



PRODIRECTIONAL

Rec'd 6/25/2020 - NMOCD



Rodney Robinson Federal No. 121H(ST01)
Lea County, NM

December 20, 2019

Job No. LNM5536819

Certified Report

ORIGINAL



PRODIRECTIONAL

Survey Certification Letter

Rec'd 6/25/2020 - NMOCD

December 20, 2019



Operator Name: Matador Resources
Well Name: Rodney Robinson Federal No. 121H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 810
Job Number: LNM5536819

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	11,273' MD – 21,198' MD	21,253' MD	11/12/19 – 11/30/19	MWD

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

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

prodirectional.com



Matador Resources

Lea County, NM
Rodney Robinson Federal
No. 121H
ST01

Survey: ProDirectional

Survey Report

19 December, 2019





ProDirectional Survey Report



Company: Matador Resources	Well No. 121H
Project: Lea County, NM (NAD83)	Well @ 3766.50usft
Site: Rodney Robinson Federal	Well @ 3766.50usft
Well: No. 121H	Grid
Wellbore: ST01	Minimum Curvature
Design: MWD	WellPlanner1

Project: Lea County, NM (NAD83)	System Datum: Mean Sea Level
Map System: US State Plane 1983	
Geo Datum: North American Datum 1983	
Map Zone: New Mexico Eastern Zone	

Site: Rodney Robinson Federal	
Site Position:	Latitude: 32.3404068
From: Map	Longitude: -103.6135370
Position Uncertainty: 0.00 usft	Grid Convergence: 0.39 °

Well: No. 121H, LNM5536819	
Well Position	Latitude: 32.3403281
+N/-S 0.00 usft	Longitude: -103.6170960
+E/-W 0.00 usft	Ground Level: 3,738.00 usft
Position Uncertainty 0.00 usft	

Wellbore: ST01	
Magnetics	
Model Name: HDGM	Field Strength (nT): 47,967.60
Sample Date: 10/22/2019	Dip Angle (°): 60.05
Declination (°): 6.67	

Design: MWD	
Audit Notes:	
Version: 1.0	Phase: ACTUAL
Vertical Section:	Tie On Depth: 11,227.00
Depth From (TVD) (usft): 0.00	+N/-S (usft): 0.00
+E/-W (usft): 0.00	Direction (°): 179.62



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 121H
Project:	Lea County, NM (NAD83)	TVD Reference:	Well @ 3766.50usft
Site:	Rodney Robinson Federal	MD Reference:	Well @ 3766.50usft
Well:	No. 121H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	MWD	Database:	WellPlanner1

Survey Program	From (usft)	To (usft)	Date	Survey (Wellbore)	Tool Name	Description
	148.00	11,227.00	12/19/2019	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM
	11,273.00	21,253.00		MWD (ST01)	MWD+HDGM	OWSG MWD + HRGM

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	488,283.00	762,541.00
148.00	0.40	226.10	148.00	0.36	-0.36	-0.37	0.52	226.10	488,282.64	762,540.63
211.00	0.50	228.20	211.00	0.69	-0.69	-0.74	1.01	226.67	488,282.31	762,540.26
274.00	0.30	227.60	274.00	0.98	-0.99	-1.06	1.45	227.07	488,282.01	762,539.94
337.00	0.50	252.50	336.99	1.17	-1.18	-1.45	1.87	230.74	488,281.82	762,539.55
400.00	0.50	245.70	399.99	1.36	-1.38	-1.96	2.40	234.88	488,281.62	762,539.04
460.00	0.30	246.80	459.99	1.53	-1.55	-2.34	2.81	236.54	488,281.45	762,538.66
492.00	0.10	185.40	491.99	1.59	-1.61	-2.42	2.91	236.41	488,281.39	762,538.58
628.00	0.10	38.80	627.99	1.62	-1.63	-2.36	2.87	235.28	488,281.37	762,538.64
724.00	0.20	95.00	723.99	1.57	-1.58	-2.14	2.66	233.49	488,281.42	762,538.86
819.00	0.20	31.70	818.99	1.44	-1.46	-1.89	2.38	232.33	488,281.54	762,539.11
915.00	0.20	33.40	914.99	1.16	-1.17	-1.71	2.07	235.46	488,281.83	762,539.29
1,010.00	0.10	11.00	1,009.99	0.94	-0.95	-1.60	1.86	239.17	488,282.05	762,539.40
1,106.00	0.20	82.30	1,105.99	0.84	-0.85	-1.42	1.65	239.05	488,282.15	762,539.58
1,202.00	0.20	168.00	1,201.99	0.98	-0.99	-1.22	1.57	230.82	488,282.01	762,539.78
1,288.00	0.10	197.90	1,287.99	1.20	-1.21	-1.21	1.71	224.97	488,281.79	762,539.79
1,379.00	0.30	334.50	1,378.99	1.06	-1.07	-1.34	1.71	231.29	488,281.93	762,539.66
1,474.00	2.30	273.50	1,473.96	0.71	-0.73	-3.35	3.42	257.70	488,282.27	762,537.65
1,570.00	3.10	276.30	1,569.85	0.27	-0.33	-7.85	7.85	267.62	488,282.67	762,533.15
1,665.00	2.60	277.00	1,664.73	-0.30	0.22	-12.54	12.54	270.99	488,283.22	762,528.46
1,761.00	3.50	285.10	1,760.60	-1.36	1.25	-17.53	17.57	274.07	488,284.25	762,523.47



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
1,857.00	3.90	282.30	1,856.40	-2.86	2.71	-23.55	23.70	276.55	488,285.71	762,517.45
1,952.00	3.60	278.60	1,951.19	-4.04	3.84	-29.66	29.90	277.38	488,286.84	762,511.34
2,048.00	4.70	293.60	2,046.94	-6.11	5.87	-36.24	36.71	279.19	488,288.87	762,504.76
2,144.00	6.70	299.60	2,142.46	-10.50	10.21	-44.71	45.86	282.86	488,293.21	762,496.29
2,240.00	6.90	298.70	2,237.79	-16.10	15.74	-54.64	56.86	286.07	488,298.74	762,486.36
2,335.00	6.50	299.00	2,332.14	-21.52	21.09	-64.35	67.72	288.15	488,304.09	762,476.65
2,431.00	6.30	298.80	2,427.54	-26.75	26.26	-73.72	78.26	289.61	488,309.26	762,467.28
2,526.00	5.90	299.30	2,522.00	-31.71	31.16	-82.54	88.23	290.68	488,314.16	762,458.46
2,622.00	5.60	298.10	2,617.52	-36.38	35.78	-90.98	97.76	291.47	488,318.78	762,450.02
2,718.00	5.30	296.50	2,713.09	-40.62	39.97	-99.08	106.84	291.97	488,322.97	762,441.92
2,814.00	5.10	299.20	2,808.69	-44.73	44.03	-106.77	115.49	292.41	488,327.03	762,434.23
2,909.00	4.80	298.20	2,903.34	-48.72	47.97	-113.96	123.64	292.83	488,330.97	762,427.04
3,005.00	5.90	299.80	2,998.92	-53.12	52.32	-121.78	132.54	293.25	488,335.32	762,419.22
3,101.00	6.50	302.50	3,094.36	-58.55	57.69	-130.65	142.82	293.82	488,340.69	762,410.35
3,197.00	6.10	303.80	3,189.78	-64.37	63.44	-139.47	153.22	294.46	488,346.44	762,401.53
3,293.00	5.80	304.10	3,285.26	-69.98	69.00	-147.72	163.04	295.04	488,352.00	762,393.28
3,388.00	5.30	303.40	3,379.81	-75.14	74.11	-155.36	172.13	295.50	488,357.11	762,385.64
3,484.00	4.80	305.60	3,475.44	-79.96	78.89	-162.33	180.48	295.92	488,361.89	762,378.67
3,579.00	5.60	301.10	3,570.05	-84.72	83.59	-169.53	189.02	296.25	488,366.59	762,371.47
3,675.00	6.10	301.70	3,665.55	-89.87	88.69	-177.88	198.77	296.50	488,371.69	762,363.12
3,771.00	5.60	302.40	3,761.05	-95.12	93.88	-186.17	208.51	296.76	488,376.88	762,354.83
3,867.00	5.30	303.00	3,856.61	-100.09	98.81	-193.85	217.58	297.01	488,381.81	762,347.15
3,962.00	6.60	294.20	3,951.10	-104.78	103.44	-202.51	227.39	297.06	488,386.44	762,338.49
4,057.00	6.40	290.30	4,045.49	-108.92	107.51	-212.45	238.11	296.84	488,390.51	762,328.55
4,153.00	4.50	289.30	4,141.05	-112.08	110.61	-221.03	247.16	296.59	488,393.61	762,319.97
4,248.00	5.20	292.00	4,235.71	-114.97	113.46	-228.54	255.15	296.40	488,396.46	762,312.46
4,344.00	5.90	290.90	4,331.26	-118.42	116.85	-237.18	264.40	296.23	488,399.85	762,303.82



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Project:

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

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
4,439.00	4.60	293.60	4,425.86	-121.74	120.11	-245.23	273.07	296.10	488,403.11	762,295.77
4,535.00	4.70	295.40	4,521.55	-125.01	123.34	-252.31	280.85	296.05	488,406.34	762,288.69
4,631.00	4.10	299.60	4,617.26	-128.44	126.73	-258.85	288.20	296.09	488,409.73	762,282.15
4,726.00	4.20	294.80	4,712.01	-131.62	129.86	-264.96	295.07	296.11	488,412.86	762,276.04
4,822.00	5.20	291.00	4,807.69	-134.70	132.90	-272.21	302.92	296.02	488,415.90	762,268.79
4,917.00	4.50	292.60	4,902.35	-137.72	135.87	-279.67	310.93	295.91	488,418.87	762,261.33
5,013.00	4.20	294.40	4,998.07	-140.67	138.77	-286.35	318.20	295.86	488,421.77	762,254.65
5,097.00	3.90	293.10	5,081.86	-143.09	141.16	-291.78	324.13	295.82	488,424.16	762,249.22
5,192.00	3.50	331.20	5,176.68	-146.93	144.97	-296.15	329.73	296.08	488,427.97	762,244.85
5,287.00	5.50	8.00	5,271.40	-153.99	152.02	-296.91	333.57	297.11	488,435.02	762,244.09
5,383.00	8.40	15.50	5,366.69	-165.29	163.34	-294.40	336.67	299.02	488,446.34	762,246.60
5,478.00	6.60	6.30	5,460.87	-177.38	175.45	-291.94	340.61	301.00	488,458.45	762,249.06
5,573.00	6.40	338.50	5,555.29	-187.75	185.81	-293.29	347.19	302.36	488,468.81	762,247.71
5,669.00	8.30	313.90	5,650.52	-197.58	195.59	-300.24	358.33	303.08	488,478.59	762,240.76
5,765.00	9.80	296.90	5,745.34	-206.17	204.10	-312.52	373.26	303.15	488,487.10	762,228.48
5,860.00	7.20	279.80	5,839.30	-210.92	208.77	-325.60	386.79	302.67	488,491.77	762,215.40
5,956.00	6.30	275.80	5,934.63	-212.55	210.33	-336.77	397.06	301.99	488,493.33	762,204.23
6,052.00	8.00	265.70	6,029.89	-212.67	210.36	-348.68	407.22	301.10	488,493.36	762,192.32
6,147.00	8.00	264.40	6,123.96	-211.61	209.22	-361.85	417.98	300.04	488,492.22	762,179.15
6,243.00	8.00	264.70	6,219.03	-210.43	207.95	-375.15	428.93	299.00	488,490.95	762,165.85
6,339.00	8.30	263.70	6,314.06	-209.14	206.57	-388.69	440.17	297.99	488,489.57	762,152.31
6,435.00	8.40	263.10	6,409.04	-207.63	204.97	-402.54	451.71	296.98	488,487.97	762,138.46
6,530.00	8.40	262.70	6,503.02	-206.01	203.25	-416.31	463.27	296.02	488,486.25	762,124.69
6,626.00	6.40	267.40	6,598.22	-204.96	202.12	-428.61	473.87	295.25	488,485.12	762,112.39
6,722.00	4.10	268.40	6,693.81	-204.68	201.78	-437.38	481.69	294.77	488,484.78	762,103.62
6,818.00	3.80	267.40	6,789.58	-204.48	201.54	-443.99	487.59	294.41	488,484.54	762,097.01
6,913.00	4.00	264.90	6,884.36	-204.09	201.10	-450.44	493.29	294.06	488,484.10	762,090.56



