



ProDirectional

30-015-43756



Janie Conner 13-24S-28E RB No. 221H(OH)
Eddy County, NM

June 28, 2016

Job No. LNM5123816

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

June 28, 2016



Operator Name: Matador Resources
Well Name: Janie Conner 13-24S-28E RB No. 221H(OH)
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5123816

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	697' MD – 14,955' MD	15,012' MD	06/03/16 – 06/17/16	MWD-OWSG

Sincerely,

Mike Coats
Well Planning
Professional Directional

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

prodirectional.com



Matador Resources

Eddy County, NM
Janie Conner 13-24S-28E RB
No. 221H
OH

Survey: ProDirectional

Survey Report

28 June, 2016





ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 221H
Project:	Eddy County, NM	TVD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

Project:	Eddy County, NM	System Datum:	Mean Sea Level
Map System:	US State Plane 1927 (Exact solution)		
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Janie Conner 201-221-121		
Site Position:		Northing:	445,277.00 usft
From:	Map	Easting:	587,635.00 usft
Position Uncertainty:	3.30 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 13' 25.917 N
		Longitude:	104° 2' 59.801 W
		Grid Convergence:	0.15 "

Well		No. 221H				
Well Position	+N/-S	0.00 usft	Northing:	445,277.00 usft	Latitude:	32° 13' 25.918 N
	+E/-W	0.00 usft	Easting:	587,605.00 usft	Longitude:	104° 3' 0.150 W
Position Uncertainty		1.10 usft	Wellhead Elevation:	0.00 usft	Ground Level:	2,976.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/7/2016	7.35	60.07	48,222

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		89.36			



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Survey Report



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Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Pat809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

Survey Program		Date	6/25/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.00	532.00	Gyro (OH)	GYD_DP_MS	Gyrodatta gyro-compassing and drop	
697.00	15,012.00	MWD (OH)	MWD - OWSG	MWD - OWSG	

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	445,277.00	587,605.00
100.00	0.45	142.75	100.00	0.23	-0.31	0.24	0.39	142.75	445,276.69	587,605.24
200.00	0.74	101.90	199.99	1.10	-0.76	1.11	1.34	124.41	445,276.24	587,606.11
300.00	1.51	123.52	299.97	2.82	-1.62	2.84	3.27	119.71	445,275.38	587,607.84
400.00	2.12	125.02	399.92	5.41	-3.41	5.45	6.43	122.02	445,273.59	587,610.45
500.00	3.02	124.96	499.82	9.06	-5.98	9.12	10.91	123.24	445,271.02	587,614.12
532.00	3.23	122.81	531.77	10.49	-6.95	10.57	12.65	123.32	445,270.05	587,615.57
697.00	4.30	121.50	696.42	19.61	-12.70	19.75	23.49	122.74	445,264.30	587,624.75
Pro MWD First Survey: 697' MD										
791.00	2.60	151.80	790.25	23.58	-16.42	23.77	28.89	124.64	445,260.58	587,628.77
884.00	2.20	232.60	883.19	23.13	-19.37	23.35	30.33	129.68	445,257.63	587,628.35
978.00	4.80	268.20	977.02	17.75	-20.59	17.98	27.33	138.87	445,256.41	587,622.98
1,072.00	6.40	295.70	1,070.58	9.12	-18.44	9.33	20.66	153.17	445,258.56	587,614.33
1,166.00	6.70	306.00	1,163.97	0.02	-12.94	0.17	12.94	179.25	445,264.06	587,605.17
1,259.00	6.20	307.10	1,256.38	-8.30	-6.72	-8.23	10.62	230.74	445,270.28	587,596.77
1,352.00	5.50	289.80	1,348.90	-16.45	-2.18	-16.43	16.57	262.43	445,274.82	587,588.57
1,446.00	5.80	266.40	1,442.46	-25.41	-0.96	-25.40	25.42	267.84	445,276.04	587,579.60
1,540.00	6.00	259.10	1,535.96	-34.99	-2.18	-34.97	35.04	266.43	445,274.82	587,570.03
1,633.00	4.30	268.20	1,628.59	-43.26	-3.21	-43.23	43.35	265.75	445,273.79	587,561.77
1,727.00	4.00	269.50	1,722.34	-50.06	-3.35	-50.03	50.14	266.17	445,273.65	587,554.97
1,821.00	4.00	265.20	1,816.11	-56.61	-3.65	-56.57	56.69	266.30	445,273.35	587,548.43



