3,539.00	10.30	131.80	3,517.66	-222.40	-212.08	223.36	308.00	133.52	453,008.92	634,047.36	
3,634.00	9.40	132.00	3,611.26	-234.44	-222.93	235.46	324.25	133.43	452,998.07	634,059.46	
3,729.00	8.70	131.20	3,705.07	-245.57	-232.85	246.63	339.19	133.35	452,988.15	634,070.63	
3,824.00	9.00	129.00	3,798.94	-256.71	-242.26	257.81	353.78	133.22	452,978.74	634,081.81	
3,920.00	8.90	128.10	3,893.78	-268.35	-251.57	269.49	368.66	133.03	452,969.43	634,093.49	
4,015.00	9.00	126.80	3,987.62	-280.04	-260.55	281.22	383.37	132.82	452,960.45	634,105.22	
4,110.00	8.80	126.30	4,081.47	-291.80	-269.31	293.03	397.99	132.58	452,951.69	634,117.03	
4,205.00	8.40	125.90	4,175.41	-303.24	-277.68	304.51	412.10	132.36	452,943.32	634,128.51	
4,300.00	8.10	125.90	4,269.42	-314.25	-285.67	315.55	425.65	132.16	452,935.33	634,139.55	



ProDirectional
Survey Report



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Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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)	
4,395.00	8.00	124.90	4,363.49	-325.06	-293.38	326.39	438.87	131.95	452,927.62	634,150.39	
4,490.00	7.90	125.80	4,457.57	-335.74	-300.98	337.11	451.92	131.76	452,920.02	634,161.11	
4,586.00	8.20	125.90	4,552.63	-346.60	-308.85	348.01	465.29	131.59	452,912.15	634,172.01	
4,681.00	8.40	125.80	4,646.63	-357.68	-316.89	359.12	478.94	131.42	452,904.11	634,183.12	
4,776.00	8.80	124.40	4,740.56	-369.27	-325.05	370.75	493.06	131.24	452,895.95	634,194.75	
4,872.00	8.80	123.40	4,835.43	-381.42	-333.24	382.94	507.63	131.03	452,887.76	634,206.94	
4,967.00	7.60	124.10	4,929.46	-392.65	-340.76	394.20	521.07	130.84	452,880.24	634,218.20	
5,062.00	7.50	123.20	5,023.64	-403.01	-347.68	404.59	533.46	130.67	452,873.32	634,228.59	
5,158.00	7.00	124.60	5,118.87	-413.04	-354.43	414.65	545.49	130.52	452,866.57	634,238.65	
5,253.00	6.30	124.30	5,213.23	-422.08	-360.66	423.72	556.43	130.40	452,860.34	634,247.72	
5,349.00	5.20	125.10	5,308.75	-429.97	-366.13	431.63	566.00	130.31	452,854.87	634,255.63	
5,444.00	5.40	125.10	5,403.34	-437.12	-371.17	438.81	574.74	130.23	452,849.83	634,262.81	
5,539.00	5.00	124.70	5,497.95	-444.16	-376.10	445.87	583.31	130.15	452,844.90	634,269.87	
5,634.00	5.00	126.10	5,592.59	-450.89	-380.90	452.62	591.57	130.08	452,840.10	634,276.62	
5,729.00	5.10	127.30	5,687.22	-457.57	-385.89	459.33	599.91	130.03	452,835.11	634,283.33	
5,824.00	4.90	130.30	5,781.86	-464.00	-391.08	465.78	608.19	130.02	452,829.92	634,289.78	
5,919.00	4.90	130.10	5,876.51	-470.17	-396.31	471.98	616.30	130.02	452,824.69	634,295.98	
6,015.00	4.80	131.90	5,972.17	-476.28	-401.64	478.10	624.42	130.03	452,819.36	634,302.10	
6,110.00	4.60	130.80	6,066.85	-482.09	-406.78	483.95	632.20	130.05	452,814.22	634,307.95	
6,205.00	4.40	132.80	6,161.55	-487.63	-411.75	489.50	639.65	130.07	452,809.25	634,313.50	
6,300.00	4.40	132.90	6,256.27	-492.95	-416.70	494.85	646.93	130.10	452,804.30	634,318.85	
6,395.00	4.30	136.30	6,351.00	-498.06	-421.76	499.98	654.11	130.15	452,799.24	634,323.98	
6,490.00	4.10	139.90	6,445.75	-502.68	-426.93	504.62	661.00	130.23	452,794.07	634,328.62	
6,585.00	3.60	140.50	6,540.53	-506.74	-431.83	508.71	667.28	130.33	452,789.17	634,332.71	
6,681.00	2.90	135.70	6,636.38	-510.34	-435.89	512.32	672.67	130.39	452,785.11	634,336.32	
6,776.00	2.30	131.90	6,731.28	-513.42	-438.89	515.42	676.96	130.41	452,782.11	634,339.42	
6,871.00	1.90	132.30	6,826.21	-516.00	-441.22	518.00	680.44	130.42	452,779.78	634,342.00	