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (")	Northing (usft)	Eastng (usft)
7,009.00	1.60	272.30	6,980.24	-203.87	200.86	-455.11	497.47	293.81	488,483.86	762,085.89
7,105.00	1.70	280.20	7,076.20	-204.20	201.16	-457.85	500.10	293.72	488,484.16	762,083.15
7,200.00	1.40	357.80	7,171.17	-205.62	202.57	-459.29	501.98	293.80	488,485.57	762,081.71
7,296.00	1.60	357.40	7,267.14	-208.13	205.08	-459.39	503.09	294.06	488,488.08	762,081.61
7,392.00	1.50	362.00	7,363.11	-210.71	207.67	-459.63	504.36	294.31	488,490.67	762,081.37
7,487.00	1.50	352.60	7,458.07	-213.18	210.13	-459.96	505.69	294.55	488,493.13	762,081.04
7,583.00	1.40	348.50	7,554.04	-215.58	212.53	-460.36	507.05	294.78	488,495.53	762,080.64
7,679.00	1.30	338.60	7,650.02	-217.74	214.69	-460.99	508.53	294.97	488,497.69	762,080.01
7,775.00	1.10	328.70	7,745.99	-219.55	216.49	-461.86	510.08	295.11	488,499.49	762,079.14
7,870.00	1.20	321.80	7,840.98	-221.12	218.05	-462.95	511.73	295.22	488,501.05	762,078.05
7,966.00	1.20	311.00	7,936.95	-222.58	219.50	-464.33	513.60	295.30	488,502.50	762,076.67
8,061.00	1.20	303.30	8,031.93	-223.79	220.70	-465.91	515.54	295.35	488,503.70	762,075.09
8,157.00	1.10	302.60	8,127.91	-224.84	221.75	-467.53	517.45	295.37	488,504.75	762,073.47
8,253.00	1.10	298.00	8,223.90	-225.78	222.68	-469.12	519.29	295.39	488,505.68	762,071.88
8,348.00	1.10	302.40	8,318.88	-226.71	223.59	-470.70	521.10	295.41	488,506.59	762,070.30
8,444.00	1.00	303.50	8,414.86	-227.68	224.55	-472.17	522.85	295.43	488,507.55	762,068.83
8,540.00	1.10	296.40	8,510.85	-228.56	225.42	-473.70	524.60	295.45	488,508.42	762,067.30
8,635.00	1.50	133.80	8,605.84	-228.10	224.97	-473.62	524.33	295.41	488,507.97	762,067.38
8,731.00	1.20	139.50	8,701.81	-226.46	223.33	-472.06	522.22	295.32	488,506.33	762,068.94
8,826.00	1.00	137.50	8,796.79	-225.08	221.97	-470.85	520.55	295.24	488,504.97	762,070.15
8,922.00	0.70	147.30	8,892.78	-223.97	220.85	-469.97	519.27	295.17	488,503.85	762,071.03
9,018.00	0.40	164.20	8,988.78	-223.15	220.04	-469.56	518.56	295.11	488,503.04	762,071.44
9,113.00	0.50	198.50	9,083.78	-222.44	219.33	-469.60	518.29	295.03	488,502.33	762,071.40
9,209.00	0.10	194.70	9,179.77	-221.96	218.85	-469.75	518.23	294.98	488,501.85	762,071.25
9,305.00	0.30	336.50	9,275.77	-222.11	219.00	-469.88	518.40	294.99	488,502.00	762,071.12
9,400.00	0.80	3.10	9,370.77	-223.00	219.89	-469.94	518.84	295.08	488,502.89	762,071.06
9,496.00	0.80	8.60	9,466.76	-224.33	221.22	-469.80	519.28	295.21	488,504.22	762,071.20



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
9,592.00	1.30	349.10	9,562.74	-226.06	222.95	-469.91	520.12	295.38	488,505.95	762,071.09
9,688.00	1.60	1.20	9,658.71	-228.47	225.36	-470.09	521.31	295.61	488,508.36	762,070.91
9,784.00	1.70	356.70	9,754.67	-231.24	228.12	-470.14	522.56	295.88	488,511.12	762,070.86
9,879.00	2.20	347.80	9,849.62	-234.43	231.31	-470.61	524.38	296.18	488,514.31	762,070.39
9,975.00	1.90	46.70	9,945.57	-237.32	234.20	-469.84	524.98	296.50	488,517.20	762,071.16
10,071.00	2.80	111.00	10,041.50	-237.54	234.46	-466.49	522.09	296.68	488,517.46	762,074.51
10,166.00	2.80	111.80	10,136.39	-235.82	232.76	-462.17	517.47	296.73	488,515.76	762,078.83
10,262.00	2.50	105.70	10,232.28	-234.36	231.33	-457.98	513.08	296.80	488,514.33	762,083.02
10,358.00	2.50	96.00	10,328.19	-233.55	230.54	-453.88	509.07	296.93	488,513.54	762,087.12
10,438.00	2.20	87.10	10,408.13	-233.42	230.44	-450.61	506.11	297.08	488,513.44	762,090.39
10,557.00	3.20	122.90	10,527.00	-231.70	228.75	-445.54	500.83	297.18	488,511.75	762,095.46
10,653.00	15.90	170.30	10,621.55	-217.18	214.26	-441.05	490.34	295.91	488,497.26	762,099.95
10,748.00	27.90	183.60	10,709.59	-182.01	179.10	-440.25	475.29	292.14	488,462.10	762,100.75
10,844.00	36.70	185.80	10,790.66	-130.99	128.04	-444.57	462.64	286.07	488,411.04	762,096.43
10,939.00	49.70	185.20	10,859.76	-66.43	63.44	-450.75	455.19	278.01	488,346.44	762,090.25
11,035.00	53.20	187.20	10,919.58	8.13	-11.17	-458.89	459.02	268.61	488,271.83	762,082.11
11,131.00	65.00	184.00	10,968.81	89.91	-93.01	-466.77	475.94	258.73	488,189.99	762,074.23
11,227.00	79.80	182.90	10,997.75	180.96	-184.09	-472.22	506.84	248.70	488,098.91	762,068.78
11,273.00	79.20	171.90	11,006.16	226.08	-229.20	-470.18	523.07	244.01	488,053.80	762,070.82
First ST01 Survey: 11273' MD										
11,305.00	82.50	175.80	11,011.25	257.50	-260.60	-466.80	534.62	240.83	488,022.40	762,074.20
11,336.00	84.20	174.30	11,014.84	288.19	-291.28	-464.14	547.97	237.89	487,991.72	762,076.86
11,368.00	84.10	174.10	11,018.10	319.88	-322.95	-460.93	562.80	234.98	487,960.05	762,080.07
11,456.00	88.70	173.40	11,023.63	407.23	-410.23	-451.37	609.93	227.73	487,872.77	762,089.63
11,551.00	91.30	172.80	11,023.63	501.60	-504.53	-439.95	669.41	221.09	487,778.47	762,101.05
11,645.00	92.30	173.50	11,020.67	594.96	-597.81	-428.75	735.67	215.65	487,685.19	762,112.25
11,740.00	91.10	174.60	11,017.86	689.46	-692.26	-418.90	809.14	211.18	487,590.74	762,122.10



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (MAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

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)
11,834.00	89.70	175.00	11,017.20	783.13	-785.87	-410.39	886.57	207.57	487,497.13	762,130.61
11,929.00	90.60	175.60	11,016.95	877.85	-880.54	-402.60	968.22	204.57	487,402.46	762,138.40
12,024.00	91.80	175.90	11,014.96	972.62	-975.26	-395.56	1,052.43	202.08	487,307.74	762,145.44
12,120.00	90.10	177.70	11,013.37	1,068.48	-1,071.09	-390.21	1,139.95	200.02	487,211.91	762,150.79
12,216.00	88.10	179.70	11,014.88	1,164.44	-1,167.04	-388.03	1,229.86	198.39	487,115.96	762,152.97
12,312.00	86.40	180.50	11,019.48	1,260.33	-1,262.93	-388.19	1,321.24	197.09	487,020.07	762,152.81
12,407.00	86.70	181.80	11,025.20	1,355.12	-1,357.74	-390.10	1,412.66	196.03	486,925.26	762,150.90
12,503.00	86.20	180.30	11,031.14	1,450.90	-1,453.53	-391.85	1,505.43	195.09	486,829.47	762,149.15
12,599.00	86.50	180.60	11,037.26	1,546.70	-1,549.33	-392.61	1,598.30	194.22	486,733.67	762,148.39
12,694.00	86.30	182.10	11,043.22	1,641.46	-1,644.12	-394.84	1,690.86	193.50	486,638.88	762,146.16
12,790.00	86.70	179.90	11,049.08	1,737.25	-1,739.92	-396.51	1,784.53	192.84	486,543.08	762,144.49
12,886.00	88.00	180.60	11,053.52	1,833.14	-1,835.81	-396.93	1,878.23	192.20	486,447.19	762,144.07
12,982.00	87.50	178.60	11,057.29	1,929.06	-1,931.73	-396.26	1,971.95	191.59	486,351.27	762,144.74
13,077.00	87.90	178.40	11,061.10	2,023.96	-2,026.62	-393.78	2,064.52	191.00	486,256.38	762,147.22
13,173.00	88.20	178.50	11,064.37	2,119.89	-2,122.53	-391.18	2,158.28	190.44	486,160.47	762,149.82
13,268.00	88.50	178.90	11,067.11	2,214.84	-2,217.47	-389.03	2,251.33	189.95	486,065.53	762,151.97
13,364.00	86.10	178.50	11,071.63	2,310.71	-2,313.33	-386.85	2,345.45	189.49	485,969.67	762,154.15
13,460.00	86.20	178.80	11,078.07	2,406.48	-2,409.08	-384.60	2,439.59	189.07	485,873.92	762,156.40
13,555.00	86.70	179.00	11,083.96	2,501.29	-2,503.88	-382.78	2,532.97	188.69	485,779.12	762,158.22
13,651.00	87.60	178.80	11,088.73	2,597.16	-2,599.75	-380.93	2,627.51	188.34	485,683.25	762,160.07
13,747.00	87.10	178.60	11,093.17	2,693.05	-2,695.62	-378.76	2,722.10	188.00	485,587.38	762,162.24
13,842.00	88.30	179.00	11,096.98	2,787.96	-2,790.52	-376.77	2,815.84	187.69	485,492.48	762,164.23
13,938.00	88.40	179.60	11,099.74	2,883.92	-2,886.47	-375.60	2,910.81	187.41	485,396.53	762,165.40
14,033.00	88.40	180.00	11,102.40	2,978.88	-2,981.43	-375.27	3,004.96	187.17	485,301.57	762,165.73
14,129.00	85.60	178.70	11,107.42	3,074.74	-3,077.28	-374.18	3,099.95	186.93	485,205.72	762,166.82
14,225.00	85.10	179.80	11,115.20	3,170.42	-3,172.96	-372.93	3,194.80	186.70	485,110.04	762,168.07
14,320.00	85.80	180.30	11,122.74	3,265.11	-3,267.66	-373.01	3,288.88	186.51	485,015.34	762,167.99



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
14,416.00	86.20	179.20	11,129.44	3,360.88	-3,363.42	-372.59	3,384.00	186.32	484,919.58	762,168.41
14,491.00	86.70	179.40	11,134.08	3,435.73	-3,438.27	-371.68	3,458.30	186.17	484,844.73	762,169.32
14,575.00	89.30	179.40	11,137.01	3,519.67	-3,522.21	-370.80	3,541.67	186.01	484,760.79	762,170.20
14,671.00	91.00	179.50	11,136.76	3,615.67	-3,618.20	-369.88	3,637.06	185.84	484,664.80	762,171.12
14,767.00	92.50	179.30	11,133.83	3,711.62	-3,714.15	-368.87	3,732.42	185.67	484,568.85	762,172.13
14,863.00	93.90	179.30	11,128.47	3,807.47	-3,809.99	-367.70	3,827.69	185.51	484,473.01	762,173.30
14,990.00	90.10	179.90	11,124.04	3,934.37	-3,936.88	-366.82	3,953.94	185.32	484,346.12	762,174.18
15,085.00	91.10	180.50	11,123.04	4,029.35	-4,031.88	-367.15	4,048.56	185.20	484,251.12	762,173.85
15,181.00	92.00	181.20	11,120.45	4,125.29	-4,127.83	-368.57	4,144.25	185.10	484,155.17	762,172.43
15,277.00	89.20	181.40	11,119.44	4,221.24	-4,223.79	-370.75	4,240.03	185.02	484,059.21	762,170.25
15,372.00	89.40	182.20	11,120.60	4,316.16	-4,318.74	-373.73	4,334.88	184.95	483,964.26	762,167.27
15,468.00	86.50	180.90	11,124.04	4,412.03	-4,414.63	-376.33	4,430.64	184.87	483,868.37	762,164.67
15,564.00	84.60	179.10	11,131.48	4,507.73	-4,510.33	-376.33	4,526.00	184.77	483,772.67	762,164.67
15,660.00	85.00	177.10	11,140.19	4,603.30	-4,605.88	-373.16	4,620.97	184.63	483,677.12	762,167.84
15,755.00	87.40	176.90	11,146.48	4,697.99	-4,700.53	-368.20	4,714.93	184.48	483,582.47	762,172.80
15,851.00	87.90	177.20	11,150.42	4,793.81	-4,796.32	-363.26	4,810.06	184.33	483,486.68	762,177.74
15,947.00	88.50	178.10	11,153.43	4,889.70	-4,892.19	-359.33	4,905.37	184.20	483,390.81	762,181.67
16,043.00	89.90	178.60	11,154.77	4,985.67	-4,988.14	-356.57	5,000.87	184.09	483,294.86	762,184.43
16,138.00	90.60	178.80	11,154.36	5,080.65	-5,083.12	-354.41	5,095.46	183.99	483,199.88	762,186.59
16,234.00	91.50	179.20	11,152.60	5,176.63	-5,179.08	-352.74	5,191.08	183.90	483,103.92	762,188.26
16,329.00	91.50	179.50	11,150.11	5,271.60	-5,274.04	-351.66	5,285.76	183.81	483,008.96	762,189.34
16,425.00	91.30	179.70	11,147.77	5,367.57	-5,370.01	-350.99	5,381.47	183.74	482,912.99	762,190.01
16,521.00	91.80	180.00	11,145.17	5,463.53	-5,465.98	-350.74	5,477.22	183.67	482,817.02	762,190.26
16,617.00	92.00	180.90	11,141.99	5,559.47	-5,561.92	-351.49	5,573.02	183.62	482,721.08	762,189.51
16,712.00	89.70	180.10	11,140.58	5,654.44	-5,656.90	-352.32	5,667.86	183.56	482,626.10	762,188.68
16,808.00	91.00	180.40	11,139.99	5,750.43	-5,752.89	-352.74	5,763.70	183.51	482,530.11	762,188.26
16,904.00	91.20	181.40	11,138.15	5,846.39	-5,848.86	-354.25	5,859.58	183.47	482,434.14	762,186.75



