



PRODIRECTIONAL

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SEP 19 2019

DISTRICT/ARTESIAO.C.D.



General Kehoe 02-24S-28E RB No. 228H

Eddy County, NM

May 14, 2019

Job No. LNM5208019

ORIGINAL

Certified Report



PRODIRECTIONAL

Survey Certification Letter

May 15, 2019



Operator Name: Matador Resources
Well Name: General Kehoe 02-24S-28E RB No. 228H
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 297
Job Number: LNM5208019

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:

<u>Surveyor</u>	<u>Surveyed Depths</u>	<u>Projection to Bit</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
ProDirectional	10,486' MD – 15,511' MD	15,564' MD	04/14/19 – 05/09/19	MWD-OWSG

Sincerely,

Mike Coats

Mike Coats
Regulatory Specialist
Professional Directional

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

prodirectional.com



Matador Resources

**Eddy County, NM (NAD 83)
General Kehoe 02-24S-28E RB
No. 228H
OH**

Survey: ProDirectional

Survey Report

15 May, 2019





ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 228H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3009.50usft
Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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	General Kehoe 02-24S-28E RB				
Site Position:		Northing:	456,137.00 usft	Latitude:	32.253680
From:	Map	Easting:	628,716.00 usft	Longitude:	-104.050676
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.15 °

Well	No. 228H					
Well Position	+N-S	0.00 usft	Northing:	456,137.00 usft	Latitude:	32.253680
	+E-W	0.00 usft	Easting:	628,716.00 usft	Longitude:	-104.050676
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,981.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/20/2019	7.10	60.00	47,914.20

Design:	MWD-125'-15511', PTB: 15564'			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	180.12



ProDirectional Survey Report



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Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	Database:	WellPlanner1

Survey Program		Date 5/15/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
124.83	402.00	Survey #1 (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s
434.00	10,471.00	Survey #2 (OH)	MWD+HRGM	OWSG MWD + HRGM
10,486.00	15,564.00	Survey #3 (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	456,137.00	628,716.00	
124.83	0.40	98.45	124.83	0.06	-0.06	0.43	0.44	98.45	456,136.94	628,716.43	
217.22	1.19	110.52	217.21	0.44	-0.45	1.65	1.71	105.19	456,136.55	628,717.65	
309.61	2.06	140.84	309.56	2.06	-2.07	3.60	4.15	119.95	456,134.93	628,719.60	
402.00	2.25	147.96	401.89	4.88	-4.90	5.61	7.44	131.13	456,132.10	628,721.61	
434.00	2.51	153.23	433.86	6.04	-6.05	6.26	8.71	134.07	456,130.95	628,722.26	
524.00	1.87	165.33	523.79	9.22	-9.23	7.51	11.91	140.86	456,127.77	628,723.51	
619.00	0.70	235.27	618.77	11.05	-11.06	7.43	13.33	146.12	456,125.94	628,723.43	
710.00	1.61	297.86	709.76	10.77	-10.78	5.84	12.27	151.55	456,126.22	628,721.84	
800.00	3.30	312.34	799.67	8.44	-8.45	2.81	8.90	161.60	456,128.55	628,718.81	
891.00	2.83	304.24	890.54	5.42	-5.42	-0.98	5.51	190.27	456,131.58	628,715.02	
982.00	2.85	311.02	981.43	2.68	-2.67	-4.55	5.27	239.56	456,134.33	628,711.45	
1,072.00	2.50	316.90	1,071.33	-0.21	0.23	-7.58	7.58	271.74	456,137.23	628,708.42	
1,163.00	2.12	308.01	1,162.26	-2.69	2.72	-10.26	10.61	284.83	456,139.72	628,705.74	
1,253.00	1.99	308.27	1,252.20	-4.68	4.71	-12.80	13.64	290.20	456,141.71	628,703.20	
1,344.00	1.97	307.63	1,343.15	-6.61	6.64	-15.28	16.66	293.50	456,143.64	628,700.72	
1,434.00	1.87	305.59	1,433.10	-8.40	8.44	-17.70	19.61	295.50	456,145.44	628,698.30	
1,528.00	1.87	306.49	1,527.05	-10.20	10.25	-20.18	22.63	296.92	456,147.25	628,695.82	
1,621.00	1.41	313.02	1,620.01	-11.88	11.93	-22.23	25.23	298.22	456,148.93	628,693.77	
1,715.00	1.27	310.70	1,713.98	-13.35	13.40	-23.87	27.37	299.31	456,150.40	628,692.13	