ProDirectional
Survey Report



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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)	
6,967.00	1.70	122.90	6,922.17	-518.36	-443.06	520.38	683.45	130.41	452,777.94	634,344.38	
7,062.00	0.80	97.30	7,017.14	-520.20	-443.91	522.22	685.40	130.37	452,777.09	634,346.22	
7,157.00	1.40	41.60	7,112.13	-521.63	-443.13	523.65	685.98	130.24	452,777.87	634,347.65	
7,252.00	1.90	12.60	7,207.09	-522.75	-440.73	524.76	685.28	130.03	452,780.27	634,348.76	
7,347.00	2.40	351.80	7,302.02	-522.83	-437.22	524.82	683.08	129.80	452,783.78	634,348.82	
7,442.00	3.00	353.00	7,396.92	-522.26	-432.78	524.23	679.80	129.54	452,788.22	634,348.23	
7,537.00	2.20	353.40	7,491.82	-521.77	-428.51	523.72	676.68	129.29	452,792.49	634,347.72	
7,632.00	2.20	355.00	7,586.75	-521.42	-424.88	523.35	674.11	129.07	452,796.12	634,347.35	
7,727.00	2.60	349.70	7,681.67	-520.89	-420.94	522.81	671.21	128.84	452,800.06	634,346.81	
7,823.00	2.70	352.60	7,777.56	-520.23	-416.56	522.13	667.93	128.58	452,804.44	634,346.13	
7,917.00	2.50	360.00	7,871.47	-520.09	-412.31	521.97	665.17	128.31	452,808.69	634,345.97	
8,012.00	1.20	18.10	7,966.42	-520.55	-409.30	522.41	663.66	128.08	452,811.70	634,346.41	
8,108.00	0.30	87.10	8,062.41	-521.12	-408.33	522.97	663.50	127.98	452,812.67	634,346.97	
8,203.00	1.30	160.60	8,157.40	-521.72	-409.34	523.58	664.60	128.02	452,811.66	634,347.58	
8,298.00	2.20	183.00	8,252.36	-521.97	-412.17	523.84	666.56	128.20	452,808.83	634,347.84	
8,393.00	2.40	154.70	8,347.28	-522.70	-415.79	524.60	669.39	128.40	452,805.21	634,348.60	
8,488.00	2.80	140.80	8,442.18	-525.01	-419.39	526.91	673.44	128.52	452,801.61	634,350.91	
8,583.00	2.60	135.60	8,537.08	-527.96	-422.73	529.89	677.85	128.58	452,798.27	634,353.89	
8,678.00	2.20	132.60	8,632.00	-530.80	-425.50	532.74	681.81	128.61	452,795.50	634,356.74	
8,773.00	1.10	169.40	8,726.96	-532.30	-427.63	534.25	684.32	128.68	452,793.37	634,358.25	
8,868.00	1.30	203.90	8,821.94	-532.02	-429.51	533.98	685.28	128.81	452,791.49	634,357.98	
8,963.00	1.90	210.90	8,916.90	-530.77	-431.85	532.73	685.78	129.03	452,789.15	634,356.73	
9,058.00	1.20	203.90	9,011.86	-529.55	-434.11	531.52	686.27	129.24	452,786.89	634,355.52	
9,152.00	0.90	203.70	9,105.85	-528.84	-435.69	530.83	686.73	129.38	452,785.31	634,354.83	
9,248.00	0.80	226.90	9,201.84	-528.05	-436.84	530.03	686.85	129.49	452,784.16	634,354.03	
9,343.00	1.10	239.80	9,296.83	-526.77	-437.75	528.76	686.45	129.62	452,783.25	634,352.76	
9,438.00	1.20	229.90	9,391.81	-525.22	-438.85	527.21	685.96	129.77	452,782.15	634,351.21	



