



Rec'd 6/25/2020 - NMOCD



Rodney Robinson Federal No. 122H
Lea County, NM

October 18, 2019

Job No. LNM5532119

ORIGINAL

Certified Report



Survey Certification Letter

Rec'd 6/25/2020 - NMOCD

October 18, 2019



Operator Name: Matador Resources
Well Name: Rodney Robinson Federal No. 122H
County/Parish: Lea County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5532119

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	193' MD – 21,047' MD	21,224' MD	09/04/19 – 09/23/19	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. 122H
OH

Survey: ProDirectional

Survey Report

18 October, 2019





ProDirectional Survey Report



Company: Matador Resources	Local Co-ordinate Reference:	Well No. 122H
Project: Lea County, NM (NAD83)	TVD Reference:	Well @ 3760.50usft
Site: Rodney Robinson Federal	MD Reference:	Well @ 3760.50usft
Well: No. 122H	North Reference:	Grid
Wellbore: OH	Survey Calculation Method:	Minimum Curvature
Design: MWD-193'-21047', PTB: 21224'	Database:	WellPlanner1

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: Map

From: 0.00 usft

Position Uncertainty: 0.00 usft

Northing: 488,319.00 usft

Easting: 763,640.00 usft

Slot Radius: 13-3/16 "

Latitude: 32.340407

Longitude: -103.613537

Grid Convergence: 0.39 °

Well: No. 122H, LNM5532119

Well Position

+N/-S 0.00 usft

+E/-W 0.00 usft

Wellhead Elevation: 0.00 usft

Northing: 488,319.00 usft

Easting: 763,640.00 usft

Wellhead Elevation: usft

Latitude: 32.340407

Longitude: -103.613537

Ground Level: 3,732.00 usft

Wellbore	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
OH	HDGM	9/16/2019	6.68	60.07	47,978.30

Design: MWD-193'-21047', PTB: 21224'

Audit Notes:

Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.00

Vertical Section:

Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
0.00	0.00	0.00	179.62

Survey Program	Date	Tool Name	Description
From (usft) 193.00	To (usft) 21,224.00	MWD+HDGM	OWSG MWD + HRGM



ProDirectional Survey Report



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Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 122H
Wellbore: OH
Design: MWD-193-21047; PTB: 21224

Local Co-ordinate Reference: Well No. 122H
TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	488,319.00	763,640.00
193.00	0.60	40.70	193.00	-0.76	0.77	0.66	1.01	40.70	488,319.77	763,640.66
Pro MWD First Survey: 193' MD										
314.00	0.80	31.40	313.99	-1.87	1.88	1.46	2.38	37.82	488,320.88	763,641.46
403.00	0.80	40.90	402.98	-2.80	2.81	2.15	3.54	37.38	488,321.81	763,642.15
493.00	0.40	43.00	492.98	-3.50	3.52	2.77	4.48	38.26	488,322.52	763,642.77
584.00	0.80	6.60	583.97	-4.36	4.38	3.06	5.34	34.97	488,323.38	763,643.06
674.00	1.50	358.60	673.95	-6.16	6.18	3.11	6.92	26.68	488,325.18	763,643.11
766.00	1.70	358.60	765.92	-8.73	8.75	3.04	9.26	19.18	488,327.75	763,643.04
857.00	1.30	358.60	856.89	-11.11	11.13	2.99	11.52	15.01	488,330.13	763,642.99
951.00	0.80	9.20	950.87	-12.82	12.84	3.06	13.20	13.42	488,331.84	763,643.06
1,046.00	0.30	29.90	1,045.86	-13.69	13.71	3.29	14.10	13.51	488,332.71	763,643.29
1,140.00	0.20	20.40	1,139.86	-14.06	14.08	3.47	14.50	13.86	488,333.08	763,643.47
1,234.00	0.10	309.50	1,233.86	-14.26	14.29	3.47	14.70	13.64	488,333.29	763,643.47
1,276.00	0.20	326.00	1,275.86	-14.35	14.37	3.40	14.77	13.30	488,333.37	763,643.40
1,443.00	0.40	288.10	1,442.86	-14.78	14.79	2.68	15.04	10.27	488,333.79	763,642.68
1,538.00	1.40	340.50	1,537.85	-15.98	15.99	1.98	16.11	7.05	488,334.99	763,641.98
1,634.00	2.50	348.60	1,633.79	-19.14	19.15	1.17	19.19	3.51	488,338.15	763,641.17
1,729.00	2.30	340.10	1,728.71	-22.97	22.97	0.11	22.97	0.29	488,341.97	763,640.11
1,825.00	3.10	344.40	1,824.60	-27.29	27.28	-1.24	27.31	357.40	488,346.28	763,638.76
1,920.00	3.90	346.70	1,919.42	-32.92	32.90	-2.67	33.01	355.36	488,351.90	763,637.33
2,015.00	3.80	349.00	2,014.21	-39.16	39.14	-4.02	39.34	354.14	488,358.14	763,635.98
2,111.00	4.60	352.90	2,109.95	-46.11	46.08	-5.10	46.36	353.68	488,365.08	763,634.90
2,206.00	5.80	354.60	2,204.56	-54.68	54.64	-6.02	54.97	353.71	488,373.64	763,633.98
2,302.00	5.80	355.00	2,300.07	-64.34	64.30	-6.90	64.67	353.87	488,383.30	763,633.10
2,397.00	5.90	355.20	2,394.57	-74.00	73.95	-7.73	74.35	354.03	488,392.95	763,632.27
2,493.00	5.80	356.10	2,490.07	-83.76	83.70	-8.47	84.13	354.22	488,402.70	763,631.53