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 228H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3009.50usft
Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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)	
1,808.00	1.18	321.00	1,806.96	-14.76	14.81	-25.25	29.28	300.40	456,151.81	628,690.75	
1,902.00	0.48	305.01	1,900.95	-15.74	15.79	-26.18	30.58	301.10	456,152.79	628,689.82	
1,995.00	0.25	237.56	1,993.95	-15.85	15.91	-26.67	31.06	300.81	456,152.91	628,689.33	
2,088.00	0.05	166.66	2,086.95	-15.70	15.76	-26.83	31.12	300.42	456,152.76	628,689.17	
2,182.00	0.29	108.95	2,180.95	-15.59	15.64	-26.60	30.86	300.46	456,152.64	628,689.40	
2,275.00	1.02	112.24	2,273.94	-15.20	15.25	-25.61	29.81	300.77	456,152.25	628,690.39	
2,369.00	0.51	125.65	2,367.93	-14.64	14.69	-24.50	28.56	300.95	456,151.69	628,691.50	
2,462.00	1.15	323.32	2,460.93	-15.15	15.20	-24.72	29.02	301.59	456,152.20	628,691.28	
2,555.00	2.67	315.35	2,553.87	-17.43	17.49	-26.80	32.00	303.13	456,154.49	628,689.20	
2,649.00	2.68	313.10	2,647.77	-20.48	20.55	-29.94	36.31	304.46	456,157.55	628,686.06	
2,705.00	2.16	311.11	2,703.72	-22.07	22.14	-31.69	38.66	304.93	456,159.14	628,684.31	
2,837.00	1.99	321.23	2,835.63	-25.48	25.56	-35.00	43.34	306.14	456,162.56	628,681.00	
2,930.00	3.58	321.24	2,928.52	-29.00	29.08	-37.83	47.72	307.55	456,166.08	628,678.17	
3,023.00	4.46	326.68	3,021.29	-34.28	34.37	-41.64	53.99	309.54	456,171.37	628,674.36	
3,117.00	4.42	326.86	3,115.01	-40.36	40.45	-45.62	60.98	311.56	456,177.45	628,670.38	
3,210.00	4.54	322.38	3,207.73	-46.27	46.37	-49.83	68.07	312.94	456,183.37	628,666.17	
3,303.00	4.67	322.22	3,300.43	-52.16	52.28	-54.40	75.44	313.86	456,189.28	628,661.60	
3,397.00	4.99	324.98	3,394.09	-58.53	58.65	-59.09	83.25	314.79	456,195.65	628,656.91	
3,490.00	4.74	321.02	3,486.76	-64.82	64.95	-63.82	91.06	315.50	456,201.95	628,652.18	
3,583.00	4.69	319.13	3,579.44	-70.67	70.81	-68.73	98.68	315.86	456,207.81	628,647.27	
3,676.00	4.72	318.79	3,672.13	-76.41	76.57	-73.74	106.30	316.08	456,213.57	628,642.26	
3,769.00	4.93	316.14	3,764.80	-82.16	82.33	-79.03	114.12	316.17	456,219.33	628,636.97	
3,863.00	5.08	314.50	3,858.44	-87.98	88.15	-84.79	122.32	316.11	456,225.15	628,631.21	
3,956.00	5.26	314.56	3,951.06	-93.84	94.03	-90.77	130.69	316.01	456,231.03	628,625.23	
4,050.00	5.03	311.05	4,044.68	-99.56	99.76	-96.95	139.11	315.82	456,236.76	628,619.05	
4,143.00	5.80	316.70	4,137.27	-105.64	105.86	-103.24	147.87	315.72	456,242.86	628,612.76	
4,236.00	6.10	321.27	4,229.77	-112.90	113.13	-109.56	157.49	315.92	456,250.13	628,606.44	