ProDirectional Survey Report



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Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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)	
9,533.00	1.20	225.70	9,486.79	-523.74	-440.18	525.74	685.68	129.94	452,780.82	634,349.74	
9,629.00	0.70	208.00	9,582.77	-522.74	-441.40	524.74	685.71	130.07	452,779.60	634,348.74	
9,724.00	0.80	186.40	9,677.76	-522.38	-442.57	524.40	686.20	130.16	452,778.43	634,348.40	
9,819.00	0.30	154.70	9,772.76	-522.41	-443.46	524.43	686.79	130.22	452,777.54	634,348.43	
9,914.00	0.30	28.20	9,867.76	-522.64	-443.46	524.65	686.97	130.21	452,777.54	634,348.65	
10,016.00	0.60	189.30	9,969.76	-522.68	-443.75	524.69	687.18	130.22	452,777.25	634,348.69	
10,111.00	0.70	215.90	10,064.75	-522.25	-444.72	524.27	687.48	130.31	452,776.28	634,348.27	
10,207.00	0.80	200.90	10,160.74	-521.66	-445.82	523.69	687.75	130.41	452,775.18	634,347.69	
10,270.00	0.90	214.80	10,223.74	-521.22	-446.63	523.25	687.95	130.48	452,774.37	634,347.25	
10,301.00	2.80	262.00	10,254.72	-520.33	-446.94	522.36	687.47	130.55	452,774.06	634,346.36	
10,333.00	5.90	274.30	10,286.63	-517.91	-446.93	519.95	685.63	130.68	452,774.07	634,343.95	
10,397.00	10.60	282.00	10,349.95	-508.88	-445.45	510.90	677.83	131.08	452,775.55	634,334.90	
10,428.00	12.60	279.00	10,380.31	-502.75	-444.33	504.78	672.48	131.36	452,776.67	634,328.78	
10,492.00	17.70	275.30	10,442.07	-486.17	-442.34	488.18	658.78	132.18	452,778.66	634,312.18	
10,524.00	24.30	276.30	10,471.93	-474.77	-441.17	476.78	649.58	132.78	452,779.83	634,300.78	
10,587.00	37.10	273.70	10,525.99	-442.81	-438.51	444.80	624.61	134.59	452,782.49	634,268.80	
10,614.00	44.10	271.20	10,546.48	-425.27	-437.78	427.26	611.72	135.70	452,783.22	634,251.26	
10,704.00	56.60	269.10	10,603.80	-356.12	-437.72	358.11	565.54	140.71	452,783.28	634,182.11	
10,768.00	55.90	267.80	10,639.35	-302.92	-439.15	304.91	534.63	145.23	452,781.85	634,128.91	
10,800.00	55.10	267.60	10,657.48	-276.56	-440.21	278.56	520.95	147.67	452,780.79	634,102.56	
10,863.00	55.60	265.80	10,693.30	-224.81	-443.20	226.83	497.87	152.90	452,777.80	634,050.83	
10,895.00	57.40	265.10	10,710.96	-198.21	-445.32	200.23	488.26	155.79	452,775.68	634,024.23	
10,927.00	60.40	262.40	10,727.49	-170.96	-448.31	173.00	480.53	158.90	452,772.69	633,997.00	
10,990.00	66.20	257.40	10,755.80	-115.57	-458.23	117.65	473.09	165.60	452,762.77	633,941.65	
11,022.00	70.50	257.90	10,767.60	-86.49	-464.59	88.60	472.96	169.20	452,756.41	633,912.60	
11,086.00	79.90	260.30	10,783.93	-25.75	-476.25	27.91	477.07	176.65	452,744.75	633,851.91	
11,117.00	84.70	261.30	10,788.09	4.59	-481.16	-2.41	481.16	180.29	452,739.84	633,821.59	