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Project:

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

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

Design:

Wellbore:

Well:

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)

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)
16,999.00	88.80	180.00	11,138.15	5,941.36	-5,943.85	-355.41	5,954.46	183.42	482,339.15	762,185.59
17,095.00	87.90	180.80	11,140.91	6,037.31	-6,039.80	-356.08	6,050.29	183.37	482,243.20	762,184.92
17,191.00	87.00	178.90	11,145.19	6,133.21	-6,135.70	-355.83	6,146.01	183.32	482,147.30	762,185.17
17,286.00	87.20	179.30	11,149.99	6,228.08	-6,230.57	-354.34	6,240.64	183.25	482,052.43	762,186.66
17,382.00	86.30	179.40	11,155.43	6,323.93	-6,326.41	-353.25	6,336.26	183.20	481,956.59	762,187.75
17,478.00	87.60	176.80	11,160.54	6,419.75	-6,422.21	-350.07	6,431.74	183.12	481,860.79	762,190.93
17,573.00	89.40	175.50	11,163.03	6,514.53	-6,516.96	-343.69	6,526.01	183.02	481,766.04	762,197.31
17,669.00	88.80	175.00	11,164.54	6,610.24	-6,612.61	-335.74	6,621.13	182.91	481,670.39	762,205.26
17,765.00	91.30	175.60	11,164.45	6,705.96	-6,708.28	-327.88	6,716.29	182.80	481,574.72	762,213.12
17,861.00	92.00	175.80	11,161.69	6,801.70	-6,803.97	-320.68	6,811.52	182.70	481,479.03	762,220.32
17,956.00	92.20	176.30	11,158.21	6,896.45	-6,898.68	-314.14	6,905.83	182.61	481,384.32	762,226.86
18,052.00	92.40	177.10	11,154.36	6,992.24	-6,994.44	-308.62	7,001.25	182.53	481,288.56	762,232.38
18,148.00	93.10	177.10	11,149.75	7,088.04	-7,090.21	-303.77	7,096.72	182.45	481,192.79	762,237.23
18,244.00	93.00	179.90	11,144.64	7,183.88	-7,186.03	-301.26	7,192.34	182.40	481,096.97	762,239.74
18,339.00	92.90	180.80	11,139.75	7,278.74	-7,280.90	-301.84	7,287.16	182.37	481,002.10	762,239.16
18,435.00	93.20	180.80	11,134.64	7,374.59	-7,376.76	-303.18	7,382.99	182.35	480,906.24	762,237.82
18,531.00	93.20	180.80	11,129.29	7,470.42	-7,472.60	-304.52	7,478.80	182.33	480,810.40	762,236.48
18,626.00	89.90	181.10	11,126.72	7,565.34	-7,567.54	-306.09	7,573.73	182.32	480,715.46	762,234.91
18,722.00	90.10	181.70	11,126.72	7,661.30	-7,663.51	-308.44	7,669.71	182.30	480,619.49	762,232.56
18,818.00	89.90	182.20	11,126.72	7,757.22	-7,759.45	-311.70	7,765.71	182.30	480,523.55	762,229.30
18,913.00	90.20	182.70	11,126.63	7,852.10	-7,854.37	-315.77	7,860.71	182.30	480,428.63	762,225.23
19,009.00	90.80	183.40	11,125.80	7,947.92	-7,950.23	-320.87	7,956.70	182.31	480,332.77	762,220.13
19,105.00	90.10	181.20	11,125.04	8,043.81	-8,046.14	-324.72	8,052.69	182.31	480,236.86	762,216.28
19,200.00	90.60	181.20	11,124.46	8,138.77	-8,141.12	-326.71	8,147.67	182.30	480,141.88	762,214.29
19,296.00	92.00	181.50	11,122.28	8,234.70	-8,237.06	-328.98	8,243.63	182.29	480,045.94	762,212.02
19,390.00	91.70	181.50	11,119.25	8,328.60	-8,330.98	-331.43	8,337.57	182.28	479,952.02	762,209.57
19,485.00	92.80	181.90	11,115.52	8,423.46	-8,425.86	-334.25	8,432.49	182.27	479,857.14	762,206.75



ProDirectional Survey Report



Company:
Project:
Site:
Well:
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Design:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Local Co-ordinate Reference:
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Survey Calculation Method:
Database:

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
19,581.00	90.20	182.10	11,113.01	8,519.34	-8,521.76	-337.60	8,528.45	182.27	479,761.24	762,203.40
19,677.00	90.80	182.10	11,112.17	8,615.24	-8,617.70	-341.12	8,624.44	182.27	479,665.30	762,199.88
19,772.00	88.80	179.80	11,112.50	8,710.21	-8,712.67	-342.69	8,719.41	182.25	479,570.33	762,198.31
19,868.00	89.70	180.40	11,113.76	8,806.19	-8,808.66	-342.86	8,815.33	182.23	479,474.34	762,198.14
19,964.00	90.90	180.50	11,113.25	8,902.18	-8,904.65	-343.61	8,911.28	182.21	479,378.35	762,197.39
20,060.00	91.90	181.00	11,110.91	8,998.13	-9,000.62	-344.87	9,007.22	182.19	479,282.38	762,196.13
20,155.00	88.30	180.40	11,110.74	9,093.10	-9,095.59	-346.03	9,102.17	182.18	479,187.41	762,194.97
20,251.00	89.10	180.30	11,112.92	9,189.06	-9,191.57	-346.62	9,198.10	182.16	479,091.43	762,194.38
20,347.00	90.20	180.80	11,113.51	9,285.05	-9,287.56	-347.54	9,294.06	182.14	478,995.44	762,193.46
20,443.00	91.30	181.00	11,112.25	9,381.02	-9,383.54	-349.05	9,390.03	182.13	478,899.46	762,191.95
20,538.00	88.60	179.80	11,112.33	9,476.00	-9,478.52	-349.71	9,484.97	182.11	478,804.48	762,191.29
20,634.00	89.20	179.50	11,114.18	9,571.98	-9,574.50	-349.12	9,580.87	182.09	478,708.50	762,191.88
20,730.00	90.50	179.70	11,114.43	9,667.98	-9,670.50	-348.45	9,676.77	182.06	478,612.50	762,192.55
20,825.00	87.10	179.80	11,116.42	9,762.94	-9,765.46	-348.04	9,771.66	182.04	478,517.54	762,192.96
20,921.00	87.80	179.70	11,120.69	9,858.84	-9,861.37	-347.62	9,867.49	182.02	478,421.63	762,193.38
21,017.00	88.50	180.10	11,123.79	9,954.79	-9,957.32	-347.45	9,963.38	182.00	478,325.68	762,193.55
21,113.00	90.30	180.40	11,124.79	10,050.78	-10,053.31	-347.87	10,059.32	181.98	478,229.69	762,193.13
21,198.00	91.00	180.20	11,123.83	10,135.76	-10,138.30	-348.32	10,144.28	181.97	478,144.70	762,192.68
Last Survey: 21198' MD										
21,253.00	91.00	180.20	11,122.87	10,190.75	-10,193.29	-348.51	10,199.24	181.96	478,089.71	762,192.49
PTB: 21253' MD										



ProDirectional Survey Report



Company: Matador Resources Project: Lea County, NM (NAD83) Site: Rodney Robinson Federal Well: No. 121H Wellbore: ST01 Design: MWD	Local Co-ordinate Reference: TVD Reference: Well @ 3766.50usft MD Reference: Well @ 3766.50usft North Reference: Grid Survey Calculation Method: Minimum Curvature Database: WellPlanner1	Well No. 121H Well @ 3766.50usft Well @ 3766.50usft Grid Minimum Curvature WellPlanner1
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Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,273.00	11,006.16	-229.20	-470.18	First ST01 Survey: 11273' MD
21,198.00	11,123.83	-10,138.30	-348.32	Last Survey: 21198' MD
21,253.00	11,122.87	-10,193.29	-348.51	PTB: 21253' MD



Rodney Robinson Federal No. 121H(OH)
Lea County, NM

December 20, 2019

Job No. LNM5536819

ORIGINAL

Certified Report



PRODIRECTIONAL

Survey Certification Letter

Rec'd 6/25/2020 - NMOCD

December 20, 2019



Operator Name: Matador Resources
Well Name: Rodney Robinson Federal No. 121H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 810
Job Number: LNM5536819

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	148' MD – 19,781' MD	19,859' MD	09/27/19 – 10/31/19	MWD

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

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

prodirectional.com



Matador Resources

**Lea County, NM
Rodney Robinson Federal
No. 121H
OH**

Survey: ProDirectional

Survey Report

19 December, 2019





ProDirectional Survey Report



Company: Matador Resources	Well No. 121H
Project: Lea County, NM (NAD83)	Well @ 3766.50usft
Site: Rodney Robinson Federal	Well @ 3766.50usft
Well: No. 121H	Grid
Wellbore: OH	Minimum Curvature
Design: MWD	WellPlanner1

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

Mean Sea Level

Project: Lea County, NM (NAD83)

Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site: Rodney Robinson Federal

Site Position: Northing: 488,319.00 usft Latitude: 32.3404068
From: Easting: 763,640.00 usft Longitude: -103.6135370
Position Uncertainty: Map Slot Radius: 13-3/16 " Grid Convergence: 0.39 °

Well: No. 121H, LNM5536819

Well Position: +N/-S 0.00 usft Northing: 488,283.00 usft Latitude: 32.3403281
+E/-W 0.00 usft Easting: 762,541.00 usft Longitude: -103.6170960
Position Uncertainty: Wellhead Elevation: 0.00 usft Ground Level: 3,738.00 usft

Wellbore: OH

Magnetics: Model Name Sample Date Dip Angle (°) Field Strength (nT)
HDGM 10/22/2019 6.67 60.05 47,967.60