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 122H
Wellbore: OH
Design: MWD-193'-21047', PTB: 21224'

Local Co-ordinate Reference:
TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 122H
Well @ 3760.50usft
Well @ 3760.50usft
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)
	2,589.00	5.90	357.80	2,585.57	-93.53	93.47	-8.99	93.91	354.51	488,412.47	763,631.01
	2,684.00	5.80	354.60	2,680.08	-103.19	103.13	-9.63	103.58	354.67	488,422.13	763,630.37
	2,780.00	6.00	359.70	2,775.57	-113.04	112.98	-10.11	113.43	354.89	488,431.98	763,629.89
	2,875.00	6.20	358.10	2,870.03	-123.14	123.07	-10.31	123.50	355.21	488,442.07	763,629.69
	2,971.00	6.40	1.00	2,965.45	-133.67	133.60	-10.39	134.00	355.55	488,452.60	763,629.61
	3,066.00	6.60	1.20	3,059.84	-144.42	144.35	-10.18	144.71	355.97	488,463.35	763,629.82
	3,162.00	5.40	4.60	3,155.31	-154.43	154.37	-9.70	154.68	356.40	488,473.37	763,630.30
	3,257.00	4.80	8.00	3,249.94	-162.82	162.76	-8.79	163.00	356.91	488,481.76	763,631.21
	3,353.00	5.10	6.90	3,345.58	-171.03	170.98	-7.72	171.15	357.42	488,489.98	763,632.28
	3,449.00	4.30	15.30	3,441.26	-178.72	178.69	-6.26	178.80	357.99	488,497.69	763,633.74
	3,544.00	3.20	21.80	3,536.05	-184.61	184.58	-4.33	184.63	358.66	488,503.58	763,635.67
	3,640.00	2.20	19.90	3,631.95	-188.82	188.80	-2.71	188.82	359.18	488,507.80	763,637.29
	3,736.00	1.30	16.40	3,727.90	-191.59	191.58	-1.78	191.59	359.47	488,510.58	763,638.22
	3,831.00	1.50	22.10	3,822.87	-193.77	193.77	-1.00	193.77	359.70	488,512.77	763,639.00
	3,927.00	1.50	16.10	3,918.84	-196.14	196.14	-0.18	196.14	359.95	488,515.14	763,639.82
	4,023.00	1.30	25.90	4,014.81	-198.32	198.32	0.64	198.33	0.19	488,517.32	763,640.64
	4,118.00	1.20	57.30	4,109.79	-199.81	199.83	1.95	199.84	0.56	488,518.83	763,641.95
	4,214.00	2.10	82.00	4,205.75	-200.59	200.62	4.54	200.67	1.30	488,519.62	763,644.54
	4,310.00	3.10	89.50	4,301.65	-200.82	200.89	8.88	201.08	2.53	488,519.89	763,648.88
	4,405.00	3.10	98.20	4,396.51	-200.45	200.54	13.99	201.03	3.99	488,519.54	763,653.99
	4,500.00	2.90	123.10	4,491.38	-198.74	198.86	18.54	199.73	5.33	488,517.86	763,658.54
	4,596.00	3.10	131.20	4,587.25	-195.87	195.83	22.53	197.12	6.56	488,514.83	763,662.53
	4,692.00	2.20	122.80	4,683.15	-192.94	193.12	26.03	194.87	7.68	488,512.12	763,666.03
	4,787.00	0.80	93.10	4,778.12	-191.91	192.10	28.23	194.16	8.36	488,511.10	763,668.23
	4,882.00	0.80	92.80	4,873.11	-191.83	192.03	29.55	194.29	8.75	488,511.03	763,669.55
	4,978.00	1.00	93.50	4,969.09	-191.73	191.94	31.06	194.44	9.19	488,510.94	763,671.06
	5,178.00	0.80	126.30	5,169.07	-190.78	191.01	33.92	194.00	10.07	488,510.01	763,673.92