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Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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)	
4,330.00	6.13	319.71	4,323.23	-120.61	120.86	-115.93	167.47	316.19	456,257.86	628,600.07	
4,423.00	5.79	332.21	4,415.73	-128.54	128.80	-121.33	176.94	316.71	456,265.80	628,594.67	
4,516.00	6.07	342.42	4,508.24	-137.37	137.63	-125.00	185.92	317.75	456,274.63	628,591.00	
4,610.00	6.08	342.13	4,601.71	-146.84	147.11	-128.03	195.02	318.97	456,284.11	628,587.97	
4,703.00	4.57	340.89	4,694.31	-155.02	155.30	-130.75	203.01	319.90	456,292.30	628,585.25	
4,796.00	3.61	341.49	4,787.07	-161.30	161.58	-132.89	209.21	320.56	456,298.58	628,583.11	
4,890.00	2.55	351.09	4,880.93	-166.17	166.45	-134.16	213.78	321.13	456,303.45	628,581.84	
4,983.00	2.02	351.77	4,973.86	-169.83	170.11	-134.71	216.99	321.62	456,307.11	628,581.29	
5,076.00	2.08	1.42	5,066.80	-173.14	173.42	-134.91	219.72	322.12	456,310.42	628,581.09	
5,170.00	1.82	0.88	5,160.75	-176.34	176.62	-134.84	222.21	322.64	456,313.62	628,581.16	
5,263.00	1.62	8.09	5,253.70	-179.12	179.40	-134.63	224.30	323.11	456,316.40	628,581.37	
5,357.00	1.66	1.17	5,347.67	-181.79	182.08	-134.42	226.32	323.56	456,319.08	628,581.58	
5,450.00	1.17	357.51	5,440.64	-184.09	184.37	-134.43	228.18	323.90	456,321.37	628,581.57	
5,544.00	1.17	349.05	5,534.62	-185.99	186.27	-134.66	229.85	324.14	456,323.27	628,581.34	
5,637.00	0.89	357.05	5,627.60	-187.64	187.93	-134.87	231.32	324.33	456,324.93	628,581.13	
5,731.00	0.91	349.93	5,721.59	-189.11	189.39	-135.04	232.60	324.51	456,326.39	628,580.96	
5,824.00	0.72	2.32	5,814.58	-190.42	190.70	-135.15	233.73	324.68	456,327.70	628,580.85	
5,918.00	0.41	339.69	5,908.58	-191.32	191.61	-135.24	234.53	324.78	456,328.61	628,580.76	
6,011.00	0.92	218.00	6,001.57	-191.04	191.33	-135.81	234.63	324.63	456,328.33	628,580.19	
6,105.00	1.04	209.79	6,095.56	-189.71	189.99	-136.70	234.06	324.26	456,326.99	628,579.30	
6,199.00	1.06	211.26	6,189.54	-188.22	188.51	-137.58	233.38	323.88	456,325.51	628,578.42	
6,293.00	1.42	209.80	6,283.52	-186.47	186.76	-138.61	232.57	323.42	456,323.76	628,577.39	
6,386.00	1.67	215.40	6,376.49	-184.36	184.65	-139.97	231.70	322.84	456,321.65	628,576.03	
6,480.00	1.60	215.20	6,470.45	-182.17	182.46	-141.52	230.91	322.20	456,319.46	628,574.48	
6,573.00	1.53	204.78	6,563.41	-179.98	180.28	-142.78	229.97	321.62	456,317.28	628,573.22	
6,667.00	1.36	206.10	6,657.38	-177.83	178.13	-143.80	228.93	321.09	456,315.13	628,572.20	
6,761.00	1.13	224.52	6,751.36	-176.17	176.47	-144.94	228.36	320.60	456,313.47	628,571.06	