Design: MWD

Audit Notes: 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 0.00 179.62

Survey Program: Date 12/19/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
148.00	19,859.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	488,283.00	762,541.00
148.00	0.40	226.10	148.00	0.36	-0.36	-0.37	0.52	226.10	488,282.64	762,540.63
Pro MWD First Survey: 148' MD										
211.00	0.50	228.20	211.00	0.69	-0.69	-0.74	1.01	226.67	488,282.31	762,540.26
274.00	0.30	227.60	274.00	0.98	-0.99	-1.06	1.45	227.07	488,282.01	762,539.94
337.00	0.50	252.50	336.99	1.17	-1.18	-1.45	1.87	230.74	488,281.82	762,539.55
400.00	0.50	245.70	399.99	1.36	-1.38	-1.96	2.40	234.88	488,281.62	762,539.04
460.00	0.30	246.80	459.99	1.53	-1.55	-2.34	2.81	236.54	488,281.45	762,538.66
492.00	0.10	185.40	491.99	1.59	-1.61	-2.42	2.91	236.41	488,281.39	762,538.58
628.00	0.10	38.80	627.99	1.62	-1.63	-2.36	2.87	235.28	488,281.37	762,538.64
724.00	0.20	95.00	723.99	1.57	-1.58	-2.14	2.66	233.49	488,281.42	762,538.86
819.00	0.20	31.70	818.99	1.44	-1.46	-1.89	2.38	232.33	488,281.54	762,539.11
915.00	0.20	33.40	914.99	1.16	-1.17	-1.71	2.07	235.46	488,281.83	762,539.29
1,010.00	0.10	11.00	1,009.99	0.94	-0.95	-1.60	1.86	239.17	488,282.05	762,539.40
1,106.00	0.20	82.30	1,105.99	0.84	-0.85	-1.42	1.65	239.05	488,282.15	762,539.58
1,202.00	0.20	168.00	1,201.99	0.98	-0.99	-1.22	1.57	230.82	488,282.01	762,539.78
1,288.00	0.10	197.90	1,287.99	1.20	-1.21	-1.21	1.71	224.97	488,281.79	762,539.79
1,379.00	0.30	334.50	1,378.99	1.06	-1.07	-1.34	1.71	231.29	488,281.93	762,539.66
1,474.00	2.30	273.50	1,473.96	0.71	-0.73	-3.35	3.42	257.70	488,282.27	762,537.65
1,570.00	3.10	276.30	1,569.85	0.27	-0.33	-7.85	7.85	267.62	488,282.67	762,533.15
1,665.00	2.60	277.00	1,664.73	-0.30	0.22	-12.54	12.54	270.99	488,283.22	762,528.46
1,761.00	3.50	285.10	1,760.60	-1.36	1.25	-17.53	17.57	274.07	488,284.25	762,523.47
1,857.00	3.90	282.30	1,856.40	-2.86	2.71	-23.55	23.70	276.55	488,285.71	762,517.45
1,952.00	3.60	278.60	1,951.19	-4.04	3.84	-29.66	29.90	277.38	488,286.84	762,511.34
2,048.00	4.70	293.60	2,046.94	-6.11	5.87	-36.24	36.71	279.19	488,288.87	762,504.76
2,144.00	6.70	299.60	2,142.46	-10.50	10.21	-44.71	45.86	282.86	488,293.21	762,496.29
2,240.00	6.90	298.70	2,237.79	-16.10	15.74	-54.64	56.86	286.07	488,298.74	762,486.36



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No.: 121H
Well @: 3766.50usft
Well @: 3766.50usft
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)
2,335.00	6.50	299.00	2,332.14	-21.52	21.09	-64.35	67.72	288.15	488,304.09	762,476.65
2,431.00	6.30	298.80	2,427.54	-26.75	26.26	-73.72	78.26	289.61	488,309.26	762,467.28
2,526.00	5.90	299.30	2,522.00	-31.71	31.16	-82.54	88.23	290.68	488,314.16	762,458.46
2,622.00	5.60	298.10	2,617.52	-36.38	35.78	-90.98	97.76	291.47	488,318.78	762,450.02
2,718.00	5.30	296.50	2,713.09	-40.62	39.97	-99.08	106.84	291.97	488,322.97	762,441.92
2,814.00	5.10	299.20	2,808.69	-44.73	44.03	-106.77	115.49	292.41	488,327.03	762,434.23
2,909.00	4.80	298.20	2,903.34	-48.72	47.97	-113.96	123.64	292.83	488,330.97	762,427.04
3,005.00	5.90	299.80	2,998.92	-53.12	52.32	-121.78	132.54	293.25	488,335.32	762,419.22
3,101.00	6.50	302.50	3,094.36	-58.55	57.69	-130.65	142.82	293.82	488,340.69	762,410.35
3,197.00	6.10	303.80	3,189.78	-64.37	63.44	-139.47	153.22	294.46	488,346.44	762,401.53
3,293.00	5.80	304.10	3,285.26	-69.98	69.00	-147.72	163.04	295.04	488,352.00	762,393.28
3,388.00	5.30	303.40	3,379.81	-75.14	74.11	-155.36	172.13	295.50	488,357.11	762,385.64
3,484.00	4.80	305.60	3,475.44	-79.96	78.89	-162.33	180.48	295.92	488,361.89	762,378.67
3,579.00	5.60	301.10	3,570.05	-84.72	83.59	-169.53	189.02	296.25	488,366.59	762,371.47
3,675.00	6.10	301.70	3,665.55	-89.87	88.69	-177.88	198.77	296.50	488,371.69	762,363.12
3,771.00	5.60	302.40	3,761.05	-95.12	93.88	-186.17	208.51	296.76	488,376.88	762,354.83
3,867.00	5.30	303.00	3,856.61	-100.09	98.81	-193.85	217.58	297.01	488,381.81	762,347.15
3,962.00	6.60	294.20	3,951.10	-104.78	103.44	-202.51	227.39	297.06	488,386.44	762,338.49
4,057.00	6.40	290.30	4,045.49	-108.92	107.51	-212.45	238.11	296.84	488,390.51	762,328.55
4,153.00	4.50	289.30	4,141.05	-112.08	110.61	-221.03	247.16	296.59	488,393.61	762,319.97
4,248.00	5.20	292.00	4,235.71	-114.97	113.46	-228.54	255.15	296.40	488,396.46	762,312.46
4,344.00	5.90	290.90	4,331.26	-118.42	116.85	-237.18	264.40	296.23	488,399.85	762,303.82
4,439.00	4.60	293.60	4,425.86	-121.74	120.11	-245.23	273.07	296.10	488,403.11	762,295.77
4,535.00	4.70	295.40	4,521.55	-125.01	123.34	-252.31	280.85	296.05	488,406.34	762,288.69
4,631.00	4.10	299.60	4,617.26	-128.44	126.73	-258.85	288.20	296.09	488,409.73	762,282.15
4,726.00	4.20	294.80	4,712.01	-131.62	129.86	-264.96	295.07	296.11	488,412.86	762,276.04
4,822.00	5.20	291.00	4,807.69	-134.70	132.90	-272.21	302.92	296.02	488,415.90	762,268.79



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

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)
4,917.00	4.50	292.60	4,902.35	-137.72	135.87	-279.67	310.93	295.91	488,418.87	762,261.33
5,013.00	4.20	294.40	4,998.07	-140.67	138.77	-286.35	318.20	295.86	488,421.77	762,254.65
5,097.00	3.90	293.10	5,081.86	-143.09	141.16	-291.78	324.13	295.82	488,424.16	762,249.22
5,192.00	3.50	331.20	5,176.68	-146.93	144.97	-296.15	329.73	296.08	488,427.97	762,244.85
5,287.00	5.50	8.00	5,271.40	-153.99	152.02	-296.91	333.57	297.11	488,435.02	762,244.09
5,383.00	8.40	15.50	5,366.69	-165.29	163.34	-294.40	336.67	299.02	488,446.34	762,246.60
5,478.00	6.60	6.30	5,460.87	-177.38	175.45	-291.94	340.61	301.00	488,458.45	762,249.06
5,573.00	6.40	338.50	5,555.29	-187.75	185.81	-293.29	347.19	302.36	488,468.81	762,247.71
5,669.00	8.30	313.90	5,650.52	-197.58	195.59	-300.24	358.33	303.08	488,478.59	762,240.76
5,765.00	9.80	296.90	5,745.34	-206.17	204.10	-312.52	373.26	303.15	488,487.10	762,228.48
5,860.00	7.20	279.80	5,839.30	-210.92	208.77	-325.60	386.79	302.67	488,491.77	762,215.40
5,956.00	6.30	275.80	5,934.63	-212.55	210.33	-336.77	397.06	301.99	488,493.33	762,204.23
6,052.00	8.00	265.70	6,029.89	-212.67	210.36	-348.88	407.22	301.10	488,493.36	762,192.32
6,147.00	8.00	264.40	6,123.96	-211.61	209.22	-361.85	417.98	300.04	488,492.22	762,179.15
6,243.00	8.00	264.70	6,219.03	-210.43	207.95	-375.15	428.93	299.00	488,490.95	762,165.85
6,339.00	8.30	263.70	6,314.06	-209.14	206.57	-388.69	440.17	297.99	488,489.57	762,152.31
6,435.00	8.40	263.10	6,409.04	-207.63	204.97	-402.54	451.71	296.98	488,487.97	762,138.46
6,530.00	8.40	262.70	6,503.02	-206.01	203.25	-416.31	463.27	296.02	488,486.25	762,124.69
6,626.00	6.40	267.40	6,598.22	-204.96	202.12	-428.61	473.87	295.25	488,485.12	762,112.39
6,722.00	4.10	268.40	6,693.81	-204.68	201.78	-437.38	481.69	294.77	488,484.78	762,103.62
6,818.00	3.80	267.40	6,789.58	-204.48	201.54	-443.99	487.59	294.41	488,484.54	762,097.01
6,913.00	4.00	264.90	6,884.36	-204.09	201.10	-450.44	493.29	294.06	488,484.10	762,090.56
7,009.00	1.60	272.30	6,980.24	-203.87	200.86	-455.11	497.47	293.81	488,483.86	762,085.89
7,105.00	1.70	280.20	7,076.20	-204.20	201.16	-457.85	500.10	293.72	488,484.16	762,083.15
7,200.00	1.40	357.80	7,171.17	-205.62	202.57	-459.29	501.98	293.80	488,485.57	762,081.71
7,296.00	1.60	357.40	7,267.14	-208.13	205.08	-459.39	503.09	294.06	488,488.08	762,081.61
7,392.00	1.50	352.00	7,363.11	-210.71	207.67	-459.63	504.36	294.31	488,490.67	762,081.37



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
OH
MWD

Local Co-ordinate Reference:

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

TVD Reference:

Well @ 3766.50usft

MD Reference:

Well @ 3766.50usft

North Reference:

Grid

Survey Calculation Method:

Minimum Curvature

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)
7,487.00	1.50	352.60	7,458.07	-213.18	210.13	-459.96	505.69	294.55	488,493.13	762,081.04
7,583.00	1.40	348.50	7,554.04	-215.58	212.53	-460.36	507.05	294.78	488,495.53	762,080.64
7,679.00	1.30	338.60	7,650.02	-217.74	214.69	-460.99	508.53	294.97	488,497.69	762,080.01
7,775.00	1.10	328.70	7,745.99	-219.55	216.49	-461.86	510.08	295.11	488,499.49	762,079.14
7,870.00	1.20	321.80	7,840.98	-221.12	218.05	-462.95	511.73	295.22	488,501.05	762,078.05
7,966.00	1.20	311.00	7,936.95	-222.58	219.50	-464.33	513.60	295.30	488,502.50	762,076.67
8,061.00	1.20	303.30	8,031.93	-223.79	220.70	-465.91	515.54	295.35	488,503.70	762,075.09
8,157.00	1.10	302.60	8,127.91	-224.84	221.75	-467.53	517.45	295.37	488,504.75	762,073.47
8,253.00	1.10	298.00	8,223.90	-225.78	222.68	-469.12	519.29	295.39	488,505.68	762,071.88
8,348.00	1.10	302.40	8,318.88	-226.71	223.59	-470.70	521.10	295.41	488,506.59	762,070.30
8,444.00	1.00	303.50	8,414.86	-227.68	224.55	-472.17	522.85	295.43	488,507.55	762,068.83
8,540.00	1.10	296.40	8,510.85	-228.56	225.42	-473.70	524.60	295.45	488,508.42	762,067.30
8,635.00	1.50	133.80	8,605.84	-228.10	224.97	-473.62	524.33	295.41	488,507.97	762,067.38
8,731.00	1.20	139.50	8,701.81	-226.46	223.33	-472.06	522.22	295.32	488,506.33	762,068.94
8,826.00	1.00	137.50	8,796.79	-225.08	221.97	-470.85	520.55	295.24	488,504.97	762,070.15
8,922.00	0.70	147.30	8,892.78	-223.97	220.85	-469.97	519.27	295.17	488,503.85	762,071.03
9,018.00	0.40	164.20	8,988.78	-223.15	220.04	-469.56	518.56	295.11	488,503.04	762,071.44
9,113.00	0.50	198.50	9,083.78	-222.44	219.33	-469.60	518.29	295.03	488,502.33	762,071.40
9,209.00	0.10	194.70	9,179.77	-221.96	218.85	-469.75	518.23	294.98	488,501.85	762,071.25
9,305.00	0.30	336.50	9,275.77	-222.11	219.00	-469.88	518.40	294.99	488,502.00	762,071.12
9,400.00	0.80	3.10	9,370.77	-223.00	219.89	-469.94	518.84	295.08	488,502.89	762,071.06
9,496.00	0.80	8.60	9,466.76	-224.33	221.22	-469.80	519.28	295.21	488,504.22	762,071.20
9,592.00	1.30	349.10	9,562.74	-226.06	222.95	-469.91	520.12	295.38	488,505.95	762,071.09
9,688.00	1.60	1.20	9,658.71	-228.47	225.36	-470.09	521.31	295.61	488,508.36	762,070.91
9,784.00	1.70	356.70	9,754.67	-231.24	228.12	-470.14	522.56	295.88	488,511.12	762,070.86
9,879.00	2.20	347.80	9,849.62	-234.43	231.31	-470.61	524.38	296.18	488,514.31	762,070.39
9,975.00	1.90	46.70	9,945.57	-237.32	234.20	-469.84	524.98	296.50	488,517.20	762,071.16