ProDirectional Survey Report



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Wellbore: OH
Design: MWD-193'-21047', PTB: 21224'

Local Co-ordinate Reference:
TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: 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)
5,277.00	0.80	113.50	5,268.06	-190.09	190.33	35.12	193.54	10.45	488,509.33	763,675.12
5,373.00	1.00	254.20	5,364.06	-189.60	189.83	34.92	193.02	10.42	488,508.83	763,674.92
5,469.00	1.90	255.40	5,460.03	-188.98	189.20	32.58	191.99	9.77	488,508.20	763,672.58
5,564.00	1.90	254.20	5,554.97	-188.18	188.38	29.54	190.68	8.91	488,507.38	763,669.54
5,659.00	1.90	254.60	5,649.92	-187.35	187.53	26.50	189.39	8.04	488,506.53	763,666.50
5,755.00	1.90	253.80	5,745.87	-186.50	186.66	23.44	188.13	7.16	488,505.66	763,663.44
5,851.00	1.80	254.90	5,841.82	-185.69	185.83	20.46	186.95	6.28	488,504.83	763,660.46
5,946.00	1.80	253.90	5,936.77	-184.90	185.02	17.58	185.86	5.43	488,504.02	763,657.58
6,041.00	1.90	256.90	6,031.72	-184.15	184.25	14.62	184.83	4.54	488,503.25	763,654.62
6,137.00	2.00	254.20	6,127.67	-183.36	183.44	11.45	183.79	3.57	488,502.44	763,651.45
6,233.00	2.10	255.20	6,223.60	-182.47	182.53	8.14	182.71	2.55	488,501.53	763,648.14
6,328.00	2.30	252.60	6,318.53	-181.48	181.52	4.64	181.58	1.46	488,500.52	763,644.64
6,424.00	2.40	254.20	6,414.45	-180.38	180.39	0.87	180.39	0.28	488,499.39	763,640.87
6,519.00	2.40	256.40	6,509.37	-179.40	179.38	-2.98	179.41	359.05	488,498.38	763,637.02
6,615.00	1.90	259.60	6,605.30	-178.66	178.62	-6.50	178.74	357.92	488,497.62	763,633.50
6,710.00	0.40	143.00	6,700.29	-178.12	178.07	-7.85	178.25	357.48	488,497.07	763,632.15
6,806.00	0.80	134.70	6,796.28	-177.38	177.33	-7.17	177.48	357.68	488,496.33	763,632.83
6,901.00	1.00	146.90	6,891.27	-176.21	176.17	-6.25	176.28	357.97	488,495.17	763,633.75
6,997.00	1.00	143.50	6,987.25	-174.83	174.80	-5.29	174.88	358.27	488,493.80	763,634.71
7,092.00	0.90	148.20	7,082.24	-173.52	173.50	-4.40	173.55	358.55	488,492.50	763,635.60
7,188.00	1.00	146.10	7,178.23	-172.18	172.16	-3.54	172.20	358.82	488,491.16	763,636.46
7,283.00	1.10	142.90	7,273.21	-170.76	170.75	-2.53	170.77	359.15	488,489.75	763,637.47
7,379.00	1.20	147.20	7,369.19	-169.17	169.17	-1.43	169.17	359.52	488,488.17	763,638.57
7,474.00	1.40	154.80	7,464.17	-167.28	167.28	-0.39	167.28	359.87	488,486.28	763,639.61
7,570.00	1.60	153.40	7,560.14	-165.01	165.02	0.71	165.02	0.25	488,484.02	763,640.71
7,665.00	1.70	151.80	7,655.10	-162.58	162.59	1.97	162.61	0.69	488,481.59	763,641.97
7,760.00	1.70	150.80	7,750.05	-160.10	160.12	3.32	160.16	1.19	488,479.12	763,643.32



ProDirectional Survey Report

**Company:**

Matador Resources
 Lea County, NM (NAD83)
 Rodney Robinson Federal
 No. 122H
 OH
 MWD-193-21047', PTB: 21224'

Local Co-ordinate Reference:

Well No. 122H
 Well @ 3760.50usft
 Well @ 3760.50usft
 Grid
 Minimum Curvature
 WellPlanner1