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 221H
Project:	Eddy County, NM	TVD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

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)
1,915.00	3.30	262.90	1,909.92	-62.57	-4.26	-62.53	62.67	266.10	445,272.74	587,542.47
2,008.00	2.70	252.70	2,002.79	-67.33	-5.25	-67.27	67.48	265.54	445,271.75	587,537.73
2,102.00	2.70	250.50	2,096.69	-71.54	-6.64	-71.47	71.78	264.69	445,270.36	587,533.53
2,196.00	2.20	247.00	2,190.60	-75.31	-8.09	-75.22	75.66	263.86	445,268.91	587,529.78
2,289.00	2.10	258.60	2,283.54	-78.63	-9.12	-78.54	79.06	263.38	445,267.88	587,526.46
2,383.00	2.10	267.10	2,377.47	-82.05	-9.55	-81.94	82.50	263.35	445,267.45	587,523.06
2,477.00	1.80	265.60	2,471.42	-85.24	-9.75	-85.14	85.69	263.47	445,267.25	587,519.86
2,570.00	2.90	277.20	2,564.34	-89.03	-9.57	-88.93	89.44	263.86	445,267.43	587,516.07
2,664.00	3.30	277.60	2,658.20	-94.06	-8.91	-93.97	94.39	264.58	445,268.09	587,511.03
2,699.00	3.20	279.00	2,693.15	-96.02	-8.62	-95.93	96.32	264.86	445,268.38	587,509.07
2,850.00	3.30	274.80	2,843.90	-104.50	-7.60	-104.42	104.70	265.84	445,269.40	587,500.58
2,944.00	3.00	271.50	2,937.76	-109.65	-7.31	-109.58	109.82	266.18	445,269.69	587,495.42
3,037.00	2.90	269.30	3,030.64	-114.44	-7.28	-114.36	114.60	266.36	445,269.72	587,490.64
3,131.00	2.50	295.20	3,124.54	-118.66	-6.43	-118.60	118.77	266.90	445,270.57	587,486.40
3,224.00	2.60	300.00	3,217.44	-122.30	-4.51	-122.26	122.34	267.89	445,272.49	587,482.74
3,318.00	2.70	300.90	3,311.34	-126.02	-2.31	-126.01	126.03	268.95	445,274.69	587,478.99
3,411.00	2.70	298.20	3,404.24	-129.81	-0.15	-129.82	129.82	269.93	445,276.85	587,475.18
3,505.00	2.70	300.70	3,498.14	-133.64	2.03	-133.67	133.69	270.87	445,279.03	587,471.33
3,598.00	2.70	297.60	3,591.03	-137.44	4.16	-137.50	137.56	271.73	445,281.16	587,467.50
3,692.00	2.80	299.50	3,684.93	-141.38	6.32	-141.46	141.60	272.56	445,283.32	587,463.54
3,786.00	2.30	291.00	3,778.83	-145.12	8.12	-145.21	145.44	273.20	445,285.12	587,459.79
3,879.00	1.90	283.90	3,871.77	-148.34	9.16	-148.45	148.74	273.53	445,286.16	587,456.55
3,973.00	1.80	283.50	3,965.72	-151.28	9.88	-151.40	151.72	273.73	445,286.88	587,453.60
4,067.00	1.90	284.10	4,059.67	-154.22	10.60	-154.35	154.71	273.93	445,287.60	587,450.65
4,160.00	1.90	283.30	4,152.62	-157.21	11.33	-157.34	157.75	274.12	445,288.33	587,447.66
4,254.00	1.90	279.70	4,246.57	-160.25	11.96	-160.40	160.84	274.26	445,288.96	587,444.60
4,348.00	1.90	278.50	4,340.52	-163.32	12.45	-163.47	163.95	274.35	445,289.45	587,441.53