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
10,071.00	2.80	111.00	10,041.50	-237.54	234.46	-466.49	522.09	296.68	488,517.46	762,074.51
10,166.00	2.80	111.80	10,136.39	-235.82	232.76	-462.17	517.47	296.73	488,515.76	762,078.83
10,262.00	2.50	105.70	10,232.28	-234.36	231.33	-457.98	513.08	296.80	488,514.33	762,083.02
10,358.00	2.50	96.00	10,328.19	-233.55	230.54	-453.88	509.07	296.93	488,513.54	762,087.12
10,438.00	2.20	87.10	10,408.13	-233.42	230.44	-450.61	506.11	297.08	488,513.44	762,090.39
10,557.00	3.20	122.90	10,527.00	-231.70	228.75	-445.54	500.83	297.18	488,511.75	762,095.46
10,653.00	15.90	170.30	10,621.55	-217.18	214.26	-441.05	490.34	295.91	488,497.26	762,099.95
10,748.00	27.90	183.60	10,709.59	-182.01	179.10	-440.25	475.29	292.14	488,462.10	762,100.75
10,771.30	30.03	184.24	10,729.97	-170.76	167.84	-441.03	471.88	290.84	488,450.84	762,099.97
HL Cross: 10771.3' MD										
10,844.00	36.70	185.80	10,790.66	-130.99	128.04	-444.57	462.64	286.07	488,411.04	762,096.43
10,939.00	49.70	185.20	10,859.76	-66.43	63.44	-450.75	455.19	278.01	488,346.44	762,090.25
11,035.00	53.20	187.20	10,919.58	8.13	-11.17	-458.89	459.02	268.61	488,271.83	762,082.11
11,131.00	65.00	184.00	10,968.81	89.91	-93.01	-466.77	475.94	258.73	488,189.99	762,074.23
11,227.00	79.80	182.90	10,997.75	180.96	-184.09	-472.22	506.84	248.70	488,098.91	762,068.78
11,322.00	87.70	182.90	11,008.09	275.16	-278.33	-477.00	552.26	239.74	488,004.67	762,064.00
11,418.00	89.00	180.20	11,010.85	371.06	-374.25	-479.59	608.33	232.03	487,908.75	762,061.41
11,462.00	89.90	179.90	11,011.27	415.06	-418.25	-479.63	636.38	228.91	487,864.75	762,061.37
11,556.00	90.70	179.90	11,010.78	509.05	-512.24	-479.47	701.63	223.11	487,770.76	762,061.53
11,651.00	90.90	180.60	11,009.46	604.04	-607.23	-479.88	773.96	218.32	487,675.77	762,061.12
11,745.00	90.00	179.40	11,008.72	688.03	-701.23	-479.88	849.71	214.39	487,581.77	762,061.12
11,840.00	90.40	179.80	11,008.39	793.03	-796.22	-479.22	929.31	211.04	487,486.78	762,061.78
11,934.00	88.30	178.60	11,009.45	887.01	-890.20	-477.90	1,010.37	208.23	487,392.80	762,063.10
12,030.00	88.80	178.70	11,011.88	982.97	-986.14	-475.64	1,094.86	205.75	487,296.86	762,065.36
12,126.00	89.20	179.60	11,013.56	1,078.95	-1,082.12	-474.22	1,181.47	203.66	487,200.88	762,066.78
12,221.00	89.70	180.20	11,014.47	1,173.94	-1,177.11	-474.05	1,268.98	201.94	487,105.89	762,066.95
12,317.00	87.90	179.70	11,016.48	1,269.92	-1,273.09	-473.97	1,358.45	200.42	487,009.91	762,067.03



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
OH
MWD

Local Co-ordinate Reference:

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

TVD Reference:

Well @ 3766.50usft

MD Reference:

Well @ 3766.50usft

North Reference:

Minimum Curvature

Survey Calculation Method:

WellPlanner1

Database:

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)
12,413.00	88.20	180.30	11,019.75	1,365.86	-1,369.03	-473.97	1,448.76	199.10	486,913.97	762,067.03
12,509.00	86.60	179.70	11,024.10	1,461.75	-1,464.93	-473.97	1,539.70	197.93	486,818.07	762,067.03
12,604.00	86.50	179.50	11,029.82	1,556.58	-1,559.75	-473.31	1,629.99	196.88	486,723.25	762,067.69
12,700.00	85.80	180.00	11,036.26	1,652.36	-1,655.54	-472.89	1,721.75	195.94	486,627.46	762,068.11
12,796.00	86.10	180.50	11,043.04	1,748.12	-1,751.29	-473.31	1,814.13	195.12	486,531.71	762,067.69
12,891.00	86.40	180.80	11,049.26	1,842.90	-1,846.08	-474.38	1,906.06	194.41	486,436.92	762,066.62
12,987.00	85.30	179.30	11,056.20	1,938.64	-1,941.83	-474.47	1,998.95	193.73	486,341.17	762,066.53
13,083.00	85.40	179.60	11,063.99	2,034.32	-2,037.51	-473.55	2,091.81	193.08	486,245.49	762,067.45
13,178.00	85.00	177.80	11,071.94	2,128.97	-2,132.15	-471.40	2,183.64	192.47	486,150.85	762,069.60
13,274.00	85.30	178.10	11,080.05	2,224.59	-2,227.74	-467.98	2,276.36	191.86	486,055.26	762,073.02
13,369.00	85.00	178.80	11,088.09	2,319.23	-2,322.37	-465.42	2,368.54	191.33	485,960.63	762,075.58
13,465.00	86.60	177.60	11,095.12	2,414.94	-2,418.06	-462.41	2,461.87	190.83	485,864.94	762,078.59
13,561.00	87.00	177.70	11,100.48	2,510.73	-2,513.83	-458.48	2,555.29	190.34	485,769.17	762,082.52
13,657.00	87.70	178.40	11,104.91	2,606.59	-2,609.67	-455.22	2,649.07	189.89	485,673.33	762,085.78
13,752.00	87.90	178.90	11,108.56	2,701.51	-2,704.57	-452.98	2,742.24	189.51	485,578.43	762,088.02
13,848.00	88.50	179.90	11,111.58	2,797.46	-2,800.51	-451.98	2,836.75	189.17	485,482.49	762,089.02
13,943.00	88.70	180.20	11,113.90	2,892.42	-2,895.49	-452.06	2,930.56	188.87	485,387.51	762,088.94
14,039.00	89.50	181.10	11,115.41	2,988.40	-2,991.47	-453.15	3,025.59	188.61	485,291.53	762,087.85
14,135.00	90.30	181.60	11,115.57	3,084.35	-3,087.44	-455.41	3,120.85	188.39	485,195.56	762,085.59
14,230.00	91.00	182.70	11,114.49	3,179.25	-3,182.36	-458.98	3,215.29	188.21	485,100.64	762,082.02
14,326.00	89.60	180.90	11,113.99	3,275.17	-3,278.31	-461.99	3,310.70	188.02	485,004.69	762,079.01
14,422.00	89.80	181.30	11,114.49	3,371.14	-3,374.29	-463.83	3,406.02	187.83	484,908.71	762,077.17
14,517.00	88.70	179.30	11,115.74	3,466.12	-3,469.27	-464.33	3,500.21	187.62	484,813.73	762,076.67
14,613.00	88.80	180.00	11,117.83	3,562.09	-3,565.25	-463.74	3,595.28	187.41	484,717.75	762,077.26
14,709.00	88.70	177.60	11,119.93	3,658.05	-3,661.20	-461.73	3,690.20	187.19	484,621.80	762,079.27
14,805.00	89.40	177.90	11,121.52	3,753.99	-3,757.11	-457.97	3,784.92	186.95	484,525.89	762,083.03
14,900.00	90.10	179.10	11,121.93	3,848.97	-3,852.07	-455.48	3,878.91	186.74	484,430.93	762,085.52



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

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)
14,996.00	90.90	180.00	11,121.10	3,944.96	-3,948.07	-454.73	3,974.17	186.57	484,334.93	762,086.27
15,092.00	91.10	181.10	11,119.42	4,040.93	-4,044.04	-455.65	4,069.63	186.43	484,238.96	762,085.35
15,187.00	90.10	179.40	11,118.43	4,135.92	-4,139.03	-456.06	4,164.08	186.29	484,143.97	762,084.94
15,283.00	90.60	179.80	11,117.84	4,231.92	-4,235.03	-455.39	4,259.44	186.14	484,047.97	762,085.61
15,379.00	91.10	180.70	11,116.41	4,327.90	-4,331.02	-455.81	4,354.94	186.01	483,951.98	762,085.19
15,475.00	91.80	181.40	11,113.99	4,423.84	-4,426.97	-457.57	4,450.55	185.90	483,856.03	762,083.43
15,570.00	90.40	179.90	11,112.16	4,518.80	-4,521.94	-458.65	4,545.14	185.79	483,761.06	762,082.35
15,666.00	91.10	179.90	11,110.91	4,614.79	-4,617.93	-458.48	4,640.63	185.67	483,665.07	762,082.52
15,762.00	89.10	178.80	11,110.74	4,710.78	-4,713.92	-457.39	4,736.06	185.54	483,569.08	762,083.61
15,858.00	88.80	179.60	11,112.50	4,806.76	-4,809.89	-456.05	4,831.46	185.42	483,473.11	762,084.95
15,953.00	89.70	180.30	11,113.74	4,901.75	-4,904.88	-455.97	4,926.03	185.31	483,378.12	762,085.03
16,049.00	88.00	178.80	11,115.67	4,997.72	-5,000.85	-455.21	5,021.53	185.20	483,282.15	762,085.79
16,145.00	88.30	178.90	11,118.77	5,093.67	-5,096.78	-453.29	5,116.90	185.08	483,186.22	762,087.71
16,240.00	88.10	177.20	11,121.75	5,188.58	-5,191.68	-450.06	5,211.15	184.95	483,091.32	762,090.94
16,336.00	87.90	177.90	11,125.10	5,284.46	-5,287.53	-445.95	5,306.30	184.82	482,995.47	762,095.05
16,432.00	87.80	178.90	11,128.70	5,380.37	-5,383.43	-443.28	5,401.64	184.71	482,899.57	762,097.72
16,527.00	89.30	177.50	11,131.11	5,475.30	-5,478.34	-440.29	5,496.01	184.59	482,804.66	762,100.71
16,623.00	89.80	178.00	11,131.86	5,571.25	-5,574.27	-436.52	5,591.33	184.48	482,708.73	762,104.48
16,719.00	90.60	178.40	11,131.53	5,667.22	-5,670.22	-433.51	5,686.76	184.37	482,612.78	762,107.49
16,815.00	92.00	179.10	11,129.35	5,763.18	-5,766.17	-431.42	5,782.28	184.28	482,516.83	762,109.58
16,910.00	92.50	179.70	11,125.62	5,858.10	-5,861.09	-430.42	5,876.87	184.20	482,421.91	762,110.58
17,006.00	92.70	180.90	11,121.26	5,954.00	-5,956.98	-430.92	5,972.55	184.14	482,326.02	762,110.08
17,101.00	89.90	181.20	11,119.11	6,048.93	-6,051.93	-432.66	6,067.38	184.09	482,231.07	762,108.34
17,197.00	87.50	179.90	11,121.29	6,144.89	-6,147.90	-433.59	6,163.17	184.03	482,135.10	762,107.41
17,293.00	87.30	179.90	11,125.64	6,240.79	-6,243.80	-433.42	6,258.82	183.97	482,039.20	762,107.58
17,389.00	87.90	180.50	11,129.66	6,336.70	-6,339.71	-433.75	6,354.53	183.91	481,943.29	762,107.25
17,484.00	88.80	180.90	11,132.40	6,431.64	-6,434.66	-434.91	6,449.35	183.87	481,848.34	762,106.09



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
OH
MWD

Project:

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

Well:

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

Wellbore:

OH

Design:

MWD

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)
17,580.00	89.40	181.50	11,133.90	6,527.59	-6,530.63	-436.92	6,545.23	183.83	481,752.37	762,104.08
17,676.00	88.00	179.40	11,136.08	6,623.55	-6,626.60	-437.68	6,641.03	183.78	481,656.40	762,103.32
17,772.00	88.20	179.10	11,139.26	6,719.49	-6,722.53	-436.42	6,736.69	183.71	481,560.47	762,104.58
17,867.00	88.40	179.90	11,142.08	6,814.45	-6,817.49	-435.59	6,831.39	183.66	481,465.51	762,105.41
17,963.00	88.70	177.30	11,144.51	6,910.39	-6,913.42	-433.25	6,926.98	183.59	481,369.58	762,107.75
18,059.00	89.50	177.40	11,146.02	7,006.31	-7,009.30	-428.81	7,022.41	183.50	481,273.70	762,112.19
18,154.00	90.90	177.80	11,145.69	7,101.24	-7,104.22	-424.83	7,116.91	183.42	481,178.78	762,116.17
18,250.00	91.50	178.50	11,143.68	7,197.19	-7,200.15	-421.73	7,212.49	183.35	481,082.85	762,119.27
18,346.00	92.00	178.70	11,140.75	7,293.13	-7,296.07	-419.39	7,308.12	183.29	480,986.93	762,121.61
18,441.00	92.80	179.30	11,136.77	7,388.04	-7,390.97	-417.73	7,402.77	183.23	480,892.03	762,123.27
18,537.00	93.30	180.10	11,131.66	7,483.90	-7,486.84	-417.23	7,498.45	183.19	480,796.16	762,123.77
18,633.00	90.90	180.60	11,128.14	7,579.82	-7,582.76	-417.82	7,594.26	183.15	480,700.24	762,123.18
18,729.00	91.20	180.50	11,126.38	7,675.79	-7,678.74	-418.74	7,690.15	183.12	480,604.26	762,122.26
18,824.00	91.90	181.40	11,123.81	7,770.73	-7,773.69	-420.31	7,785.05	183.09	480,509.31	762,120.69
18,920.00	88.80	181.40	11,123.23	7,866.67	-7,869.65	-422.66	7,880.99	183.07	480,413.35	762,118.34
19,015.00	88.90	181.60	11,125.13	7,961.60	-7,964.60	-425.14	7,975.94	183.06	480,318.40	762,115.86
19,111.00	90.10	182.10	11,125.97	8,057.52	-8,060.54	-428.24	8,071.91	183.04	480,222.46	762,112.76
19,207.00	88.90	181.20	11,126.81	8,153.46	-8,156.50	-431.01	8,167.88	183.02	480,126.50	762,109.99
19,302.00	87.30	178.80	11,129.96	8,248.39	-8,251.43	-431.01	8,262.68	182.99	480,031.57	762,109.99
19,398.00	87.60	178.60	11,134.23	8,344.29	-8,347.31	-428.83	8,358.32	182.94	479,935.69	762,112.17
19,494.00	88.00	178.90	11,137.92	8,440.20	-8,443.22	-426.74	8,454.00	182.89	479,839.78	762,114.26
19,589.00	89.10	179.60	11,140.32	8,535.17	-8,538.18	-425.50	8,548.77	182.85	479,744.82	762,115.50
19,685.00	89.90	180.20	11,141.16	8,631.16	-8,634.17	-425.33	8,644.64	182.82	479,648.83	762,115.67
19,781.00	90.20	178.50	11,141.07	8,727.16	-8,730.16	-424.24	8,740.47	182.78	479,552.84	762,116.76
Last Survey: 19781' MD										
19,859.00										
PTB: 19859' MD										
182.74										
8,818.25										
479,474.86										
762,118.80										



ProDirectional Survey Report



Company:
Project:
Site:
Well:
Wellbore:
Design:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
OH
MWD

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

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
148.00	148.00	-0.36	-0.37	Pro MWD First Survey: 148' MD
10,771.30	10,729.97	167.84	-441.03	HL Cross: 10771.3' MD
19,781.00	11,141.07	-8,730.16	-424.24	Last Survey: 19781' MD
19,859.00	11,140.80	-8,808.14	-422.20	PTB: 19859' MD



PRODIRECTIONAL

Rec'd 6/25/2020 - NMOCD



Rodney Robinson Federal No. 121H(ST01)
Lea County, NM

December 20, 2019

Job No. LNM5536819

Certified Report

ORIGINAL



PRODIRECTIONAL

Survey Certification Letter

Rec'd 6/25/2020 - NMOCD

December 20, 2019



Operator Name: Matador Resources
Well Name: Rodney Robinson Federal No. 121H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 810
Job Number: LNM5536819

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	11,273' MD – 21,198' MD	21,253' MD	11/12/19 – 11/30/19	MWD

Sincerely,

Mike Coats
Regulatory Specialist
Professional Directional

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

prodirectional.com



Matador Resources

**Lea County, NM
Rodney Robinson Federal
No. 121H
ST01**

Survey: ProDirectional

Survey Report

19 December, 2019





ProDirectional Survey Report



Company: Matador Resources	Well No. 121H
Project: Lea County, NM (NAD83)	Well @ 3766.50usft
Site: Rodney Robinson Federal	Well @ 3766.50usft
Well: No. 121H	Grid
Wellbore: ST01	Minimum Curvature
Design: MWD	WellPlanner1

Project: Lea County, NM (NAD83)	System Datum:	Mean Sea Level
Map System: US State Plane 1983		
Geo Datum: North American Datum 1983		
Map Zone: New Mexico Eastern Zone		

Site: Rodney Robinson Federal		
Site Position:	Northing: 488,319.00 usft	Latitude: 32.3404068
From: Map	Easting: 763,640.00 usft	Longitude: -103.6135370
Position Uncertainty: 0.00 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.39 °

Well: No. 121H, LNM5536819		
Well Position	Northing: 488,283.00 usft	Latitude: 32.3403281
+N/-S	0.00 usft	
+E/-W	0.00 usft	Longitude: -103.6170960
Position Uncertainty	0.00 usft	Ground Level: 3,738.00 usft

Wellbore: ST01		
Magnetics	Model Name HDGM	Sample Date 10/22/2019
	Declination (°) 6.67	Dip Angle (°) 60.05
		Field Strength (nT) 47,967.60

Design: MWD		
Audit Notes:		
Version: 1.0	Phase: ACTUAL	Tie On Depth: 11,227.00
Vertical Section:	Depth From (TVD) (usft)	Direction (°)
	0.00	179.62
	0.00	0.00
	0.00	0.00



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 121H
Project:	Lea County, NM (NAD83)	TVD Reference:	Well @ 3766.50usft
Site:	Rodney Robinson Federal	MD Reference:	Well @ 3766.50usft
Well:	No. 121H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	MWD	Database:	WellPlanner1

Survey Program	From (usft)	To (usft)	Date	Survey (Wellbore)	Tool Name	Description
	148.00	11,227.00	12/19/2019	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM
	11,273.00	21,253.00		MWD (ST01)	MWD+HDGM	OWSG MWD + HRGM

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	488,283.00	762,541.00
148.00	0.40	226.10	148.00	0.36	-0.36	-0.37	0.52	226.10	488,282.64	762,540.63
211.00	0.50	228.20	211.00	0.69	-0.69	-0.74	1.01	226.67	488,282.31	762,540.26
274.00	0.30	227.60	274.00	0.98	-0.99	-1.06	1.45	227.07	488,282.01	762,539.94
337.00	0.50	252.50	336.99	1.17	-1.18	-1.45	1.87	230.74	488,281.82	762,539.55
400.00	0.50	245.70	399.99	1.36	-1.38	-1.96	2.40	234.88	488,281.62	762,539.04
460.00	0.30	246.80	459.99	1.53	-1.55	-2.34	2.81	236.54	488,281.45	762,538.66
492.00	0.10	185.40	491.99	1.59	-1.61	-2.42	2.91	236.41	488,281.39	762,538.58
628.00	0.10	38.80	627.99	1.62	-1.63	-2.36	2.87	235.28	488,281.37	762,538.64
724.00	0.20	95.00	723.99	1.57	-1.58	-2.14	2.66	233.49	488,281.42	762,538.86
819.00	0.20	31.70	818.99	1.44	-1.46	-1.89	2.38	232.33	488,281.54	762,539.11
915.00	0.20	33.40	914.99	1.16	-1.17	-1.71	2.07	235.46	488,281.83	762,539.29
1,010.00	0.10	11.00	1,009.99	0.94	-0.95	-1.60	1.86	239.17	488,282.05	762,539.40
1,106.00	0.20	82.30	1,105.99	0.84	-0.85	-1.42	1.65	239.05	488,282.15	762,539.58
1,202.00	0.20	168.00	1,201.99	0.98	-0.99	-1.22	1.57	230.82	488,282.01	762,539.78
1,288.00	0.10	197.90	1,287.99	1.20	-1.21	-1.21	1.71	224.97	488,281.79	762,539.79
1,379.00	0.30	334.50	1,378.99	1.06	-1.07	-1.34	1.71	231.29	488,281.93	762,539.66
1,474.00	2.30	273.50	1,473.96	0.71	-0.73	-3.35	3.42	257.70	488,282.27	762,537.65
1,570.00	3.10	276.30	1,569.85	0.27	-0.33	-7.85	7.85	267.62	488,282.67	762,533.15
1,665.00	2.60	277.00	1,664.73	-0.30	0.22	-12.54	12.54	270.99	488,283.22	762,528.46
1,761.00	3.50	285.10	1,760.60	-1.36	1.25	-17.53	17.57	274.07	488,284.25	762,523.47



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Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
1,857.00	3.90	282.30	1,856.40	-2.86	2.71	-23.55	23.70	276.55	488,285.71	762,517.45
1,952.00	3.60	278.60	1,951.19	-4.04	3.84	-29.66	29.90	277.38	488,286.84	762,511.34
2,048.00	4.70	293.60	2,046.94	-6.11	5.87	-36.24	36.71	279.19	488,288.87	762,504.76
2,144.00	6.70	299.60	2,142.46	-10.50	10.21	-44.71	45.86	282.86	488,293.21	762,496.29
2,240.00	6.90	298.70	2,237.79	-16.10	15.74	-54.64	56.86	286.07	488,298.74	762,486.36
2,335.00	6.50	299.00	2,332.14	-21.52	21.09	-64.35	67.72	288.15	488,304.09	762,476.65
2,431.00	6.30	298.80	2,427.54	-26.75	26.26	-73.72	78.26	289.61	488,309.26	762,467.28
2,526.00	5.90	299.30	2,522.00	-31.71	31.16	-82.54	88.23	290.68	488,314.16	762,458.46
2,622.00	5.60	298.10	2,617.52	-36.38	35.78	-90.98	97.76	291.47	488,318.78	762,450.02
2,718.00	5.30	296.50	2,713.09	-40.62	39.97	-99.08	106.84	291.97	488,322.97	762,441.92
2,814.00	5.10	299.20	2,808.69	-44.73	44.03	-106.77	115.49	292.41	488,327.03	762,434.23
2,909.00	4.80	298.20	2,903.34	-48.72	47.97	-113.96	123.64	292.83	488,330.97	762,427.04
3,005.00	5.90	299.80	2,998.92	-53.12	52.32	-121.78	132.54	293.25	488,335.32	762,419.22
3,101.00	6.50	302.50	3,094.36	-58.55	57.69	-130.65	142.82	293.82	488,340.69	762,410.35
3,197.00	6.10	303.80	3,189.78	-64.37	63.44	-139.47	153.22	294.46	488,346.44	762,401.53
3,293.00	5.80	304.10	3,285.26	-69.98	69.00	-147.72	163.04	295.04	488,352.00	762,393.28
3,388.00	5.30	303.40	3,379.81	-75.14	74.11	-155.36	172.13	295.50	488,357.11	762,385.64
3,484.00	4.80	305.60	3,475.44	-79.96	78.89	-162.33	180.48	295.92	488,361.89	762,378.67
3,579.00	5.60	301.10	3,570.05	-84.72	83.59	-169.53	189.02	296.25	488,366.59	762,371.47
3,675.00	6.10	301.70	3,665.55	-89.87	88.69	-177.88	198.77	296.50	488,371.69	762,363.12
3,771.00	5.60	302.40	3,761.05	-95.12	93.88	-186.17	208.51	296.76	488,376.88	762,354.83
3,867.00	5.30	303.00	3,856.61	-100.09	98.81	-193.85	217.58	297.01	488,381.81	762,347.15
3,962.00	6.60	294.20	3,951.10	-104.78	103.44	-202.51	227.39	297.06	488,386.44	762,338.49
4,057.00	6.40	290.30	4,045.49	-108.92	107.51	-212.45	238.11	296.84	488,390.51	762,328.55
4,153.00	4.50	289.30	4,141.05	-112.08	110.61	-221.03	247.16	296.59	488,393.61	762,319.97
4,248.00	5.20	292.00	4,235.71	-114.97	113.46	-228.54	255.15	296.40	488,396.46	762,312.46
4,344.00	5.90	290.90	4,331.26	-118.42	116.85	-237.18	264.40	296.23	488,399.85	762,303.82



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Project:

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

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
4,439.00	4.60	293.60	4,425.86	-121.74	120.11	-245.23	273.07	296.10	488,403.11	762,295.77
4,535.00	4.70	295.40	4,521.55	-125.01	123.34	-252.31	280.85	296.05	488,406.34	762,288.69
4,631.00	4.10	299.60	4,617.26	-128.44	126.73	-258.85	288.20	296.09	488,409.73	762,282.15
4,726.00	4.20	294.80	4,712.01	-131.62	129.86	-264.96	295.07	296.11	488,412.86	762,276.04
4,822.00	5.20	291.00	4,807.69	-134.70	132.90	-272.21	302.92	296.02	488,415.90	762,268.79
4,917.00	4.50	292.60	4,902.35	-137.72	135.87	-279.67	310.93	295.91	488,418.87	762,261.33
5,013.00	4.20	294.40	4,998.07	-140.67	138.77	-286.35	318.20	295.86	488,421.77	762,254.65
5,097.00	3.90	293.10	5,081.86	-143.09	141.16	-291.78	324.13	295.82	488,424.16	762,249.22
5,192.00	3.50	331.20	5,176.68	-146.93	144.97	-296.15	329.73	296.08	488,427.97	762,244.85
5,287.00	5.50	8.00	5,271.40	-153.99	152.02	-296.91	333.57	297.11	488,435.02	762,244.09
5,383.00	8.40	15.50	5,366.69	-165.29	163.34	-294.40	336.67	299.02	488,446.34	762,246.60
5,478.00	6.60	6.30	5,460.87	-177.38	175.45	-291.94	340.61	301.00	488,458.45	762,249.06
5,573.00	6.40	338.50	5,555.29	-187.75	185.81	-293.29	347.19	302.36	488,468.81	762,247.71
5,669.00	8.30	313.90	5,650.52	-197.58	195.59	-300.24	358.33	303.08	488,478.59	762,240.76
5,765.00	9.80	296.90	5,745.34	-206.17	204.10	-312.52	373.26	303.15	488,487.10	762,228.48
5,860.00	7.20	279.80	5,839.30	-210.92	208.77	-325.60	386.79	302.67	488,491.77	762,215.40
5,956.00	6.30	275.80	5,934.63	-212.55	210.33	-336.77	397.06	301.99	488,493.33	762,204.23
6,052.00	8.00	265.70	6,029.89	-212.67	210.36	-348.68	407.22	301.10	488,493.36	762,192.32
6,147.00	8.00	264.40	6,123.96	-211.61	209.22	-361.85	417.98	300.04	488,492.22	762,179.15
6,243.00	8.00	264.70	6,219.03	-210.43	207.95	-375.15	428.93	299.00	488,490.95	762,165.85
6,339.00	8.30	263.70	6,314.06	-209.14	206.57	-388.69	440.17	297.99	488,489.57	762,152.31
6,435.00	8.40	263.10	6,409.04	-207.63	204.97	-402.54	451.71	296.98	488,487.97	762,138.46
6,530.00	8.40	262.70	6,503.02	-206.01	203.25	-416.31	463.27	296.02	488,486.25	762,124.69
6,626.00	6.40	267.40	6,598.22	-204.96	202.12	-428.61	473.87	295.25	488,485.12	762,112.39
6,722.00	4.10	268.40	6,693.81	-204.68	201.78	-437.38	481.69	294.77	488,484.78	762,103.62
6,818.00	3.80	267.40	6,789.58	-204.48	201.54	-443.99	487.59	294.41	488,484.54	762,097.01
6,913.00	4.00	264.90	6,884.36	-204.09	201.10	-450.44	493.29	294.06	488,484.10	762,090.56



ProDirectional Survey Report



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Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

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)
7,009.00	1.60	272.30	6,980.24	-203.87	200.86	-455.11	497.47	293.81	488,483.86	762,085.89
7,105.00	1.70	280.20	7,076.20	-204.20	201.16	-457.85	500.10	293.72	488,484.16	762,083.15
7,200.00	1.40	357.80	7,171.17	-205.62	202.57	-459.29	501.98	293.80	488,485.57	762,081.71
7,296.00	1.60	357.40	7,267.14	-208.13	205.08	-459.39	503.09	294.06	488,488.08	762,081.61
7,392.00	1.50	362.00	7,363.11	-210.71	207.67	-459.63	504.36	294.31	488,490.67	762,081.37
7,487.00	1.50	352.60	7,458.07	-213.18	210.13	-459.96	505.69	294.55	488,493.13	762,081.04
7,583.00	1.40	348.50	7,554.04	-215.58	212.53	-460.36	507.05	294.78	488,495.53	762,080.64
7,679.00	1.30	338.60	7,650.02	-217.74	214.69	-460.99	508.53	294.97	488,497.69	762,080.01
7,775.00	1.10	328.70	7,745.99	-219.55	216.49	-461.86	510.08	295.11	488,499.49	762,079.14
7,870.00	1.20	321.80	7,840.98	-221.12	218.05	-462.95	511.73	295.22	488,501.05	762,078.05
7,966.00	1.20	311.00	7,936.95	-222.58	219.50	-464.33	513.60	295.30	488,502.50	762,076.67
8,061.00	1.20	303.30	8,031.93	-223.79	220.70	-465.91	515.54	295.35	488,503.70	762,075.09
8,157.00	1.10	302.60	8,127.91	-224.84	221.75	-467.53	517.45	295.37	488,504.75	762,073.47
8,253.00	1.10	298.00	8,223.90	-225.78	222.68	-469.12	519.29	295.39	488,505.68	762,071.88
8,348.00	1.10	302.40	8,318.88	-226.71	223.59	-470.70	521.10	295.41	488,506.59	762,070.30
8,444.00	1.00	303.50	8,414.86	-227.68	224.55	-472.17	522.85	295.43	488,507.55	762,068.83
8,540.00	1.10	296.40	8,510.85	-228.56	225.42	-473.70	524.60	295.45	488,508.42	762,067.30
8,635.00	1.50	133.80	8,605.84	-228.10	224.97	-473.62	524.33	295.41	488,507.97	762,067.38
8,731.00	1.20	139.50	8,701.81	-226.46	223.33	-472.06	522.22	295.32	488,506.33	762,068.94
8,826.00	1.00	137.50	8,796.79	-225.08	221.97	-470.85	520.55	295.24	488,504.97	762,070.15
8,922.00	0.70	147.30	8,892.78	-223.97	220.85	-469.97	519.27	295.17	488,503.85	762,071.03
9,018.00	0.40	164.20	8,988.78	-223.15	220.04	-469.56	518.56	295.11	488,503.04	762,071.44
9,113.00	0.50	198.50	9,083.78	-222.44	219.33	-469.60	518.29	295.03	488,502.33	762,071.40
9,209.00	0.10	194.70	9,179.77	-221.96	218.85	-469.75	518.23	294.98	488,501.85	762,071.25
9,305.00	0.30	336.50	9,275.77	-222.11	219.00	-469.88	518.40	294.99	488,502.00	762,071.12
9,400.00	0.80	3.10	9,370.77	-223.00	219.89	-469.94	518.84	295.08	488,502.89	762,071.06
9,496.00	0.80	8.60	9,466.76	-224.33	221.22	-469.80	519.28	295.21	488,504.22	762,071.20



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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)
9,592.00	1.30	349.10	9,562.74	-226.06	222.95	-469.91	520.12	295.38	488,505.95	762,071.09
9,688.00	1.60	1.20	9,658.71	-228.47	225.36	-470.09	521.31	295.61	488,508.36	762,070.91
9,784.00	1.70	356.70	9,754.67	-231.24	228.12	-470.14	522.56	295.88	488,511.12	762,070.86
9,879.00	2.20	347.80	9,849.62	-234.43	231.31	-470.61	524.38	296.18	488,514.31	762,070.39
9,975.00	1.90	46.70	9,945.57	-237.32	234.20	-469.84	524.98	296.50	488,517.20	762,071.16
10,071.00	2.80	111.00	10,041.50	-237.54	234.46	-466.49	522.09	296.68	488,517.46	762,074.51
10,166.00	2.80	111.80	10,136.39	-235.82	232.76	-462.17	517.47	296.73	488,515.76	762,078.83
10,262.00	2.50	105.70	10,232.28	-234.36	231.33	-457.98	513.08	296.80	488,514.33	762,083.02
10,358.00	2.50	96.00	10,328.19	-233.55	230.54	-453.88	509.07	296.93	488,513.54	762,087.12
10,438.00	2.20	87.10	10,408.13	-233.42	230.44	-450.61	506.11	297.08	488,513.44	762,090.39
10,557.00	3.20	122.90	10,527.00	-231.70	228.75	-445.54	500.83	297.18	488,511.75	762,095.46
10,653.00	15.90	170.30	10,621.55	-217.18	214.26	-441.05	490.34	295.91	488,497.26	762,099.95
10,748.00	27.90	183.60	10,709.59	-182.01	179.10	-440.25	475.29	292.14	488,462.10	762,100.75
10,844.00	36.70	185.80	10,790.66	-130.99	128.04	-444.57	462.64	286.07	488,411.04	762,096.43
10,939.00	49.70	185.20	10,859.76	-66.43	63.44	-450.75	455.19	278.01	488,346.44	762,090.25
11,035.00	53.20	187.20	10,919.58	8.13	-11.17	-458.89	459.02	268.61	488,271.83	762,082.11
11,131.00	65.00	184.00	10,968.81	89.91	-93.01	-466.77	475.94	258.73	488,189.99	762,074.23
11,227.00	79.80	182.90	10,997.75	180.96	-184.09	-472.22	506.84	248.70	488,098.91	762,068.78
11,273.00	79.20	171.90	11,006.16	226.08	-229.20	-470.18	523.07	244.01	488,053.80	762,070.82
First ST01 Survey: 11273' MD										
11,305.00	82.50	175.80	11,011.25	257.50	-260.60	-466.80	534.62	240.83	488,022.40	762,074.20
11,336.00	84.20	174.30	11,014.84	288.19	-291.28	-464.14	547.97	237.89	487,991.72	762,076.86
11,368.00	84.10	174.10	11,018.10	319.88	-322.95	-460.93	562.80	234.98	487,960.05	762,080.07
11,456.00	88.70	173.40	11,023.63	407.23	-410.23	-451.37	609.93	227.73	487,872.77	762,089.63
11,551.00	91.30	172.80	11,023.63	501.60	-504.53	-439.95	669.41	221.09	487,778.47	762,101.05
11,645.00	92.30	173.50	11,020.67	594.96	-597.81	-428.75	735.67	215.65	487,685.19	762,112.25
11,740.00	91.10	174.60	11,017.86	689.46	-692.26	-418.90	809.14	211.18	487,590.74	762,122.10



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (MAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
Grid
Minimum Curvature
WellPlanner1

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)
11,834.00	89.70	175.00	11,017.20	783.13	-785.87	-410.39	886.57	207.57	487,497.13	762,130.61
11,929.00	90.60	175.60	11,016.95	877.85	-880.54	-402.60	968.22	204.57	487,402.46	762,138.40
12,024.00	91.80	175.90	11,014.96	972.62	-975.26	-395.56	1,052.43	202.08	487,307.74	762,145.44
12,120.00	90.10	177.70	11,013.37	1,068.48	-1,071.09	-390.21	1,139.95	200.02	487,211.91	762,150.79
12,216.00	88.10	179.70	11,014.88	1,164.44	-1,167.04	-388.03	1,229.86	198.39	487,115.96	762,152.97
12,312.00	86.40	180.50	11,019.48	1,260.33	-1,262.93	-388.19	1,321.24	197.09	487,020.07	762,152.81
12,407.00	86.70	181.80	11,025.20	1,355.12	-1,357.74	-390.10	1,412.66	196.03	486,925.26	762,150.90
12,503.00	86.20	180.30	11,031.14	1,450.90	-1,453.53	-391.85	1,505.43	195.09	486,829.47	762,149.15
12,599.00	86.50	180.60	11,037.26	1,546.70	-1,549.33	-392.61	1,598.30	194.22	486,733.67	762,148.39
12,694.00	86.30	182.10	11,043.22	1,641.46	-1,644.12	-394.84	1,690.86	193.50	486,638.88	762,146.16
12,790.00	86.70	179.90	11,049.08	1,737.25	-1,739.92	-396.51	1,784.53	192.84	486,543.08	762,144.49
12,886.00	88.00	180.60	11,053.52	1,833.14	-1,835.81	-396.93	1,878.23	192.20	486,447.19	762,144.07
12,982.00	87.50	178.60	11,057.29	1,929.06	-1,931.73	-396.26	1,971.95	191.59	486,351.27	762,144.74
13,077.00	87.90	178.40	11,061.10	2,023.96	-2,026.62	-393.78	2,064.52	191.00	486,256.38	762,147.22
13,173.00	88.20	178.50	11,064.37	2,119.89	-2,122.53	-391.18	2,158.28	190.44	486,160.47	762,149.82
13,268.00	88.50	178.90	11,067.11	2,214.84	-2,217.47	-389.03	2,251.33	189.95	486,065.53	762,151.97
13,364.00	86.10	178.50	11,071.63	2,310.71	-2,313.33	-386.85	2,345.45	189.49	485,969.67	762,154.15
13,460.00	86.20	178.80	11,078.07	2,406.48	-2,409.08	-384.60	2,439.59	189.07	485,873.92	762,156.40
13,555.00	86.70	179.00	11,083.96	2,501.29	-2,503.88	-382.78	2,532.97	188.69	485,779.12	762,158.22
13,651.00	87.60	178.80	11,088.73	2,597.16	-2,599.75	-380.93	2,627.51	188.34	485,683.25	762,160.07
13,747.00	87.10	178.60	11,093.17	2,693.05	-2,695.62	-378.76	2,722.10	188.00	485,587.38	762,162.24
13,842.00	88.30	179.00	11,096.98	2,787.96	-2,790.52	-376.77	2,815.84	187.69	485,492.48	762,164.23
13,938.00	88.40	179.60	11,099.74	2,883.92	-2,886.47	-375.60	2,910.81	187.41	485,396.53	762,165.40
14,033.00	88.40	180.00	11,102.40	2,978.88	-2,981.43	-375.27	3,004.96	187.17	485,301.57	762,165.73
14,129.00	85.60	178.70	11,107.42	3,074.74	-3,077.28	-374.18	3,099.95	186.93	485,205.72	762,166.82
14,225.00	85.10	179.80	11,115.20	3,170.42	-3,172.96	-372.93	3,194.80	186.70	485,110.04	762,168.07
14,320.00	85.80	180.30	11,122.74	3,265.11	-3,267.66	-373.01	3,288.88	186.51	485,015.34	762,167.99



