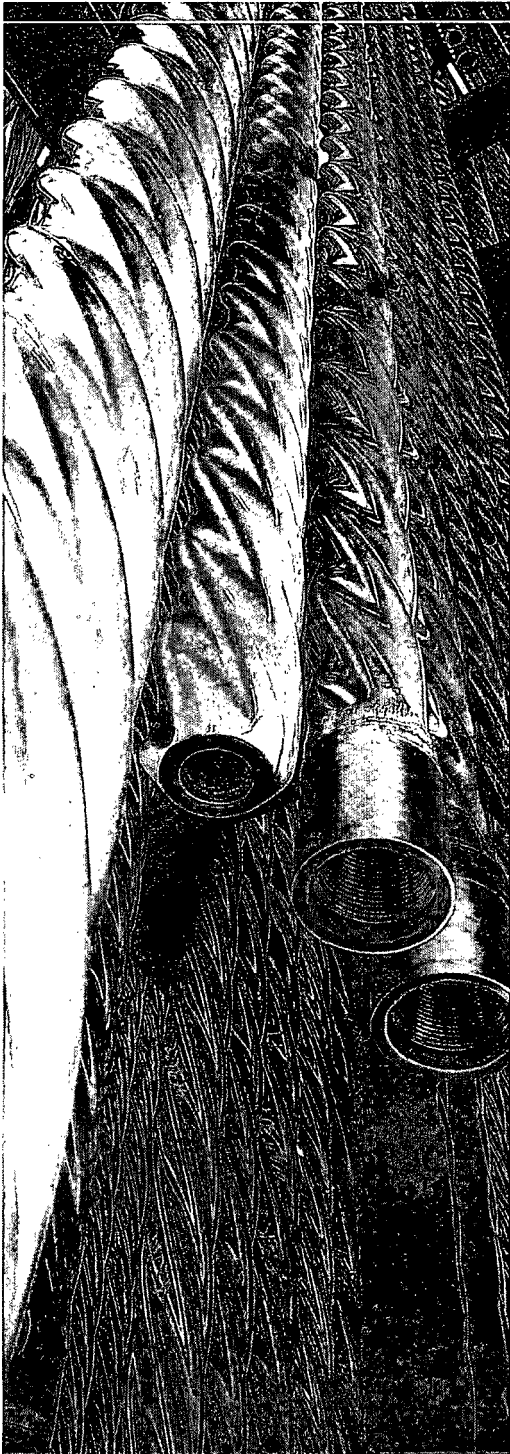


30-025-44722



PRODIRECTIONAL



HOBBS OCD
NOV 06 2018
RECEIVED

Northeast Kemnitz No. 233H(OH)

Lea County, NM

August 06, 2018

Job No. LNM5172718

ORIGINAL

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

August 06, 2018



Operator Name: Matador Resources
Well Name: Northeast Kemnitz No. 233H(OH)
County/Parish: Lea County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5172718

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	197' MD – 8,813' MD	8,968' MD	05/01/18 – 05/09/18	MWD-OWSG

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
Northeast Kemnitz
No. 233H
OH**

Survey: ProDirectional

Survey Report

06 August, 2018





ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Northeast Kemnitz
Well: No. 233H
Wellbore: OH
Design: MWD-197'-8813', Proj. 8968'

Local Co-ordinate Reference: Well No. 233H
TVD Reference: Well @ 4112.50usft
MD Reference: Well @ 4112.50usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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 Northeast Kemnitz

Site Position:		Northing:	692,346.00 usft	Latitude:	32.900808
From:	Map	Easting:	782,424.00 usft	Longitude:	-103.547839
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well No. 233H

Well Position	+N/-S	0.00 usft	Northing:	692,346.00 usft	Latitude:	32.900808
	+E/-W	0.00 usft	Easting:	782,424.00 usft	Longitude:	-103.547839
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,084.00 usft

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	4/30/2018	6.60	60.80	48,215.40

Design MWD-197'-8813', Proj. 8968'

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	359.48	

Survey Program Date 8/6/2018

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
197.00	8,968.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Northeast Kernitz
Well: No. 233H
Wellbore: OH
Design: MWD-197'-8813', Proj. 8968'

