

PRO DIRECTIONAL



NM OIL CONSERVATION
ARTESIA DISTRICT
JAN 23 2018
RECEIVED

Garrett Fed Com No. 221H

Eddy County, NM

30-015-44256

October 26, 2017

Job No. LNM5149717

ORIGINAL

Survey Completion Report

October 26, 2017



Operator Name: Matador Resources
Well Name: Garrett Fed Com No. 221H
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 274
Job Number: LNM5149717

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	173' MD – 15,689' MD	15,758' MD	09/06/17 – 10/09/17	MWD-OWSG

Sincerely,

A handwritten signature in cursive script that reads "Mike Coats".

Mike Coats
Regulatory Specialist
Professional Directional

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



Matador Resources

**Eddy County, NM
Garrett Fed Com
No. 221H
OH**

Survey: ProDirectional

Survey Report

26 October, 2017





ProDirectional Survey Report



Company: Matador Resources
Project: Eddy County, NM(NAD 83)
Site: Garrett Fed Com
Well: No. 221H
Wellbore: OH
Design: MWD

Local Co-ordinates Reference:
TVD Reference: Well @ 2967.00usft
MD Reference: Well @ 2967.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Project	Eddy County, NM(NAD 83)			System Datum:	Mean Sea Level
Map System:	US State Plane 1983				
Geo Datum:	North American Datum 1983				
Map Zone:	New Mexico Eastern Zone				

Site	Garrett Fed Com				
Site Position:					
From:	Map				
Position Uncertainty:	0.00 usft				
		Northing:	429,558.00 usft	Latitude:	32.1805278
		Easting:	640,352.00 usft	Longitude:	-104.0132915
		Slot Radius:	13-3/16 "	Grid Convergence:	0.17 °

Well	No. 221H				
Well Position					
	+N/-S	0.00 usft			
	+E/-W	0.00 usft			
		0.00 usft			
Position Uncertainty					
		Northing:	429,558.00 usft	Latitude:	32.1805278
		Easting:	640,352.00 usft	Longitude:	-104.0132915
		Wellhead Elevation:	usft	Ground Level:	2,938.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	8/17/2017	7.15	60.02	48,093.80

Design	MWD				
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	90.16

Survey Program	Date	10/26/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
173.00	15,758.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HRGM	



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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	429,558.00	640,352.00
173.00	0.80	171.90	172.99	0.17	-1.20	0.17	1.21	171.90	429,556.80	640,352.17
Pro MWD First Survey: 173' MD										
358.00	0.30	66.40	357.99	0.80	-2.28	0.80	2.42	160.76	429,555.72	640,352.80
531.00	0.80	9.10	530.98	1.40	-0.91	1.40	1.67	122.89	429,557.09	640,353.40
696.00	1.00	359.00	695.96	1.55	1.67	1.56	2.28	43.03	429,559.67	640,353.56
791.00	0.90	3.40	790.95	1.58	3.24	1.59	3.61	26.09	429,561.24	640,353.59
886.00	0.80	12.10	885.94	1.76	4.64	1.77	4.96	20.91	429,562.64	640,353.77
981.00	0.70	8.70	980.93	1.98	5.86	2.00	6.19	18.84	429,563.86	640,354.00
1,077.00	0.40	10.10	1,076.92	2.13	6.77	2.15	7.10	17.59	429,564.77	640,354.15
1,172.00	0.80	296.00	1,171.92	1.59	7.39	1.61	7.56	12.29	429,565.39	640,353.61
1,267.00	2.50	264.90	1,266.88	-1.07	7.49	-1.05	7.57	352.01	429,565.49	640,350.95
1,362.00	4.70	264.40	1,361.69	-7.01	6.93	-6.99	9.84	314.75	429,564.93	640,345.01
1,457.00	5.30	266.70	1,456.32	-15.26	6.30	-15.24	16.49	292.44	429,564.30	640,336.76
1,553.00	4.70	265.40	1,551.96	-23.61	5.73	-23.59	24.28	283.64	429,563.73	640,328.41
1,648.00	4.30	264.70	1,646.66	-31.03	5.08	-31.02	31.43	279.31	429,563.08	640,320.98
1,743.00	4.30	264.10	1,741.40	-38.12	4.39	-38.11	38.36	276.57	429,562.39	640,313.89
1,838.00	3.10	263.60	1,836.20	-44.21	3.74	-44.20	44.36	274.83	429,561.74	640,307.80
1,933.00	2.50	260.20	1,931.08	-48.80	3.10	-48.80	48.89	273.63	429,561.10	640,303.20
2,028.00	3.60	257.20	2,025.95	-53.75	2.08	-53.75	53.79	272.22	429,560.08	640,298.25
2,124.00	6.70	268.60	2,121.55	-62.29	1.28	-62.29	62.30	271.18	429,559.28	640,289.71
2,219.00	7.00	275.80	2,215.87	-73.59	1.73	-73.58	73.61	271.35	429,559.73	640,278.42
2,315.00	4.70	278.20	2,311.37	-83.31	2.88	-83.30	83.35	271.98	429,560.88	640,268.70
2,410.00	4.30	272.10	2,406.08	-90.72	3.57	-90.71	90.78	272.25	429,561.57	640,261.29
2,505.00	5.40	255.50	2,500.74	-98.60	2.58	-98.60	98.63	271.50	429,560.58	640,253.40
2,600.00	6.00	244.90	2,595.27	-107.42	-0.65	-107.42	107.42	269.65	429,557.35	640,244.58
2,696.00	5.10	240.90	2,690.82	-115.68	-4.85	-115.69	115.80	267.60	429,553.15	640,236.31