ProDirectional
Survey Report



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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

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)
4,442.00	1.90	276.90	4,434.47	-166.41	12.87	-166.56	167.06	274.42	445,289.87	587,438.44
4,535.00	2.00	273.90	4,527.41	-169.55	13.16	-169.71	170.22	274.43	445,290.16	587,435.29
4,629.00	2.10	276.60	4,621.35	-172.90	13.47	-173.06	173.58	274.45	445,290.47	587,431.94
4,722.00	2.20	274.80	4,714.29	-176.37	13.82	-176.53	177.07	274.48	445,290.82	587,428.47
4,816.00	1.30	277.40	4,808.24	-179.22	14.10	-179.39	179.94	274.50	445,291.10	587,425.61
4,910.00	0.60	271.90	4,902.23	-180.76	14.26	-180.94	181.50	274.51	445,291.26	587,424.06
5,003.00	1.00	262.60	4,995.22	-182.06	14.17	-182.23	182.78	274.45	445,291.17	587,422.77
5,097.00	1.00	260.70	5,089.20	-183.68	13.93	-183.85	184.38	274.33	445,290.93	587,421.15
5,191.00	0.90	270.90	5,183.19	-185.23	13.81	-185.40	185.91	274.26	445,290.81	587,419.60
5,284.00	0.90	262.10	5,276.18	-186.69	13.72	-186.85	187.35	274.20	445,290.72	587,418.15
5,378.00	1.00	248.40	5,370.17	-188.18	13.32	-188.34	188.82	274.04	445,290.32	587,416.66
5,472.00	1.00	250.00	5,464.15	-189.72	12.74	-189.88	190.31	273.84	445,289.74	587,415.12
5,565.00	0.80	242.70	5,557.14	-191.07	12.16	-191.22	191.60	273.64	445,289.16	587,413.78
5,659.00	0.80	247.60	5,651.13	-192.27	11.61	-192.41	192.76	273.45	445,288.61	587,412.59
5,752.00	1.00	231.00	5,744.12	-193.51	10.85	-193.64	193.94	273.21	445,287.85	587,411.36
5,846.00	1.00	221.00	5,838.11	-194.69	9.72	-194.81	195.06	272.86	445,286.72	587,410.19
5,939.00	1.00	245.20	5,931.09	-195.97	8.76	-196.08	196.28	272.56	445,285.76	587,408.92
6,033.00	1.30	224.30	6,025.07	-197.47	7.66	-197.57	197.72	272.22	445,284.66	587,407.43
6,126.00	1.30	288.20	6,118.05	-199.22	7.23	-199.31	199.44	272.08	445,284.23	587,405.69
6,219.00	1.80	300.30	6,211.02	-201.47	8.30	-201.58	201.75	272.36	445,285.30	587,403.42
6,313.00	1.60	286.00	6,304.98	-203.99	9.40	-204.11	204.33	272.64	445,286.40	587,400.89
6,406.00	1.90	267.50	6,397.94	-206.78	9.69	-206.90	207.13	272.68	445,286.69	587,398.10
6,500.00	2.10	254.80	6,491.88	-210.00	9.17	-210.12	210.32	272.50	445,286.17	587,394.88
6,593.00	1.80	266.60	6,584.83	-213.11	8.64	-213.22	213.40	272.32	445,285.64	587,391.78
6,687.00	1.30	264.50	6,678.79	-215.65	8.45	-215.76	215.92	272.24	445,285.45	587,389.24
6,781.00	1.70	271.20	6,772.76	-218.10	8.38	-218.21	218.37	272.20	445,285.38	587,386.79
6,874.00	1.20	284.20	6,865.73	-220.42	8.65	-220.53	220.70	272.25	445,285.65	587,384.47