Local Co-ordinate Reference: Well No. 233H
TVD Reference: Well @ 4112.50usft
MD Reference: Well @ 4112.50usft
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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	692,346.00	782,424.00
197.00	0.30	108.70	197.00	-0.17	-0.17	0.49	0.52	108.70	692,345.83	782,424.49
Pro MWD First Survey: 197' MD										
286.00	0.80	116.10	285.99	-0.52	-0.51	1.27	1.37	112.06	692,345.49	782,425.27
380.00	0.80	134.80	379.99	-1.29	-1.26	2.32	2.64	118.57	692,344.74	782,426.32
474.00	1.00	125.80	473.97	-2.24	-2.21	3.45	4.10	122.58	692,343.79	782,427.45
596.00	0.80	130.90	595.96	-3.43	-3.39	4.96	6.01	124.33	692,342.61	782,428.96
689.00	0.70	130.60	688.95	-4.24	-4.18	5.88	7.22	125.41	692,341.82	782,429.88
781.00	0.80	139.70	780.94	-5.10	-5.04	6.72	8.40	126.84	692,340.96	782,430.72
873.00	0.60	118.80	872.94	-5.83	-5.76	7.56	9.51	127.29	692,340.24	782,431.56
964.00	0.60	127.40	963.93	-6.35	-6.28	8.36	10.45	126.91	692,339.72	782,432.36
1,058.00	1.50	147.90	1,057.91	-7.70	-7.62	9.40	12.10	129.02	692,338.38	782,433.40
1,151.00	1.60	152.10	1,150.88	-9.89	-9.80	10.66	14.48	132.59	692,336.20	782,434.66
1,244.00	1.80	146.40	1,243.84	-12.27	-12.16	12.07	17.14	135.21	692,333.84	782,436.07
1,337.00	1.40	143.40	1,336.80	-14.41	-14.29	13.56	19.70	136.51	692,331.71	782,437.56
1,431.00	1.20	147.00	1,430.78	-16.17	-16.04	14.78	21.81	137.34	692,329.96	782,438.78
1,525.00	1.00	158.80	1,524.76	-17.77	-17.63	15.61	23.55	138.47	692,328.37	782,439.61
1,599.00	0.70	146.30	1,598.75	-18.75	-18.61	16.10	24.60	139.14	692,327.39	782,440.10
1,714.00	0.50	133.50	1,713.75	-19.69	-19.54	16.85	25.80	139.22	692,326.46	782,440.85
1,808.00	1.60	144.90	1,807.73	-21.05	-20.89	17.90	27.51	139.41	692,325.11	782,441.90
1,901.00	2.10	148.60	1,900.68	-23.59	-23.41	19.54	30.49	140.15	692,322.59	782,443.54
1,994.00	2.30	149.20	1,993.61	-26.66	-26.47	21.38	34.02	141.07	692,319.53	782,445.38
2,087.00	2.30	152.60	2,086.54	-29.94	-29.73	23.19	37.70	142.04	692,316.27	782,447.19
2,181.00	2.30	154.90	2,180.46	-33.33	-33.11	24.86	41.40	143.10	692,312.89	782,448.86
2,274.00	2.20	152.40	2,273.39	-36.62	-36.38	26.48	45.00	143.95	692,309.62	782,450.48
2,368.00	2.10	142.20	2,367.33	-39.60	-39.34	28.37	48.50	144.20	692,306.66	782,452.37
2,461.00	1.90	144.60	2,460.27	-42.22	-41.94	30.31	51.75	144.15	692,304.06	782,454.31



ProDirectional Survey Report



Company: Matador Resources
Project: Lea County, NM(NAD83)
Site: Northeast Kernitz
Well: No. 233H
Wellbore: OH
Design: MWD-197'-8813', Proj. 8968'