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 227H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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)	
11,181.00	93.30	268.60	10,789.20	68.26	-486.78	-66.05	491.24	187.73	452,734.22	633,757.95	
11,276.00	88.30	270.60	10,787.88	163.21	-487.44	-161.00	513.34	198.28	452,733.56	633,663.00	
11,371.00	90.80	273.70	10,788.62	258.11	-483.87	-255.91	547.38	207.87	452,737.13	633,568.09	
11,467.00	92.40	274.60	10,785.94	353.78	-476.93	-351.62	592.54	216.40	452,744.07	633,472.38	
11,562.00	90.90	273.50	10,783.21	448.47	-470.22	-446.34	648.33	223.51	452,750.78	633,377.66	
11,657.00	88.90	271.10	10,783.37	543.36	-466.41	-541.25	714.49	229.25	452,754.59	633,282.75	
11,752.00	90.80	272.40	10,783.62	638.30	-463.51	-636.20	787.14	233.92	452,757.49	633,187.80	
11,848.00	90.60	272.00	10,782.45	734.20	-459.83	-732.12	864.55	237.87	452,761.17	633,091.88	
11,943.00	87.70	270.10	10,783.86	829.15	-458.08	-827.08	945.46	241.02	452,762.92	632,996.92	
12,038.00	91.70	272.10	10,784.36	924.10	-456.26	-922.04	1,028.75	243.67	452,764.74	632,901.96	
12,133.00	91.20	272.20	10,781.95	1,018.98	-452.70	-1,016.94	1,113.15	246.00	452,768.30	632,807.06	
12,228.00	91.80	271.40	10,779.47	1,113.89	-449.72	-1,111.86	1,199.36	247.98	452,771.28	632,712.14	
12,323.00	90.30	270.20	10,777.73	1,208.85	-448.39	-1,206.83	1,287.44	249.62	452,772.61	632,617.17	
12,418.00	94.60	269.50	10,773.67	1,303.74	-448.64	-1,301.72	1,376.86	250.98	452,772.36	632,522.28	
12,514.00	94.20	268.90	10,766.30	1,399.45	-449.97	-1,397.43	1,468.09	252.15	452,771.03	632,426.57	
12,609.00	91.00	268.30	10,761.99	1,494.32	-452.29	-1,492.29	1,559.32	253.14	452,768.71	632,331.71	
12,704.00	91.90	268.00	10,759.59	1,589.26	-455.36	-1,587.21	1,651.23	253.99	452,765.64	632,236.79	
12,799.00	89.80	266.50	10,758.18	1,684.15	-459.92	-1,682.08	1,743.82	254.71	452,761.08	632,141.92	
12,894.00	88.00	266.60	10,760.00	1,778.98	-465.63	-1,776.89	1,836.88	255.32	452,755.37	632,047.11	
12,989.00	88.00	271.70	10,763.32	1,873.89	-467.04	-1,871.79	1,929.17	255.99	452,753.96	631,952.21	
13,085.00	92.00	275.00	10,763.32	1,969.66	-461.43	-1,967.59	2,020.97	256.80	452,759.57	631,856.41	
13,180.00	88.30	274.80	10,763.07	2,064.26	-453.32	-2,062.22	2,111.46	257.60	452,767.68	631,761.78	
13,275.00	88.90	274.20	10,765.39	2,158.90	-445.87	-2,156.90	2,202.50	258.32	452,775.13	631,667.10	
13,370.00	90.10	275.20	10,766.22	2,253.54	-438.08	-2,251.58	2,293.80	258.99	452,782.92	631,572.42	
13,465.00	91.40	275.80	10,764.98	2,348.05	-428.98	-2,346.13	2,385.02	259.64	452,792.02	631,477.87	
13,560.00	88.40	274.00	10,765.14	2,442.65	-420.87	-2,440.77	2,476.79	260.22	452,800.13	631,383.23	
13,656.00	89.80	274.70	10,766.65	2,538.33	-413.59	-2,536.48	2,569.97	260.74	452,807.41	631,287.52	