ProDirectional Survey Report



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Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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)	
6,854.00	1.07	249.15	6,844.35	-175.20	175.51	-146.40	228.55	320.17	456,312.51	628,569.60	
6,947.00	1.58	298.17	6,937.32	-175.49	175.80	-148.34	230.03	319.84	456,312.80	628,567.66	
7,041.00	2.58	312.77	7,031.26	-177.54	177.85	-151.03	233.33	319.66	456,314.85	628,564.97	
7,135.00	2.72	319.92	7,125.16	-180.67	181.00	-154.02	237.66	319.60	456,318.00	628,561.98	
7,228.00	1.29	319.50	7,218.10	-183.15	183.48	-156.12	240.92	319.61	456,320.48	628,559.88	
7,322.00	0.21	85.84	7,312.09	-183.97	184.30	-156.64	241.87	319.64	456,321.30	628,559.36	
7,415.00	0.16	120.08	7,405.09	-183.92	184.25	-156.36	241.65	319.68	456,321.25	628,559.64	
7,509.00	0.26	121.30	7,499.09	-183.74	184.07	-156.06	241.32	319.71	456,321.07	628,559.94	
7,603.00	0.25	272.82	7,593.09	-183.64	183.97	-156.08	241.26	319.69	456,320.97	628,559.92	
7,696.00	0.90	264.07	7,686.09	-183.57	183.90	-157.01	241.81	319.51	456,320.90	628,558.99	
7,790.00	1.31	263.37	7,780.07	-183.37	183.70	-158.81	242.83	319.16	456,320.70	628,557.19	
7,884.00	0.99	211.50	7,874.05	-182.55	182.89	-160.31	243.20	318.76	456,319.89	628,555.69	
7,977.00	1.81	188.18	7,967.02	-180.41	180.75	-160.94	242.01	318.32	456,317.75	628,555.06	
8,071.00	2.26	184.74	8,060.97	-177.09	177.43	-161.30	239.79	317.73	456,314.43	628,554.70	
8,164.00	2.81	188.62	8,153.87	-173.01	173.35	-161.79	237.12	316.97	456,310.35	628,554.21	
8,258.00	2.61	185.73	8,247.77	-168.60	168.94	-162.35	234.31	316.14	456,305.94	628,553.65	
8,351.00	2.65	182.76	8,340.67	-164.35	164.69	-162.67	231.48	315.35	456,301.69	628,553.33	
8,441.00	2.68	182.23	8,430.57	-160.17	160.51	-162.85	228.65	314.59	456,297.51	628,553.15	
8,535.00	2.57	189.00	8,524.48	-155.89	156.23	-163.26	225.97	313.74	456,293.23	628,552.74	
8,628.00	2.59	186.48	8,617.38	-151.74	152.08	-163.83	223.54	312.87	456,289.08	628,552.17	
8,722.00	3.55	171.15	8,711.25	-146.75	147.10	-163.62	220.02	311.96	456,284.10	628,552.38	
8,815.00	3.49	183.66	8,804.07	-141.08	141.43	-163.36	216.07	310.88	456,278.43	628,552.64	
8,909.00	2.63	192.67	8,897.94	-136.12	136.47	-164.01	213.36	309.76	456,273.47	628,551.99	
9,002.00	1.55	188.82	8,990.88	-132.80	133.14	-164.67	211.76	308.96	456,270.14	628,551.33	
9,096.00	0.92	206.97	9,084.85	-130.87	131.21	-165.21	210.98	308.46	456,268.21	628,550.79	
9,193.00	0.62	220.55	9,181.84	-129.77	130.12	-165.90	210.85	308.11	456,267.12	628,550.10	
9,287.00	0.21	224.61	9,275.84	-129.26	129.61	-166.36	210.89	307.92	456,266.61	628,549.64	



ProDirectional
Survey Report



Company: Matador Resources
Project: Eddy County, NM (NAD 83)
Site: General Kehoe 02-24S-28E RB
Well: No. 228H
Wellbore: OH
Design: MWD-125'-15511', PTB: 15564'