Local Co-ordinate Reference: Well No. 233H
TVD Reference: Well @ 4112.50usft
MD Reference: Well @ 4112.50usft
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)
2,555.00	1.80	145.70	2,554.22	-44.72	-44.43	32.04	54.78	144.20	692,301.57	782,456.04
2,647.00	1.90	142.40	2,646.17	-47.14	-46.84	33.79	57.75	144.19	692,299.16	782,457.79
2,741.00	1.70	145.20	2,740.13	-49.54	-49.21	35.54	60.70	144.17	692,296.79	782,459.54
2,834.00	1.70	145.40	2,833.08	-51.82	-51.48	37.11	63.46	144.22	692,294.52	782,461.11
2,928.00	1.60	138.80	2,927.05	-53.97	-53.62	38.76	66.16	144.14	692,292.38	782,462.76
3,021.00	1.40	145.50	3,020.01	-55.89	-55.53	40.26	68.59	144.06	692,290.47	782,464.26
3,114.00	1.30	137.10	3,112.99	-57.62	-57.24	41.62	70.77	143.98	692,288.76	782,465.62
3,207.00	2.30	140.60	3,205.94	-59.85	-59.46	43.53	73.68	143.79	692,286.54	782,467.53
3,301.00	2.90	144.70	3,299.84	-63.27	-62.85	46.10	77.95	143.74	692,283.15	782,470.10
3,394.00	2.50	143.60	3,392.74	-66.84	-66.41	48.66	82.33	143.77	692,279.59	782,472.66
3,487.00	2.50	148.80	3,485.65	-70.23	-69.77	50.91	86.37	143.88	692,276.23	782,474.91
3,580.00	2.10	149.60	3,578.58	-73.45	-72.98	52.83	90.09	144.10	692,273.02	782,476.83
3,674.00	1.90	148.00	3,672.52	-76.28	-75.79	54.52	93.36	144.27	692,270.21	782,478.52
3,767.00	1.80	149.90	3,765.47	-78.86	-78.36	56.07	96.35	144.41	692,267.64	782,480.07
3,860.00	1.50	148.90	3,858.43	-81.18	-80.66	57.44	99.02	144.55	692,265.34	782,481.44
3,954.00	1.50	151.10	3,952.40	-83.32	-82.79	58.67	101.47	144.68	692,263.21	782,482.67
4,047.00	1.10	151.10	4,045.38	-85.18	-84.64	59.69	103.57	144.81	692,261.36	782,483.69
4,140.00	1.10	161.60	4,138.36	-86.81	-86.27	60.40	105.31	145.00	692,259.73	782,484.40
4,234.00	0.80	157.80	4,232.35	-88.28	-87.73	60.93	106.82	145.22	692,258.27	782,484.93
4,327.00	0.70	151.80	4,325.34	-89.39	-88.83	61.44	108.01	145.33	692,257.17	782,485.44
4,420.00	0.70	166.10	4,418.33	-90.44	-89.89	61.85	109.11	145.47	692,256.11	782,485.85
4,514.00	0.60	157.40	4,512.32	-91.46	-90.90	62.18	110.13	145.63	692,255.10	782,486.18
4,706.00	0.40	172.90	4,704.32	-93.06	-92.49	62.65	111.71	145.89	692,253.51	782,486.65
4,799.00	0.30	186.10	4,797.32	-93.62	-93.06	62.66	112.19	146.04	692,252.94	782,486.66
4,893.00	0.20	116.60	4,891.32	-93.94	-93.37	62.78	112.52	146.08	692,252.63	782,486.78
4,987.00	0.20	149.70	4,985.31	-94.16	-93.59	63.01	112.82	146.05	692,252.41	782,487.01
5,080.00	0.00	304.40	5,078.31	-94.30	-93.73	63.09	112.99	146.05	692,252.27	782,487.09



ProDirectional Survey Report



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Project: Lea County, NM(NAD83)
Site: Northeast Kernitz
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Wellbore: OH
Design: MWD-197'-8813', Proj. 8968'