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 121H
Wellbore: ST01
Design: MWD

Local Co-ordinate Reference:
TVD Reference: Well @ 3766.50usft
MD Reference: Well @ 3766.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
14,416.00	86.20	179.20	11,129.44	3,360.88	-3,363.42	-372.59	3,384.00	186.32	484,919.58	762,168.41
14,491.00	86.70	179.40	11,134.08	3,435.73	-3,438.27	-371.68	3,458.30	186.17	484,844.73	762,169.32
14,575.00	89.30	179.40	11,137.01	3,519.67	-3,522.21	-370.80	3,541.67	186.01	484,760.79	762,170.20
14,671.00	91.00	179.50	11,136.76	3,615.67	-3,618.20	-369.88	3,637.06	185.84	484,664.80	762,171.12
14,767.00	92.50	179.30	11,133.83	3,711.62	-3,714.15	-368.87	3,732.42	185.67	484,568.85	762,172.13
14,863.00	93.90	179.30	11,128.47	3,807.47	-3,809.99	-367.70	3,827.69	185.51	484,473.01	762,173.30
14,990.00	90.10	179.90	11,124.04	3,934.37	-3,936.88	-366.82	3,953.94	185.32	484,346.12	762,174.18
15,085.00	91.10	180.50	11,123.04	4,029.35	-4,031.88	-367.15	4,048.56	185.20	484,251.12	762,173.85
15,181.00	92.00	181.20	11,120.45	4,125.29	-4,127.83	-368.57	4,144.25	185.10	484,155.17	762,172.43
15,277.00	89.20	181.40	11,119.44	4,221.24	-4,223.79	-370.75	4,240.03	185.02	484,059.21	762,170.25
15,372.00	89.40	182.20	11,120.60	4,316.16	-4,318.74	-373.73	4,334.88	184.95	483,964.26	762,167.27
15,468.00	86.50	180.90	11,124.04	4,412.03	-4,414.63	-376.33	4,430.64	184.87	483,868.37	762,164.67
15,564.00	84.60	179.10	11,131.48	4,507.73	-4,510.33	-376.33	4,526.00	184.77	483,772.67	762,164.67
15,660.00	85.00	177.10	11,140.19	4,603.30	-4,605.88	-373.16	4,620.97	184.63	483,677.12	762,167.84
15,755.00	87.40	176.90	11,146.48	4,697.99	-4,700.53	-368.20	4,714.93	184.48	483,582.47	762,172.80
15,851.00	87.90	177.20	11,150.42	4,793.81	-4,796.32	-363.26	4,810.06	184.33	483,486.68	762,177.74
15,947.00	88.50	178.10	11,153.43	4,889.70	-4,892.19	-359.33	4,905.37	184.20	483,390.81	762,181.67
16,043.00	89.90	178.60	11,154.77	4,985.67	-4,988.14	-356.57	5,000.87	184.09	483,294.86	762,184.43
16,138.00	90.60	178.80	11,154.36	5,080.65	-5,083.12	-354.41	5,095.46	183.99	483,199.88	762,186.59
16,234.00	91.50	179.20	11,152.60	5,176.63	-5,179.08	-352.74	5,191.08	183.90	483,103.92	762,188.26
16,329.00	91.50	179.50	11,150.11	5,271.60	-5,274.04	-351.66	5,285.76	183.81	483,008.96	762,189.34
16,425.00	91.30	179.70	11,147.77	5,367.57	-5,370.01	-350.99	5,381.47	183.74	482,912.99	762,190.01
16,521.00	91.80	180.00	11,145.17	5,463.53	-5,465.98	-350.74	5,477.22	183.67	482,817.02	762,190.26
16,617.00	92.00	180.90	11,141.99	5,559.47	-5,561.92	-351.49	5,573.02	183.62	482,721.08	762,189.51
16,712.00	89.70	180.10	11,140.58	5,654.44	-5,656.90	-352.32	5,667.86	183.56	482,626.10	762,188.68
16,808.00	91.00	180.40	11,139.99	5,750.43	-5,752.89	-352.74	5,763.70	183.51	482,530.11	762,188.26
16,904.00	91.20	181.40	11,138.15	5,846.39	-5,848.86	-354.25	5,859.58	183.47	482,434.14	762,186.75



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Project:

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

Well No. 121H
Well @ 3766.50usft
Well @ 3766.50usft
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)
16,999.00	88.80	180.00	11,138.15	5,941.36	-5,943.85	-355.41	5,954.46	183.42	482,339.15	762,185.59
17,095.00	87.90	180.80	11,140.91	6,037.31	-6,039.80	-356.08	6,050.29	183.37	482,243.20	762,184.92
17,191.00	87.00	178.90	11,145.19	6,133.21	-6,135.70	-355.83	6,146.01	183.32	482,147.30	762,185.17
17,286.00	87.20	179.30	11,149.99	6,228.08	-6,230.57	-354.34	6,240.64	183.25	482,052.43	762,186.66
17,382.00	86.30	179.40	11,155.43	6,323.93	-6,326.41	-353.25	6,336.26	183.20	481,956.59	762,187.75
17,478.00	87.60	176.80	11,160.54	6,419.75	-6,422.21	-350.07	6,431.74	183.12	481,860.79	762,190.93
17,573.00	89.40	175.50	11,163.03	6,514.53	-6,516.96	-343.69	6,526.01	183.02	481,766.04	762,197.31
17,669.00	88.80	175.00	11,164.54	6,610.24	-6,612.61	-335.74	6,621.13	182.91	481,670.39	762,205.26
17,765.00	91.30	175.60	11,164.45	6,705.96	-6,708.28	-327.88	6,716.29	182.80	481,574.72	762,213.12
17,861.00	92.00	175.80	11,161.69	6,801.70	-6,803.97	-320.68	6,811.52	182.70	481,479.03	762,220.32
17,956.00	92.20	176.30	11,158.21	6,896.45	-6,898.68	-314.14	6,905.83	182.61	481,384.32	762,226.86
18,052.00	92.40	177.10	11,154.36	6,992.24	-6,994.44	-308.62	7,001.25	182.53	481,288.56	762,232.38
18,148.00	93.10	177.10	11,149.75	7,088.04	-7,090.21	-303.77	7,096.72	182.45	481,192.79	762,237.23
18,244.00	93.00	179.90	11,144.64	7,183.88	-7,186.03	-301.26	7,192.34	182.40	481,096.97	762,239.74
18,339.00	92.90	180.80	11,139.75	7,278.74	-7,280.90	-301.84	7,287.16	182.37	481,002.10	762,239.16
18,435.00	93.20	180.80	11,134.64	7,374.59	-7,376.76	-303.18	7,382.99	182.35	480,906.24	762,237.82
18,531.00	93.20	180.80	11,129.29	7,470.42	-7,472.60	-304.52	7,478.80	182.33	480,810.40	762,236.48
18,626.00	89.90	181.10	11,126.72	7,565.34	-7,567.54	-306.09	7,573.73	182.32	480,715.46	762,234.91
18,722.00	90.10	181.70	11,126.72	7,661.30	-7,663.51	-308.44	7,669.71	182.30	480,619.49	762,232.56
18,818.00	89.90	182.20	11,126.72	7,757.22	-7,759.45	-311.70	7,765.71	182.30	480,523.55	762,229.30
18,913.00	90.20	182.70	11,126.63	7,852.10	-7,854.37	-315.77	7,860.71	182.30	480,428.63	762,225.23
19,009.00	90.80	183.40	11,125.80	7,947.92	-7,950.23	-320.87	7,956.70	182.31	480,332.77	762,220.13
19,105.00	90.10	181.20	11,125.04	8,043.81	-8,046.14	-324.72	8,052.69	182.31	480,236.86	762,216.28
19,200.00	90.60	181.20	11,124.46	8,138.77	-8,141.12	-326.71	8,147.67	182.30	480,141.88	762,214.29
19,296.00	92.00	181.50	11,122.28	8,234.70	-8,237.06	-328.98	8,243.63	182.29	480,045.94	762,212.02
19,390.00	91.70	181.50	11,119.25	8,328.60	-8,330.98	-331.43	8,337.57	182.28	479,952.02	762,209.57
19,485.00	92.80	181.90	11,115.52	8,423.46	-8,425.86	-334.25	8,432.49	182.27	479,857.14	762,206.75



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 121H
ST01
MWD

Project:

Well @ 3766.50usft

Site:

Well @ 3766.50usft

Well:

Grid

Wellbore:

Minimum Curvature

Design:

WellPlanner1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well No. 121H

Well @ 3766.50usft

Well @ 3766.50usft

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)
19,581.00	90.20	182.10	11,113.01	8,519.34	-8,521.76	-337.60	8,528.45	182.27	479,761.24	762,203.40
19,677.00	90.80	182.10	11,112.17	8,615.24	-8,617.70	-341.12	8,624.44	182.27	479,665.30	762,199.88
19,772.00	88.80	179.80	11,112.50	8,710.21	-8,712.67	-342.69	8,719.41	182.25	479,570.33	762,198.31
19,868.00	89.70	180.40	11,113.76	8,806.19	-8,808.66	-342.86	8,815.33	182.23	479,474.34	762,198.14
19,964.00	90.90	180.50	11,113.25	8,902.18	-8,904.65	-343.61	8,911.28	182.21	479,378.35	762,197.39
20,060.00	91.90	181.00	11,110.91	8,998.13	-9,000.62	-344.87	9,007.22	182.19	479,282.38	762,196.13
20,155.00	88.30	180.40	11,110.74	9,093.10	-9,095.59	-346.03	9,102.17	182.18	479,187.41	762,194.97
20,251.00	89.10	180.30	11,112.92	9,189.06	-9,191.57	-346.62	9,198.10	182.16	479,091.43	762,194.38
20,347.00	90.20	180.80	11,113.51	9,285.05	-9,287.56	-347.54	9,294.06	182.14	478,995.44	762,193.46
20,443.00	91.30	181.00	11,112.25	9,381.02	-9,383.54	-349.05	9,390.03	182.13	478,899.46	762,191.95
20,538.00	88.60	179.80	11,112.33	9,476.00	-9,478.52	-349.71	9,484.97	182.11	478,804.48	762,191.29
20,634.00	89.20	179.50	11,114.18	9,571.98	-9,574.50	-349.12	9,580.87	182.09	478,708.50	762,191.88
20,730.00	90.50	179.70	11,114.43	9,667.98	-9,670.50	-348.45	9,676.77	182.06	478,612.50	762,192.55
20,825.00	87.10	179.80	11,116.42	9,762.94	-9,765.46	-348.04	9,771.66	182.04	478,517.54	762,192.96
20,921.00	87.80	179.70	11,120.69	9,858.84	-9,861.37	-347.62	9,867.49	182.02	478,421.63	762,193.38
21,017.00	88.50	180.10	11,123.79	9,954.79	-9,957.32	-347.45	9,963.38	182.00	478,325.68	762,193.55
21,113.00	90.30	180.40	11,124.79	10,050.78	-10,053.31	-347.87	10,059.32	181.98	478,229.69	762,193.13
21,198.00	91.00	180.20	11,123.83	10,135.76	-10,138.30	-348.32	10,144.28	181.97	478,144.70	762,192.68
Last Survey: 21198' MD										
21,253.00	91.00	180.20	11,122.87	10,190.75	-10,193.29	-348.51	10,199.24	181.96	478,089.71	762,192.49
PTB: 21253' MD										



ProDirectional Survey Report



Company: Matador Resources Project: Lea County, NM (NAD83) Site: Rodney Robinson Federal Well: No. 121H Wellbore: ST01 Design: MWD	Local Co-ordinate Reference: TVD Reference: Well @ 3766.50usft MD Reference: Well @ 3766.50usft North Reference: Grid Survey Calculation Method: Minimum Curvature Database: WellPlanner1	Well No. 121H Well @ 3766.50usft Well @ 3766.50usft Grid Minimum Curvature WellPlanner1
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Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
11,273.00	11,006.16	-229.20	-470.18	First ST01 Survey: 11273' MD
21,198.00	11,123.83	-10,138.30	-348.32	Last Survey: 21198' MD
21,253.00	11,122.87	-10,193.29	-348.51	PTB: 21253' MD