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well No. 228H
Well @ 3009.50usft
Well @ 3009.50usft
Grid
Minimum Curvature
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)
9,381.00	0.35	221.00	9,369.84	-128.92	129.27	-166.67	210.92	307.80	456,266.27	628,549.33
9,474.00	0.54	222.21	9,462.84	-128.38	128.73	-167.15	210.97	307.60	456,265.73	628,548.85
9,568.00	0.98	214.96	9,556.83	-127.39	127.75	-167.90	210.98	307.26	456,264.75	628,548.10
9,662.00	1.03	215.78	9,650.81	-126.05	126.40	-168.86	210.93	306.82	456,263.40	628,547.14
9,755.00	0.90	224.98	9,743.80	-124.85	125.21	-169.86	211.02	306.39	456,262.21	628,546.14
9,849.00	1.32	341.75	9,837.79	-125.36	125.71	-170.73	212.02	306.37	456,262.71	628,545.27
9,943.00	2.39	343.78	9,931.74	-128.26	128.62	-171.61	214.46	306.85	456,265.62	628,544.39
10,036.00	2.41	342.43	10,024.66	-131.99	132.35	-172.74	217.62	307.46	456,269.35	628,543.26
10,118.00	1.91	308.07	10,106.60	-134.47	134.84	-174.34	220.40	307.72	456,271.84	628,541.66
10,191.00	2.99	255.82	10,179.54	-134.75	135.12	-177.14	222.79	307.34	456,272.12	628,538.86
10,238.00	6.47	212.60	10,226.39	-132.21	132.59	-179.76	223.37	306.41	456,269.59	628,536.24
10,284.00	10.40	197.98	10,271.89	-126.07	126.45	-182.44	221.98	304.73	456,263.45	628,533.56
10,330.00	14.57	191.52	10,316.79	-116.44	116.83	-184.88	218.70	302.29	456,253.83	628,531.12
10,377.00	19.80	184.97	10,361.68	-102.70	103.09	-186.75	213.32	298.90	456,240.09	628,529.25
10,424.00	24.08	183.38	10,405.27	-85.19	85.58	-188.01	206.57	294.48	456,222.58	628,527.99
10,471.00	27.77	181.81	10,447.53	-64.67	65.06	-188.92	199.81	289.00	456,202.06	628,527.08
10,486.00	28.80	182.00	10,460.74	-57.56	57.96	-189.15	197.83	287.04	456,194.96	628,526.85
Pro MWD First Survey: 10486' MD										
10,533.00	32.40	177.50	10,501.20	-33.66	34.05	-189.00	192.04	280.21	456,171.05	628,527.00
10,579.00	35.30	173.20	10,539.40	-8.14	8.53	-186.89	187.08	272.61	456,145.53	628,529.11
10,626.00	38.70	172.40	10,576.93	19.91	-19.52	-183.34	184.37	263.92	456,117.48	628,532.66
10,673.00	43.30	171.60	10,612.39	50.42	-50.05	-179.04	185.90	254.38	456,086.95	628,536.96
10,720.00	48.60	168.30	10,645.06	83.64	-83.28	-173.10	192.09	244.31	456,053.72	628,542.90
10,766.00	54.00	166.00	10,673.82	118.60	-118.26	-165.09	203.08	234.39	456,018.74	628,550.91
10,813.00	59.80	165.10	10,699.47	156.69	-156.37	-155.26	220.36	224.80	455,980.63	628,560.74
10,895.00	66.60	163.10	10,736.43	226.98	-226.70	-135.19	263.95	210.81	455,910.30	628,580.81
10,942.00	71.40	164.40	10,753.27	269.07	-268.82	-122.92	295.59	204.57	455,868.18	628,593.08