ProDirectional Survey Report



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Site: Garrett Fed Com
Well: No. 221H
Wellbore: OH
Design: MWD

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TVD Reference: Well @ 2967.00ust
MD Reference: Well @ 2967.00ust
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Survey	MD (ust)	Inc (°)	Azi (azimuth) (°)	TVD (ust)	V. Sec (ust)	N/S (ust)	E/W (ust)	Closure Distance (ust)	Closure Azimuth (°)	Northing (ust)	Easting (ust)
	2,791.00	5.10	256.50	2,785.45	-123.47	-7.89	-123.49	123.74	266.34	429,550.11	640,228.51
	2,856.00	5.30	264.80	2,850.18	-129.26	-8.84	-129.29	129.59	266.09	429,549.16	640,222.71
	2,973.00	4.90	270.00	2,966.72	-139.64	-9.33	-139.67	139.98	266.18	429,548.67	640,212.33
	3,068.00	7.80	267.80	3,061.13	-150.14	-9.57	-150.17	150.47	266.35	429,548.43	640,201.83
	3,163.00	7.60	267.00	3,155.27	-162.85	-10.15	-162.88	163.20	266.43	429,547.85	640,189.12
	3,258.00	7.60	267.40	3,249.44	-175.40	-10.76	-175.43	175.76	266.49	429,547.24	640,176.57
	3,353.00	7.90	266.50	3,343.57	-188.19	-11.45	-188.23	188.57	266.52	429,546.55	640,163.77
	3,449.00	7.60	264.80	3,438.69	-201.10	-12.43	-201.13	201.52	266.46	429,545.57	640,150.87
	3,544.00	7.70	265.90	3,532.85	-213.70	-13.45	-213.74	214.16	266.40	429,544.55	640,138.26
	3,639.00	7.70	265.50	3,626.99	-226.39	-14.40	-226.43	226.89	266.36	429,543.60	640,125.57
	3,735.00	6.90	262.60	3,722.21	-238.52	-15.65	-238.56	239.07	266.25	429,542.35	640,113.44
	3,830.00	6.80	263.00	3,816.53	-249.75	-17.07	-249.80	250.38	266.09	429,540.93	640,102.20
	3,925.00	6.60	262.30	3,910.88	-260.74	-18.49	-260.79	261.45	265.94	429,539.51	640,091.21
	4,020.00	6.60	262.00	4,005.25	-271.55	-19.98	-271.61	272.34	265.79	429,538.02	640,080.39
	4,115.00	5.70	271.70	4,099.71	-281.67	-20.60	-281.73	282.49	265.82	429,537.40	640,070.27
	4,211.00	5.40	273.00	4,195.26	-290.95	-20.22	-291.01	291.71	266.02	429,537.78	640,060.99
	4,306.00	5.10	273.50	4,289.86	-299.63	-19.73	-299.69	300.34	266.23	429,538.27	640,052.31
	4,401.00	4.60	272.90	4,384.52	-307.65	-19.28	-307.71	308.31	266.41	429,538.72	640,044.29
	4,497.00	6.20	265.30	4,480.09	-316.66	-19.51	-316.72	317.32	266.47	429,538.49	640,035.28
	4,592.00	8.10	260.10	4,574.35	-326.37	-21.08	-328.43	329.10	266.33	429,536.92	640,023.57
	4,687.00	8.40	259.80	4,668.37	-341.78	-23.46	-341.85	342.65	266.07	429,534.54	640,010.15
	4,783.00	9.00	265.70	4,763.26	-356.17	-25.27	-356.24	357.13	265.94	429,532.73	639,995.76
	4,878.00	8.90	266.50	4,857.11	-370.91	-26.27	-370.98	371.91	265.95	429,531.73	639,981.02
	4,973.00	8.60	267.40	4,951.00	-385.34	-27.04	-385.41	386.36	265.99	429,530.96	639,966.59
	5,068.00	8.00	263.10	5,045.01	-398.99	-28.16	-399.07	400.06	265.96	429,529.84	639,952.93
	5,163.00	6.50	269.10	5,139.25	-410.93	-29.04	-411.01	412.04	265.96	429,528.96	639,940.99
	5,258.00	6.10	267.70	5,233.67	-421.35	-29.32	-421.43	422.45	266.02	429,528.68	639,930.57