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 221H
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Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

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)	
6,968.00	1.00	260.70	6,959.71	-222.19	8.76	-222.30	222.47	272.26	445,285.76	587,382.70	
7,061.00	1.20	259.90	7,052.70	-223.95	8.45	-224.06	224.22	272.16	445,285.45	587,380.94	
7,155.00	1.30	255.70	7,146.67	-225.96	8.02	-226.06	226.20	272.03	445,285.02	587,378.94	
7,248.00	1.00	221.10	7,239.66	-227.52	7.15	-227.62	227.73	271.80	445,284.15	587,377.38	
7,342.00	1.00	188.60	7,333.64	-228.20	5.72	-228.28	228.35	271.43	445,282.72	587,376.72	
7,436.00	1.20	174.50	7,427.62	-228.25	3.93	-228.31	228.34	270.98	445,280.93	587,376.69	
7,529.00	1.60	165.80	7,520.60	-227.86	1.70	-227.89	227.90	270.43	445,278.70	587,377.11	
7,623.00	2.00	169.90	7,614.55	-227.28	-1.19	-227.28	227.29	269.70	445,275.81	587,377.72	
7,716.00	0.40	65.50	7,707.53	-226.72	-2.65	-226.70	226.72	269.33	445,274.35	587,378.30	
7,810.00	1.10	35.40	7,801.52	-225.89	-1.78	-225.88	225.89	269.55	445,275.22	587,379.12	
7,903.00	1.00	331.30	7,894.51	-225.75	-0.34	-225.76	225.76	269.91	445,276.66	587,379.24	
7,997.00	3.80	298.90	7,988.42	-228.84	1.88	-228.88	228.89	270.47	445,278.88	587,376.12	
8,090.00	3.30	289.50	8,081.24	-234.04	4.27	-234.10	234.14	271.04	445,281.27	587,370.90	
8,184.00	1.60	251.30	8,175.16	-237.82	4.75	-237.89	237.94	271.14	445,281.75	587,367.11	
8,277.00	1.10	142.80	8,268.14	-238.53	3.62	-238.58	238.61	270.87	445,280.62	587,366.42	
8,371.00	1.50	120.00	8,362.12	-236.93	2.29	-236.97	236.98	270.55	445,279.29	587,368.03	
8,465.00	1.50	101.20	8,456.09	-234.67	1.43	-234.70	234.70	270.35	445,278.43	587,370.30	
8,558.00	0.60	103.80	8,549.07	-233.01	1.08	-233.03	233.04	270.27	445,278.08	587,371.97	
8,652.00	1.60	196.20	8,643.06	-232.91	-0.30	-232.92	232.92	269.93	445,276.70	587,372.08	
8,746.00	2.00	204.60	8,737.01	-233.99	-3.05	-233.97	233.99	269.25	445,273.95	587,371.03	
8,839.00	2.10	214.40	8,829.95	-235.66	-5.93	-235.61	235.68	268.56	445,271.07	587,369.39	
8,933.00	1.20	227.10	8,923.91	-237.38	-8.02	-237.30	237.44	268.06	445,268.98	587,367.70	
9,026.00	1.10	269.30	9,016.90	-238.99	-8.70	-238.91	239.07	267.92	445,268.30	587,366.09	
9,120.00	2.10	266.10	9,110.86	-241.61	-8.82	-241.53	241.69	267.91	445,268.18	587,363.47	
9,214.00	0.90	312.10	9,204.83	-243.87	-8.45	-243.79	243.94	268.02	445,268.55	587,361.21	
9,307.00	1.40	31.00	9,297.81	-243.81	-6.98	-243.75	243.85	268.36	445,270.02	587,361.25	
9,401.00	0.70	25.70	9,391.80	-242.96	-5.48	-242.91	242.97	268.71	445,271.52	587,362.09	



ProDirectional
Survey Report



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Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Pat809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