Local Co-ordinate Reference: Well No. 233H
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MD Reference: Well @ 4112.50usft
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)
5,173.00	0.10	286.00	5,171.31	-94.27	-93.71	63.01	112.92	146.08	692,252.29	782,487.01
5,267.00	0.10	241.30	5,265.31	-94.29	-93.72	62.86	112.85	146.15	692,252.28	782,486.86
5,360.00	0.10	269.70	5,358.31	-94.33	-93.76	62.71	112.80	146.22	692,252.24	782,486.71
5,453.00	0.10	281.40	5,451.31	-94.31	-93.75	62.55	112.70	146.29	692,252.25	782,486.55
5,546.00	0.20	254.80	5,544.31	-94.34	-93.77	62.31	112.59	146.40	692,252.23	782,486.31
5,639.00	0.10	260.50	5,637.31	-94.39	-93.83	62.08	112.51	146.51	692,252.17	782,486.08
5,733.00	0.20	280.10	5,731.31	-94.37	-93.81	61.84	112.36	146.61	692,252.19	782,485.84
5,826.00	0.30	263.70	5,824.31	-94.37	-93.81	61.43	112.14	146.78	692,252.19	782,485.43
5,919.00	0.10	265.00	5,917.31	-94.40	-93.85	61.11	111.99	146.93	692,252.15	782,485.11
6,012.00	0.30	269.00	6,010.31	-94.41	-93.86	60.79	111.82	147.07	692,252.14	782,484.79
6,106.00	0.30	288.10	6,104.31	-94.33	-93.79	60.31	111.50	147.26	692,252.21	782,484.31
6,199.00	0.60	285.10	6,197.31	-94.12	-93.58	59.60	110.95	147.51	692,252.42	782,483.60
6,293.00	0.70	275.00	6,291.30	-93.93	-93.40	58.56	110.24	147.92	692,252.60	782,482.56
6,386.00	0.80	271.00	6,384.29	-93.86	-93.34	57.34	109.55	148.44	692,252.66	782,481.34
6,480.00	1.00	273.60	6,478.28	-93.78	-93.28	55.87	108.73	149.08	692,252.72	782,479.87
6,573.00	0.30	8.70	6,571.28	-93.49	-92.99	55.09	108.09	149.35	692,253.01	782,479.09
6,666.00	0.80	56.90	6,664.27	-92.90	-92.39	55.68	107.87	148.93	692,253.61	782,479.68
6,759.00	0.70	45.00	6,757.26	-92.15	-91.64	56.62	107.72	148.29	692,254.36	782,480.62
6,853.00	0.70	20.80	6,851.26	-91.21	-90.69	57.23	107.24	147.75	692,255.31	782,481.23
6,946.00	1.60	79.00	6,944.24	-90.45	-89.92	58.71	107.38	146.86	692,256.08	782,482.71
7,039.00	2.10	80.20	7,037.19	-89.93	-89.38	61.66	108.58	145.40	692,256.62	782,485.66
7,132.00	1.80	77.60	7,130.14	-89.36	-88.77	64.77	109.89	143.89	692,257.23	782,488.77
7,225.00	1.70	78.00	7,223.09	-88.78	-88.17	67.54	111.07	142.55	692,257.83	782,491.54
7,317.00	2.50	108.30	7,315.03	-89.16	-88.52	70.78	113.34	141.35	692,257.48	782,494.78
7,411.00	2.10	108.60	7,408.96	-90.38	-89.71	74.36	116.52	140.35	692,256.29	782,498.36
7,504.00	1.70	104.70	7,501.91	-91.30	-90.61	77.31	119.11	139.53	692,255.39	782,501.31
7,598.00	2.80	138.40	7,595.84	-93.40	-92.68	80.18	122.55	139.13	692,253.32	782,504.18



ProDirectional Survey Report



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Site: Northeast Kernitz
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Wellbore: OH
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Local Co-ordinate Reference: Well No. 233H
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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)
7,691.00	2.80	139.50	7,688.73	-96.85	-96.10	83.17	127.09	139.13	692,249.90	782,507.17
7,785.00	2.60	140.40	7,782.62	-100.27	-99.49	86.02	131.52	139.15	692,246.51	782,510.02
7,878.00	2.50	141.10	7,875.53	-103.50	-102.70	88.64	135.66	139.20	692,243.30	782,512.64
7,971.00	2.30	139.50	7,968.45	-106.52	-105.69	91.12	139.55	139.23	692,240.31	782,515.12
8,065.00	0.50	253.90	8,062.42	-108.07	-107.24	91.95	141.27	139.39	692,238.76	782,515.95
8,159.00	0.90	271.50	8,156.42	-108.16	-107.34	90.82	140.60	139.76	692,238.66	782,514.82
8,252.00	0.80	247.10	8,249.41	-108.38	-107.57	89.49	139.93	140.24	692,238.43	782,513.49
8,345.00	0.80	258.10	8,342.40	-108.75	-107.96	88.26	139.44	140.73	692,238.04	782,512.26
8,439.00	0.80	266.50	8,436.39	-108.92	-108.13	86.96	138.76	141.19	692,237.87	782,510.96
8,533.00	1.00	261.00	8,530.38	-109.07	-108.30	85.50	137.98	141.71	692,237.70	782,509.50
8,626.00	1.00	248.20	8,623.36	-109.49	-108.73	83.94	137.36	142.33	692,237.27	782,507.94
8,719.00	1.00	257.90	8,716.35	-109.94	-109.20	82.39	136.80	142.96	692,236.80	782,506.39
8,813.00	0.90	256.30	8,810.34	-110.28	-109.55	80.87	136.17	143.56	692,236.45	782,504.87
Last Survey: 8813' MD										
8,968.00	0.90	256.30	8,965.32	-110.83	-110.12	78.51	135.24	144.51	692,235.88	782,502.51
PTB: 8968' MD										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
197.00	197.00	-0.17	0.49	Pro MWD First Survey: 197' MD
8,813.00	8,810.34	-109.55	80.87	Last Survey: 8813' MD
8,968.00	8,965.32	-110.12	78.51	PTB: 8968' MD