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 228H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3009.50usft
Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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)	
10,989.00	77.10	164.90	10,766.02	312.65	-312.42	-110.96	331.54	199.55	455,824.58	628,605.04	
11,036.00	85.10	165.30	10,773.28	357.46	-357.26	-99.03	370.73	195.49	455,779.74	628,616.97	
11,084.00	91.30	166.90	10,774.79	403.99	-403.80	-87.51	413.18	192.23	455,733.20	628,628.49	
11,178.00	90.60	165.60	10,773.23	495.23	-495.10	-65.17	499.37	187.50	455,641.90	628,650.83	
11,273.00	92.50	168.30	10,770.66	587.69	-587.60	-43.73	589.22	184.26	455,549.40	628,672.27	
11,367.00	92.70	171.60	10,766.40	680.10	-680.04	-27.34	680.59	182.30	455,456.96	628,688.66	
11,462.00	91.00	173.50	10,763.33	774.22	-774.19	-15.03	774.33	181.11	455,362.81	628,700.97	
11,557.00	91.10	178.20	10,761.59	868.91	-868.89	-8.16	868.93	180.54	455,268.11	628,707.84	
11,652.00	90.70	179.70	10,760.10	963.88	-963.86	-6.42	963.89	180.38	455,173.14	628,709.58	
11,746.00	89.80	179.60	10,759.69	1,057.87	-1,057.86	-5.85	1,057.88	180.32	455,079.14	628,710.15	
11,840.00	87.90	182.80	10,761.57	1,151.82	-1,151.80	-7.81	1,151.83	180.39	454,985.20	628,708.19	
11,936.00	87.80	185.40	10,765.17	1,247.51	-1,247.48	-14.67	1,247.57	180.67	454,889.52	628,701.33	
12,030.00	91.10	187.00	10,766.08	1,340.96	-1,340.91	-24.82	1,341.14	181.06	454,796.09	628,691.18	
12,125.00	90.90	178.90	10,764.42	1,435.75	-1,435.69	-29.71	1,436.00	181.19	454,701.31	628,686.29	
12,220.00	87.00	178.10	10,766.16	1,530.68	-1,530.63	-27.22	1,530.87	181.02	454,606.37	628,688.78	
12,315.00	90.20	178.60	10,768.48	1,625.59	-1,625.55	-24.49	1,625.73	180.86	454,511.45	628,691.51	
12,410.00	91.80	179.70	10,766.82	1,720.56	-1,720.52	-23.08	1,720.67	180.77	454,416.48	628,692.92	
12,504.00	92.40	180.90	10,763.37	1,814.49	-1,814.45	-23.57	1,814.60	180.74	454,322.55	628,692.43	
12,599.00	91.70	180.30	10,759.98	1,909.43	-1,909.38	-24.56	1,909.54	180.74	454,227.62	628,691.44	
12,693.00	87.30	178.30	10,760.80	2,003.39	-2,003.34	-23.42	2,003.48	180.67	454,133.66	628,692.58	
12,787.00	87.20	176.80	10,765.31	2,097.18	-2,097.15	-19.40	2,097.24	180.53	454,039.85	628,696.60	
12,882.00	88.00	177.20	10,769.28	2,191.96	-2,191.93	-14.44	2,191.98	180.38	453,945.07	628,701.56	
12,976.00	93.70	182.20	10,767.89	2,285.88	-2,285.85	-13.94	2,285.89	180.35	453,851.15	628,702.06	
13,071.00	90.80	184.30	10,764.16	2,380.65	-2,380.61	-19.32	2,380.69	180.47	453,756.39	628,696.68	
13,165.00	89.10	186.50	10,764.24	2,474.24	-2,474.18	-28.17	2,474.34	180.65	453,662.82	628,687.83	
13,260.00	90.60	184.60	10,764.49	2,568.80	-2,568.73	-37.36	2,569.00	180.83	453,568.27	628,678.64	
13,354.00	90.80	181.70	10,763.34	2,662.66	-2,662.57	-42.52	2,662.91	180.91	453,474.43	628,673.48	