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)	
9,495.00	0.50	15.10	9,485.79	-242.59	-4.57	-242.56	242.60	268.92	445,272.43	587,362.44	
9,588.00	0.30	28.00	9,578.79	-242.36	-3.96	-242.34	242.37	269.06	445,273.04	587,362.66	
9,682.00	0.20	11.90	9,672.79	-242.21	-3.58	-242.19	242.21	269.15	445,273.42	587,362.81	
9,775.00	0.30	140.90	9,765.79	-242.02	-3.61	-242.00	242.03	269.14	445,273.39	587,363.00	
9,869.00	0.60	151.70	9,859.79	-241.64	-4.24	-241.61	241.65	269.00	445,272.76	587,363.39	
9,962.00	0.90	152.20	9,952.78	-241.08	-5.31	-241.04	241.10	268.74	445,271.69	587,363.96	
9,986.00	1.00	157.80	9,976.77	-240.92	-5.67	-240.87	240.94	268.65	445,271.33	587,364.13	
10,080.00	4.10	85.70	10,070.68	-237.26	-6.18	-237.21	237.29	268.51	445,270.82	587,367.79	
10,111.00	8.40	81.80	10,101.49	-233.91	-5.77	-233.86	233.93	268.59	445,271.23	587,371.14	
10,142.00	11.90	80.30	10,132.00	-228.51	-4.91	-228.47	228.52	268.77	445,272.09	587,376.53	
10,173.00	15.10	77.80	10,162.14	-221.39	-3.52	-221.37	221.40	269.09	445,273.48	587,383.63	
10,220.00	19.80	83.80	10,206.97	-207.47	-1.37	-207.46	207.47	269.62	445,275.63	587,397.54	
10,267.00	24.70	88.20	10,250.46	-189.71	-0.20	-189.72	189.72	269.94	445,276.80	587,415.28	
10,314.00	30.40	90.10	10,292.11	-167.99	0.09	-168.00	168.00	270.03	445,277.09	587,437.00	
10,361.00	36.00	89.80	10,331.43	-142.26	0.12	-142.27	142.27	270.05	445,277.12	587,462.73	
10,408.00	39.90	88.30	10,368.48	-113.37	0.61	-113.38	113.38	270.31	445,277.61	587,491.62	
10,454.00	41.90	87.00	10,403.25	-83.26	1.86	-83.29	83.31	271.28	445,278.86	587,521.71	
10,501.00	44.20	85.50	10,437.59	-51.23	3.96	-51.28	51.43	274.42	445,280.96	587,553.72	
10,548.00	46.60	85.10	10,470.59	-17.85	6.71	-17.93	19.14	290.51	445,283.71	587,587.07	
10,595.00	50.20	87.70	10,501.80	17.24	8.89	17.14	19.31	62.58	445,285.89	587,622.14	
10,642.00	55.10	89.70	10,530.30	54.58	9.72	54.48	55.34	79.89	445,286.72	587,659.48	
10,689.00	59.60	90.70	10,555.65	94.14	9.57	94.04	94.52	84.19	445,286.57	587,699.04	
10,735.00	61.70	91.10	10,578.20	134.22	8.94	134.13	134.42	86.19	445,285.94	587,739.13	
10,782.00	63.30	88.80	10,599.90	175.90	8.98	175.81	176.04	87.08	445,285.98	587,780.81	
10,829.00	66.50	86.00	10,619.84	218.42	10.93	218.32	218.59	87.13	445,287.93	587,823.32	
10,876.00	71.50	85.40	10,636.68	262.20	14.22	262.06	262.44	86.89	445,291.22	587,867.06	
10,917.00	76.10	84.10	10,648.11	301.43	17.83	301.25	301.78	86.61	445,294.83	587,906.25	



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 221H
Project:	Eddy County, NM	TVD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well Planner1