TVD Reference:

Well @ 3760.50usft

MD Reference:

Grid

North Reference:

Minimum Curvature

Survey Calculation Method:

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)
7,856.00	0.50	280.50	7,846.04	-158.93	158.95	3.60	159.00	1.30	488,477.95	763,643.60
7,951.00	0.80	298.70	7,941.04	-159.33	159.35	2.61	159.37	0.94	488,478.35	763,642.61
8,047.00	1.00	299.40	8,037.02	-160.07	160.08	1.30	160.09	0.46	488,479.08	763,641.30
8,142.00	0.90	295.60	8,132.01	-160.81	160.81	-0.10	160.81	359.96	488,479.81	763,639.90
8,238.00	0.80	302.40	8,228.00	-161.50	161.50	-1.35	161.50	359.52	488,480.50	763,638.65
8,333.00	0.80	304.30	8,322.99	-162.24	162.22	-2.45	162.24	359.13	488,481.22	763,637.55
8,429.00	0.80	296.50	8,418.98	-162.92	162.90	-3.61	162.94	358.73	488,481.90	763,636.39
8,524.00	0.60	291.50	8,513.97	-163.41	163.38	-4.66	163.45	358.37	488,482.38	763,635.34
8,619.00	0.70	281.90	8,608.97	-163.72	163.68	-5.69	163.78	358.01	488,482.68	763,634.31
8,715.00	0.70	283.80	8,704.96	-163.98	163.94	-6.84	164.09	357.61	488,482.94	763,633.16
8,811.00	0.80	275.20	8,800.95	-164.19	164.14	-8.07	164.34	357.18	488,483.14	763,631.93
8,906.00	0.70	277.80	8,895.94	-164.34	164.28	-9.31	164.55	356.76	488,483.28	763,630.69
9,002.00	0.30	265.10	8,991.94	-164.40	164.34	-10.14	164.65	356.47	488,483.34	763,629.86
9,097.00	1.20	13.90	9,086.93	-165.35	165.28	-10.15	165.60	356.49	488,484.28	763,629.85
9,193.00	1.50	22.50	9,182.91	-167.48	167.42	-9.43	167.69	356.78	488,486.42	763,630.57
9,289.00	1.50	31.50	9,278.87	-169.70	169.65	-8.29	169.86	357.20	488,488.65	763,631.71
9,384.00	1.40	38.20	9,373.84	-171.67	171.63	-6.92	171.77	357.69	488,490.63	763,633.08
9,480.00	1.10	38.50	9,469.82	-173.30	173.27	-5.62	173.36	358.14	488,492.27	763,634.38
9,575.00	0.90	37.90	9,564.81	-174.60	174.57	-4.60	174.63	358.49	488,493.57	763,635.40
9,671.00	0.40	26.70	9,660.80	-175.49	175.47	-3.98	175.51	358.70	488,494.47	763,636.02
9,766.00	0.70	257.10	9,755.80	-175.66	175.63	-4.40	175.69	358.56	488,494.63	763,635.60
9,862.00	0.80	234.50	9,851.79	-175.14	175.11	-5.52	175.20	358.20	488,494.11	763,634.48
9,958.00	1.10	220.20	9,947.78	-174.06	174.02	-6.66	174.15	357.81	488,493.02	763,633.34
10,053.00	1.20	213.60	10,042.76	-172.54	172.49	-7.80	172.67	357.41	488,491.49	763,632.20
10,149.00	1.10	212.50	10,138.74	-170.93	170.88	-8.85	171.11	357.04	488,489.88	763,631.15
10,244.00	1.10	231.50	10,233.72	-169.61	169.54	-10.05	169.84	356.61	488,488.54	763,629.95
10,339.00	1.00	267.10	10,328.71	-169.01	168.93	-11.59	169.33	356.07	488,487.93	763,628.41



ProDirectional Survey Report

**Company:**

Matador Resources
Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 122H
Wellbore: OH
Design: MWD-193-21047', PTB: 21224'

Local Co-ordinate Reference:

TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
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)
10,433.00	0.80	287.40	10,422.69	-169.17	169.09	-13.04	169.59	355.59	488,488.09	763,626.96
10,528.00	10.80	186.40	10,517.14	-160.51	160.41	-14.67	161.08	354.77	488,479.41	763,625.33
10,624.00	27.30	189.60	10,607.57	-129.68	129.55	-19.38	131.00	351.49	488,448.55	763,620.62
10,720.00	35.90	191.00	10,689.26	-80.31	80.13	-28.44	85.02	340.46	488,399.13	763,611.56
10,815.00	41.10	185.90	10,763.60	-21.91	21.67	-36.97	42.85	300.38	488,340.67	763,603.03
10,911.00	47.70	180.20	10,832.18	45.05	-45.32	-40.34	60.67	221.67	488,273.68	763,599.66
11,006.00	49.50	179.50	10,895.00	116.31	-116.58	-40.15	123.30	199.00	488,202.42	763,599.85
11,102.00	57.10	181.30	10,952.34	193.21	-193.48	-40.74	197.73	191.89	488,125.52	763,599.26
11,197.00	63.20	184.80	10,999.61	275.39	-275.70	-45.20	279.38	189.31	488,043.30	763,594.80
11,293.00	71.00	185.50	11,036.94	363.35	-363.71	-53.15	367.57	188.31	487,955.29	763,586.85
11,388.00	83.50	182.40	11,057.87	455.55	-455.95	-59.46	459.81	187.43	487,863.05	763,580.54
11,420.00	86.90	180.60	11,060.54	487.41	-487.82	-60.29	491.54	187.05	487,831.18	763,579.71
11,483.00	87.10	180.00	11,063.84	550.32	-550.74	-60.62	554.06	186.28	487,768.26	763,579.38
11,579.00	86.80	179.30	11,068.95	646.19	-646.60	-60.03	649.38	185.30	487,672.40	763,579.97
11,675.00	88.00	182.00	11,073.30	742.06	-742.48	-61.12	744.99	184.71	487,576.52	763,578.88
11,770.00	88.40	181.00	11,076.29	836.96	-837.40	-63.61	839.81	184.34	487,481.60	763,576.39
11,865.00	88.90	179.80	11,078.53	931.92	-932.37	-64.27	934.58	183.94	487,386.63	763,575.73
11,961.00	89.80	179.20	11,079.62	1,027.92	-1,028.36	-63.43	1,030.31	183.53	487,290.64	763,576.57
12,056.00	90.50	178.40	11,079.37	1,122.91	-1,123.34	-61.44	1,125.02	183.13	487,195.66	763,578.56
12,152.00	86.70	179.80	11,081.71	1,218.85	-1,219.28	-59.94	1,220.75	182.81	487,099.72	763,580.06
12,247.00	86.60	179.30	11,087.26	1,313.69	-1,314.11	-59.19	1,315.44	182.58	487,004.89	763,580.81
12,342.00	86.50	178.60	11,092.98	1,408.51	-1,408.92	-57.45	1,410.09	182.34	486,910.08	763,582.55
12,438.00	87.00	178.30	11,098.42	1,504.34	-1,504.73	-54.86	1,505.73	182.09	486,814.27	763,585.14
12,534.00	87.60	177.50	11,102.94	1,600.18	-1,600.56	-51.35	1,601.38	181.84	486,718.44	763,588.65
12,629.00	84.20	180.90	11,109.74	1,694.91	-1,695.28	-50.02	1,696.02	181.69	486,623.72	763,589.98
12,724.00	89.90	181.00	11,114.62	1,789.72	-1,790.10	-51.59	1,790.85	181.65	486,528.90	763,588.41
12,820.00	90.70	180.50	11,114.12	1,885.70	-1,886.09	-52.85	1,886.83	181.60	486,432.91	763,587.15



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD63)
Site: Rodney Robinson Federal
Well: No. 122H
Wellbore: OH
Design: MWD-193'-21047', PTB: 21224'