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 228H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3009.50usft
Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	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)	
13,450.00	88.70	183.30	10,763.76	2,758.56	-2,758.47	-46.71	2,758.87	180.97	453,378.53	628,669.29	
13,544.00	90.50	184.90	10,764.42	2,852.33	-2,852.22	-53.43	2,852.72	181.07	453,284.78	628,662.57	
13,639.00	91.10	183.10	10,763.09	2,947.10	-2,946.98	-60.05	2,947.59	181.17	453,190.02	628,655.95	
13,734.00	89.70	178.30	10,762.43	3,042.06	-3,041.94	-61.21	3,042.55	181.15	453,095.06	628,654.79	
13,828.00	89.80	178.20	10,762.84	3,136.01	-3,135.89	-58.34	3,136.44	181.07	453,001.11	628,657.66	
13,923.00	90.20	179.10	10,762.84	3,230.98	-3,230.87	-56.10	3,231.35	180.99	452,906.13	628,659.90	
14,017.00	90.40	180.70	10,762.35	3,324.97	-3,324.86	-55.94	3,325.33	180.96	452,812.14	628,660.06	
14,112.00	90.40	182.00	10,761.68	3,419.94	-3,419.83	-58.18	3,420.32	180.97	452,717.17	628,657.82	
14,207.00	90.20	183.00	10,761.18	3,514.86	-3,514.74	-62.32	3,515.29	181.02	452,622.26	628,653.68	
14,302.00	88.70	179.80	10,762.10	3,609.82	-3,609.69	-64.64	3,610.27	181.03	452,527.31	628,651.36	
14,397.00	90.20	177.20	10,763.01	3,704.76	-3,704.64	-62.16	3,705.16	180.96	452,432.36	628,653.84	
14,492.00	92.00	180.50	10,761.18	3,799.71	-3,799.59	-60.25	3,800.07	180.91	452,337.41	628,655.75	
14,585.00	87.70	179.10	10,761.43	3,892.68	-3,892.56	-59.93	3,893.02	180.88	452,244.44	628,656.07	
14,680.00	89.40	181.70	10,763.83	3,987.64	-3,987.52	-60.59	3,987.98	180.87	452,149.48	628,655.41	
14,775.00	91.00	182.90	10,763.50	4,082.56	-4,082.44	-64.40	4,082.94	180.90	452,054.56	628,651.60	
14,870.00	90.00	180.80	10,762.67	4,177.51	-4,177.38	-67.47	4,177.92	180.93	451,959.62	628,648.53	
14,965.00	90.30	178.40	10,762.42	4,272.50	-4,272.37	-66.80	4,272.89	180.90	451,864.63	628,649.20	
15,059.00	91.00	179.10	10,761.36	4,366.46	-4,366.34	-64.75	4,366.82	180.85	451,770.66	628,651.25	
15,154.00	88.20	174.00	10,762.02	4,461.24	-4,461.12	-59.04	4,461.51	180.76	451,675.88	628,656.96	
15,249.00	89.80	174.70	10,763.68	4,555.74	-4,555.64	-49.69	4,555.91	180.62	451,581.36	628,666.31	
15,343.00	89.30	175.00	10,764.42	4,649.34	-4,649.26	-41.25	4,649.44	180.51	451,487.74	628,674.75	
15,438.00	88.20	175.80	10,766.49	4,743.99	-4,743.93	-33.64	4,744.05	180.41	451,393.07	628,682.36	
15,511.00	88.80	176.40	10,768.40	4,816.78	-4,816.73	-28.67	4,816.82	180.34	451,320.27	628,687.33	
Last Survey: 15511' MD											
15,564.00	88.80	176.40	10,769.51	4,869.66	-4,869.62	-25.34	4,869.68	180.30	451,267.38	628,690.66	
PTB: 15564' MD											



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 228H
Project:	Eddy County, NM (NAD 83)	TVD Reference:	Well @ 3009.50usft
Site:	General Kehoe 02-24S-28E RB	MD Reference:	Well @ 3009.50usft
Well:	No. 228H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	MWD-125'-15511', PTB: 15564'	Database:	WellPlanner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,486.00	10,460.74	57.96	-189.15	Pro MWD First Survey: 10486' MD
15,511.00	10,768.40	-4,816.73	-28.67	Last Survey: 15511' MD
15,564.00	10,769.51	-4,869.62	-25.34	PTB: 15564' MD