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 227H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	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)	
13,751.00	91.90	273.50	10,765.24	2,633.03	-406.79	-2,631.21	2,662.47	261.21	452,814.21	631,192.79	
13,846.00	88.80	271.20	10,764.66	2,727.92	-402.90	-2,726.12	2,755.73	261.59	452,818.10	631,097.88	
13,941.00	88.30	269.40	10,767.07	2,822.88	-402.40	-2,821.08	2,849.63	261.88	452,818.60	631,002.92	
14,036.00	92.40	269.10	10,766.49	2,917.85	-403.65	-2,916.05	2,943.85	262.12	452,817.35	630,907.95	
14,132.00	87.00	268.70	10,766.99	3,013.80	-405.49	-3,011.99	3,039.17	262.33	452,815.51	630,812.01	
14,227.00	84.60	267.70	10,773.95	3,108.51	-408.46	-3,106.68	3,133.42	262.51	452,812.54	630,717.32	
14,322.00	85.20	267.30	10,782.39	3,203.06	-412.59	-3,201.22	3,227.70	262.66	452,808.41	630,622.78	
14,418.00	87.90	268.00	10,788.17	3,298.81	-416.52	-3,296.95	3,323.16	262.80	452,804.48	630,527.05	
14,513.00	88.60	267.40	10,791.07	3,393.70	-420.33	-3,391.83	3,417.78	262.94	452,800.67	630,432.17	
14,608.00	91.50	270.40	10,790.98	3,488.67	-422.15	-3,486.79	3,512.26	263.10	452,798.85	630,337.21	
14,703.00	91.00	267.80	10,788.91	3,583.64	-423.64	-3,581.75	3,606.72	263.25	452,797.36	630,242.25	
14,798.00	90.90	265.20	10,787.34	3,678.46	-429.44	-3,676.55	3,701.55	263.34	452,791.56	630,147.45	
14,893.00	93.10	267.80	10,784.02	3,773.24	-435.24	-3,771.30	3,796.33	263.42	452,785.76	630,052.70	
14,988.00	93.90	268.00	10,778.22	3,868.01	-438.71	-3,866.06	3,890.87	263.53	452,782.29	629,957.94	
15,083.00	93.50	267.20	10,772.09	3,962.75	-442.68	-3,960.78	3,985.44	263.62	452,778.32	629,863.22	
15,179.00	93.80	266.60	10,765.98	4,058.43	-447.86	-4,056.44	4,081.09	263.70	452,773.14	629,767.56	
15,274.00	94.30	265.80	10,759.27	4,153.02	-454.14	-4,151.00	4,175.77	263.76	452,766.86	629,673.00	
15,369.00	95.00	265.50	10,751.57	4,247.46	-461.33	-4,245.41	4,270.40	263.80	452,759.67	629,578.59	
15,465.00	87.10	264.40	10,749.81	4,343.03	-469.77	-4,340.94	4,366.29	263.82	452,751.23	629,483.06	
15,560.00	87.00	264.10	10,754.70	4,437.47	-479.27	-4,435.34	4,461.16	263.83	452,741.73	629,388.66	
Last Survey: 15560' MD											
15,626.00	87.00	264.10	10,758.15	4,503.06	-486.05	-4,500.90	4,527.07	263.84	452,734.95	629,323.10	
PTB: 15626' MD											



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 227H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3015.50usft
Site:	Dr. Scrivner Fed Com	MD Reference:	Well @ 3015.50usft
Well:	No. 227H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro-MWD-91'-15560, PTB: 15626'	Database:	WellPlanner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
426.00	425.99	0.60	-1.78	Pro MWD First Survey: 426' MD
15,560.00	10,754.70	-479.27	-4,435.34	Last Survey: 15560' MD
15,626.00	10,758.15	-486.05	-4,500.90	PTB: 15626' MD