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)	
10,947.00	77.51	84.42	10,654.96	330.52	20.75	330.31	330.96	86.41	445,297.75	587,935.31	
LL Xing: 10947' MD											
11,023.00	81.10	85.20	10,669.06	404.96	27.50	404.67	405.61	86.11	445,304.50	588,009.67	
11,055.00	82.20	84.90	10,673.71	436.53	30.23	436.22	437.26	86.04	445,307.23	588,041.22	
11,086.00	84.60	85.30	10,677.27	467.23	32.86	466.90	468.05	85.97	445,309.86	588,071.90	
11,181.00	88.20	89.10	10,683.24	561.95	37.49	561.56	562.81	86.18	445,314.49	588,166.56	
11,274.00	90.50	91.80	10,684.29	654.91	36.76	654.54	655.57	86.79	445,313.76	588,259.54	
11,279.00	90.50	91.71	10,684.25	659.90	36.60	659.54	660.55	86.82	445,313.60	588,264.54	
HL Xing: 11279' MD											
11,369.00	90.50	90.10	10,683.46	749.86	35.18	749.52	750.34	87.31	445,312.18	588,354.52	
11,464.00	89.30	92.50	10,683.63	844.80	33.03	844.49	845.13	87.76	445,310.03	588,449.49	
11,559.00	91.00	92.20	10,683.38	939.67	29.13	939.40	939.85	88.22	445,306.13	588,544.40	
11,653.00	90.80	93.20	10,681.90	1,033.50	24.70	1,033.28	1,033.58	88.63	445,301.70	588,638.28	
11,747.00	88.30	92.40	10,682.64	1,127.32	20.11	1,127.16	1,127.34	88.98	445,297.11	588,732.16	
11,841.00	86.60	90.20	10,686.82	1,221.16	17.98	1,221.03	1,221.17	89.16	445,294.98	588,826.03	
11,936.00	89.70	92.20	10,689.89	1,316.04	15.99	1,315.95	1,316.04	89.30	445,292.99	588,920.95	
12,031.00	88.60	92.00	10,691.30	1,410.92	12.51	1,410.87	1,410.93	89.49	445,289.51	589,015.87	
12,125.00	84.80	88.60	10,696.71	1,504.72	12.01	1,504.68	1,504.73	89.54	445,289.01	589,109.68	
12,219.00	88.40	89.10	10,702.29	1,598.54	13.90	1,598.48	1,598.54	89.50	445,290.90	589,203.48	
12,314.00	89.50	88.90	10,704.03	1,693.52	15.55	1,693.45	1,693.52	89.47	445,292.55	589,298.45	
12,408.00	89.00	88.20	10,705.26	1,787.50	17.93	1,787.41	1,787.50	89.43	445,294.93	589,392.41	
12,503.00	86.70	89.40	10,708.82	1,882.42	19.92	1,882.32	1,882.42	89.39	445,296.92	589,487.32	
12,597.00	92.10	92.20	10,709.80	1,976.34	18.61	1,976.26	1,976.35	89.46	445,295.61	589,581.26	
12,692.00	89.50	89.80	10,708.48	2,071.28	16.95	2,071.22	2,071.29	89.53	445,293.95	589,676.22	
12,786.00	86.30	89.20	10,711.92	2,165.20	17.77	2,165.14	2,165.21	89.53	445,294.77	589,770.14	
12,880.00	85.80	89.10	10,718.40	2,258.98	19.16	2,258.91	2,258.99	89.51	445,296.16	589,863.91	
12,975.00	90.50	90.40	10,721.46	2,353.90	19.57	2,353.83	2,353.91	89.52	445,296.57	589,958.83	



ProDirectional
Survey Report



Company:	Matador.Resources	Local Co-ordinate Reference:	Well No. 221H
Project:	Eddy County, NM	TVD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well_Planner1