Local Co-ordinate Reference:
TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No. 122H
Well @ 3760.50usft
Well @ 3760.50usft
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)
12,915.00	91.30	180.20	11,112.46	1,980.68	-1,981.07	-53.43	1,981.79	181.54	486,337.93	763,586.57
13,011.00	90.30	179.40	11,111.12	2,076.66	-2,077.06	-53.09	2,077.74	181.46	486,241.94	763,586.91
13,106.00	89.10	180.50	11,111.62	2,171.66	-2,172.06	-53.01	2,172.70	181.40	486,146.94	763,586.99
13,150.00	88.50	181.00	11,112.54	2,215.64	-2,216.04	-53.59	2,216.69	181.39	486,102.96	763,586.41
13,246.00	88.30	181.70	11,115.22	2,311.56	-2,311.98	-55.85	2,312.65	181.38	486,007.02	763,584.15
13,341.00	88.20	182.20	11,118.12	2,406.44	-2,406.88	-59.08	2,407.61	181.41	485,912.12	763,580.92
13,437.00	88.00	182.50	11,121.31	2,502.27	-2,502.75	-63.01	2,503.54	181.44	485,816.25	763,576.99
13,532.00	87.90	183.00	11,124.71	2,597.07	-2,597.58	-67.57	2,598.45	181.49	485,721.42	763,572.43
13,628.00	88.10	183.50	11,128.06	2,692.82	-2,693.36	-73.01	2,694.35	181.55	485,625.64	763,566.99
13,724.00	86.70	182.10	11,132.41	2,788.57	-2,789.14	-77.69	2,790.23	181.60	485,529.86	763,562.31
13,819.00	86.90	182.10	11,137.71	2,883.33	-2,883.93	-81.17	2,885.07	181.61	485,435.07	763,558.83
13,915.00	86.40	179.80	11,143.32	2,979.13	-2,979.75	-82.76	2,980.90	181.59	485,339.25	763,557.24
14,010.00	86.50	179.30	11,149.21	3,073.95	-3,074.56	-82.01	3,075.66	181.53	485,244.44	763,557.99
14,106.00	86.90	179.30	11,154.73	3,169.79	-3,170.40	-80.84	3,171.43	181.46	485,148.60	763,559.16
14,201.00	87.20	178.90	11,159.62	3,264.66	-3,265.26	-79.35	3,266.22	181.39	485,053.74	763,560.65
14,296.00	87.40	179.20	11,164.10	3,359.55	-3,360.14	-77.78	3,361.04	181.33	484,958.86	763,562.22
14,392.00	90.20	178.90	11,166.11	3,455.52	-3,456.10	-76.19	3,456.94	181.26	484,862.90	763,563.81
14,487.00	91.20	179.20	11,164.95	3,550.50	-3,551.07	-74.61	3,551.86	181.20	484,767.93	763,565.39
14,583.00	91.90	179.30	11,162.35	3,646.46	-3,647.03	-73.35	3,647.77	181.15	484,671.97	763,566.65
14,678.00	92.10	178.50	11,159.03	3,741.40	-3,741.95	-71.53	3,742.64	181.10	484,577.05	763,568.47
14,774.00	92.80	178.60	11,154.93	3,837.29	-3,837.84	-69.10	3,838.46	181.03	484,481.16	763,570.90
14,869.00	91.80	179.60	11,151.12	3,932.21	-3,932.74	-67.61	3,933.33	180.98	484,386.26	763,572.39
14,965.00	91.20	179.80	11,148.61	4,028.18	-4,028.71	-67.11	4,029.27	180.95	484,290.29	763,572.89
15,060.00	91.80	180.50	11,146.12	4,123.14	-4,123.68	-67.36	4,124.23	180.94	484,195.32	763,572.64
15,155.00	89.50	180.10	11,145.04	4,218.12	-4,218.66	-67.86	4,219.21	180.92	484,100.34	763,572.14
15,251.00	89.40	180.60	11,145.96	4,314.11	-4,314.66	-68.44	4,315.20	180.91	484,004.34	763,571.56
15,346.00	90.10	181.40	11,146.38	4,409.08	-4,409.64	-70.10	4,410.20	180.91	483,909.36	763,569.90



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 122H
OH
MWD-193'-21047', PTB: 21224'

Local Co-ordinate Reference:

Well No. 122H
Well @ 3760.50usft
Well @ 3760.50usft
Grid
Minimum Curvature
WellPlanner1

TVD Reference:

Well @ 3760.50usft

MD Reference:

Well @ 3760.50usft

North Reference:

Grid

Survey Calculation Method:

Minimum Curvature

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)
15,442.00	89.80	181.80	11,146.46	4,505.02	-4,505.60	-72.78	4,506.19	180.93	483,813.40	763,567.22
15,537.00	89.90	182.30	11,146.71	4,599.93	-4,600.54	-76.18	4,601.17	180.95	483,718.46	763,563.82
15,633.00	89.10	181.10	11,147.55	4,695.86	-4,696.49	-79.03	4,697.16	180.96	483,622.51	763,560.97
15,728.00	89.40	180.70	11,148.79	4,790.83	-4,791.47	-80.52	4,792.15	180.96	483,527.53	763,559.48
15,823.00	89.60	181.20	11,149.62	4,885.80	-4,886.45	-82.10	4,887.14	180.96	483,432.55	763,557.90
15,919.00	89.80	181.50	11,150.12	4,981.76	-4,982.43	-84.36	4,983.14	180.97	483,336.57	763,555.64
16,015.00	90.80	180.90	11,149.62	5,077.72	-5,078.40	-86.37	5,079.14	180.97	483,240.60	763,553.63
16,110.00	90.50	181.00	11,148.54	5,172.69	-5,173.38	-87.94	5,174.13	180.97	483,145.62	763,552.06
16,206.00	89.80	180.30	11,148.29	5,268.67	-5,269.38	-89.03	5,270.13	180.97	483,049.62	763,550.97
16,301.00	89.10	180.40	11,149.20	5,363.66	-5,364.37	-89.61	5,365.12	180.96	482,954.63	763,550.39
16,397.00	90.00	180.70	11,149.96	5,459.64	-5,460.36	-90.53	5,461.11	180.95	482,858.64	763,549.47
16,493.00	86.90	180.10	11,152.55	5,555.58	-5,556.31	-91.20	5,557.06	180.94	482,762.69	763,548.80
16,588.00	86.00	178.90	11,158.44	5,650.40	-5,651.12	-90.38	5,651.84	180.92	482,667.88	763,549.62
16,684.00	85.80	178.30	11,165.30	5,746.14	-5,746.85	-88.04	5,747.52	180.88	482,572.15	763,551.96
16,779.00	88.20	176.50	11,170.27	5,840.92	-5,841.61	-83.73	5,842.21	180.82	482,477.39	763,556.27
16,875.00	88.90	175.30	11,172.70	5,936.69	-5,937.33	-76.87	5,937.83	180.74	482,381.67	763,563.13
16,971.00	89.70	174.50	11,173.87	6,032.35	-6,032.94	-68.34	6,033.33	180.65	482,286.06	763,571.66
17,066.00	91.30	176.10	11,173.04	6,127.08	-6,127.61	-60.55	6,127.91	180.57	482,191.39	763,579.45
17,161.00	91.20	174.30	11,170.97	6,221.77	-6,222.25	-52.61	6,222.47	180.48	482,096.75	763,587.39
17,257.00	91.10	176.40	11,169.05	6,317.47	-6,317.91	-44.83	6,318.07	180.41	482,001.09	763,595.17
17,353.00	90.70	176.50	11,167.54	6,413.32	-6,413.72	-38.88	6,413.83	180.35	481,905.28	763,601.12
17,448.00	89.40	176.20	11,167.45	6,508.16	-6,508.52	-32.84	6,508.60	180.29	481,810.48	763,607.16
17,543.00	90.40	177.40	11,167.62	6,603.04	-6,603.37	-27.53	6,603.43	180.24	481,715.63	763,612.47
17,638.00	89.40	177.10	11,167.79	6,698.96	-6,699.26	-22.93	6,699.30	180.20	481,619.74	763,617.07
17,734.00	89.80	179.10	11,168.45	6,793.92	-6,794.20	-19.78	6,794.23	180.17	481,524.80	763,620.22
17,830.00	90.20	177.50	11,168.45	6,889.89	-6,890.15	-16.93	6,890.17	180.14	481,428.85	763,623.07
17,925.00	90.80	179.30	11,167.62	6,984.86	-6,985.11	-14.28	6,985.12	180.12	481,333.89	763,625.72



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM (NAD83)
Site: Rodney Robinson Federal
Well: No. 122H
Wellbore: OH
Design: MWD-193-21047', PTB: 21224"