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)	
13,070.00	86.40	87.20	10,724.03	2,448.83	21.56	2,448.74	2,448.83	89.50	445,298.56	590,053.74	
13,164.00	86.20	87.40	10,730.10	2,542.57	25.98	2,542.44	2,542.57	89.41	445,302.98	590,147.44	
13,258.00	86.40	88.00	10,736.17	2,636.33	29.74	2,636.17	2,636.33	89.35	445,306.74	590,241.17	
13,352.00	88.00	87.90	10,740.76	2,730.19	33.10	2,729.99	2,730.19	89.31	445,310.10	590,334.99	
13,446.00	88.30	88.20	10,743.79	2,824.12	36.30	2,823.89	2,824.12	89.26	445,313.30	590,428.89	
13,540.00	90.60	88.40	10,744.69	2,918.09	39.09	2,917.84	2,918.10	89.23	445,316.09	590,522.84	
13,635.00	91.90	90.70	10,742.62	3,013.06	39.83	3,012.80	3,013.07	89.24	445,316.83	590,617.80	
13,728.00	90.40	92.40	10,740.75	3,105.97	37.32	3,105.74	3,105.97	89.31	445,314.32	590,710.74	
13,823.00	90.90	92.30	10,739.68	3,200.83	33.42	3,200.66	3,200.83	89.40	445,310.42	590,805.66	
13,917.00	89.70	90.80	10,739.18	3,294.76	30.88	3,294.62	3,294.76	89.46	445,307.88	590,899.62	
14,011.00	90.80	92.10	10,738.77	3,388.69	28.50	3,388.58	3,388.70	89.52	445,305.50	590,993.58	
14,106.00	90.10	90.20	10,738.03	3,483.63	26.60	3,483.56	3,483.66	89.56	445,303.60	591,088.56	
14,200.00	89.10	88.70	10,738.68	3,577.63	27.50	3,577.54	3,577.65	89.56	445,304.50	591,182.54	
14,295.00	89.20	88.20	10,740.09	3,672.61	30.07	3,672.50	3,672.62	89.53	445,307.07	591,277.50	
14,389.00	90.50	89.50	10,740.34	3,766.60	31.95	3,766.48	3,766.61	89.51	445,308.95	591,371.48	
14,483.00	89.20	90.60	10,740.59	3,860.59	31.87	3,860.47	3,860.60	89.53	445,308.87	591,465.47	
14,578.00	87.80	90.10	10,743.07	3,955.54	31.29	3,955.44	3,955.56	89.55	445,308.29	591,560.44	
14,672.00	87.90	90.10	10,746.60	4,049.46	31.13	4,049.37	4,049.49	89.56	445,308.13	591,654.37	
14,766.00	88.60	88.50	10,749.47	4,143.42	32.28	4,143.31	4,143.44	89.55	445,309.28	591,748.31	
14,861.00	90.60	88.80	10,750.13	4,238.40	34.51	4,238.28	4,238.42	89.53	445,311.51	591,843.28	
14,955.00	83.20	85.30	10,755.21	4,332.11	39.33	4,331.94	4,332.12	89.48	445,316.33	591,936.94	
Last Survey(OH): 14955' MD, 10755' TVD											
15,012.00	85.70	87.30	10,760.73	4,388.75	42.99	4,388.55	4,388.76	89.44	445,319.99	591,993.55	
PTB(OH): 15012' MD, 10761' TVD											



ProDirectional
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 221H
Project:	Eddy County, NM	TVD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Site:	Janie Conner 201-221-121	MD Reference:	Well @ 3004.50usft (GL: 2976' + KB: 28.5' (Patt809))
Well:	No. 221H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyro/MWD	Database:	Well Planner1

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
697.00	696.42	-12.70	19.75	Pro MWD First Survey: 697' MD
10,947.00	10,654.96	20.75	330.31	LL Xing: 10947' MD
11,279.00	10,684.25	36.60	659.54	HL Xing: 11279' MD
14,955.00	10,755.21	39.33	4,331.94	Last Survey(OH): 14955'MD, 10755'TVD
15,012.00	10,760.73	42.99	4,388.55	PTB(OH): 15012'MD, 10761'TVD