Local Co-ordinate Reference:
TVD Reference: Well @ 3760.50usft
MD Reference: Well @ 3760.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Well No.: 122H
Well @: 3760.50usft
Well @: 3760.50usft
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)
18,021.00	92.50	182.10	11,164.86	7,080.79	-7,081.05	-15.45	7,081.06	180.12	481,237.95	763,624.55
18,116.00	94.40	183.50	11,159.14	7,175.46	-7,175.75	-20.08	7,175.78	180.16	481,143.25	763,619.92
18,212.00	92.20	183.30	11,153.61	7,271.09	-7,271.42	-25.76	7,271.47	180.20	481,047.58	763,614.24
18,307.00	90.60	183.00	11,151.29	7,365.88	-7,366.25	-30.98	7,366.31	180.24	480,952.75	763,609.02
18,403.00	91.00	182.80	11,149.95	7,461.71	-7,462.11	-35.84	7,462.20	180.28	480,856.89	763,604.16
18,499.00	90.60	182.60	11,148.61	7,557.56	-7,558.00	-40.36	7,558.10	180.31	480,761.00	763,599.64
18,594.00	89.90	182.40	11,148.20	7,652.44	-7,652.91	-44.50	7,653.03	180.33	480,666.09	763,595.50
18,690.00	90.40	182.50	11,147.95	7,748.32	-7,748.82	-48.61	7,748.97	180.36	480,570.18	763,591.39
18,785.00	89.40	181.90	11,148.11	7,843.23	-7,843.75	-52.25	7,843.92	180.38	480,475.25	763,587.75
18,881.00	89.20	181.10	11,149.29	7,939.17	-7,939.70	-54.77	7,939.89	180.40	480,379.30	763,585.23
18,976.00	89.00	181.50	11,150.78	8,034.11	-8,034.67	-56.92	8,034.87	180.41	480,284.33	763,583.08
19,072.00	89.00	181.00	11,152.45	8,130.06	-8,130.63	-59.02	8,130.84	180.42	480,188.37	763,580.98
19,168.00	89.80	180.90	11,153.46	8,226.03	-8,226.61	-60.61	8,226.83	180.42	480,092.39	763,579.39
19,359.00	89.80	179.80	11,154.13	8,417.01	-8,417.60	-61.77	8,417.83	180.42	479,901.40	763,578.23
19,455.00	91.10	180.30	11,153.37	8,513.00	-8,513.60	-61.86	8,513.82	180.42	479,805.40	763,578.14
19,550.00	91.10	180.40	11,151.55	8,607.97	-8,608.58	-62.44	8,608.80	180.42	479,710.42	763,577.56
19,646.00	91.20	180.10	11,149.62	8,703.95	-8,704.56	-62.86	8,704.78	180.41	479,614.44	763,577.14
19,741.00	91.50	180.70	11,147.38	8,798.91	-8,799.53	-63.52	8,799.76	180.41	479,519.47	763,576.48
19,837.00	90.70	180.30	11,145.54	8,894.88	-8,895.51	-64.36	8,895.74	180.41	479,423.49	763,575.64
19,932.00	90.30	180.80	11,144.71	8,989.87	-8,990.50	-65.27	8,990.73	180.42	479,328.50	763,574.73
20,028.00	90.40	180.60	11,144.12	9,085.85	-9,086.49	-66.44	9,086.73	180.42	479,232.51	763,573.56
20,124.00	89.90	180.50	11,143.87	9,181.84	-9,182.48	-67.36	9,182.73	180.42	479,136.52	763,572.64
20,219.00	89.50	179.80	11,144.37	9,276.83	-9,277.48	-67.61	9,277.73	180.42	479,041.52	763,572.39
20,315.00	89.50	179.80	11,145.21	9,372.82	-9,373.48	-67.28	9,373.72	180.41	478,945.52	763,572.72
20,410.00	89.00	179.40	11,146.45	9,467.82	-9,468.47	-66.61	9,468.70	180.40	478,850.53	763,573.39
20,506.00	88.70	178.70	11,148.38	9,563.79	-9,564.43	-65.02	9,564.65	180.39	478,754.57	763,574.98
20,569.00	88.70	178.80	11,149.81	9,626.77	-9,627.40	-63.65	9,627.61	180.38	478,691.60	763,576.35



ProDirectional Survey Report



Company:

Matador Resources
Lea County, NM (NAD83)
Rodney Robinson Federal
No. 122H
OH
MWD-193'-21047', PTB: 21224'

Project:

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

Well No. 122H
Well @ 3760.50usft
Well @ 3760.50usft
Grid
Minimum Curvature
WellPlanner1

Site:

Well:

Wellbore:

Design:

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)
20,665.00	88.10	178.70	11,152.49	9,722.72	-9,723.34	-61.55	9,723.54	180.36	478,595.66	763,578.45
20,761.00	87.50	178.50	11,156.17	9,818.63	-9,819.24	-59.21	9,819.42	180.35	478,499.76	763,580.79
20,856.00	85.80	177.90	11,161.72	9,913.44	-9,914.03	-56.23	9,914.19	180.32	478,404.97	763,583.77
20,952.00	85.60	176.40	11,168.92	10,009.08	-10,009.64	-51.47	10,009.77	180.29	478,309.36	763,588.53
21,047.00	85.70	175.10	11,176.13	10,103.58	-10,104.10	-44.45	10,104.20	180.25	478,214.90	763,595.55
Last Survey: 21047' MD										
21,224.00	85.70	175.10	11,189.40	10,279.54	-10,279.96	-29.38	10,280.00	180.16	478,039.04	763,610.62
PTB: 21224' MD										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
193.00	193.00	0.77	0.66	Pro MWD First Survey: 193' MD
21,047.00	11,176.13	-10,104.10	-44.45	Last Survey: 21047' MD
21,224.00	11,189.40	-10,279.96	-29.38	PTB: 21224' MD