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5,354.00	5.70	266.30	5,329.16	-431.20	-29.84	-431.29	432.32	266.04	429,528.16	639,920.71
5,449.00	5.40	265.10	5,423.72	-440.36	-30.52	-440.45	441.50	266.04	429,527.48	639,911.55
5,544.00	5.30	265.20	5,518.30	-449.18	-31.27	-449.27	450.36	266.02	429,526.73	639,902.73
5,639.00	5.00	265.50	5,612.92	-457.68	-31.96	-457.77	458.89	266.01	429,526.04	639,894.23
5,735.00	6.00	268.40	5,708.48	-466.87	-32.43	-466.96	468.08	266.03	429,525.57	639,885.04
5,830.00	5.70	268.30	5,802.98	-476.55	-32.71	-476.64	477.76	266.07	429,525.29	639,875.36
5,926.00	5.40	266.30	5,898.53	-485.82	-33.14	-485.91	487.04	266.10	429,524.86	639,866.09
6,021.00	5.30	264.30	5,993.12	-494.64	-33.87	-494.74	495.90	266.08	429,524.13	639,857.26
6,116.00	5.00	260.40	6,087.73	-503.09	-34.99	-503.19	504.40	266.02	429,523.01	639,848.81
6,211.00	4.70	257.90	6,182.39	-510.97	-36.50	-511.07	512.38	265.91	429,521.50	639,840.93
6,307.00	3.30	268.90	6,278.16	-517.58	-37.38	-517.68	519.03	265.87	429,520.62	639,834.32
6,401.00	2.50	275.10	6,372.04	-522.32	-37.25	-522.43	523.76	265.92	429,520.75	639,829.57
6,497.00	0.50	2.10	6,468.01	-524.40	-36.64	-524.50	525.78	266.00	429,521.36	639,827.50
6,592.00	0.80	352.00	6,563.00	-524.48	-35.57	-524.58	525.78	266.12	429,522.43	639,827.42
6,688.00	1.50	328.40	6,658.98	-525.23	-33.84	-525.33	526.42	266.31	429,524.16	639,826.67
6,783.00	1.50	120.80	6,753.97	-524.82	-33.42	-524.91	525.97	266.36	429,524.58	639,827.09
6,878.00	1.80	118.60	6,848.93	-522.43	-34.77	-522.53	523.69	266.19	429,523.23	639,829.47
6,974.00	2.50	115.90	6,944.86	-519.22	-36.40	-519.33	520.60	265.99	429,521.60	639,832.67
7,069.00	2.90	109.60	7,039.76	-515.09	-38.11	-515.20	516.61	265.77	429,519.89	639,836.80
7,165.00	2.50	140.80	7,135.65	-511.47	-40.55	-511.59	513.19	265.47	429,517.45	639,840.41
7,260.00	1.00	164.40	7,230.61	-509.93	-42.96	-510.06	511.86	265.19	429,515.04	639,841.94
7,355.00	1.50	187.30	7,325.59	-509.86	-44.99	-509.99	511.97	264.96	429,513.01	639,842.01
7,450.00	2.00	186.40	7,420.54	-510.20	-47.87	-510.33	512.57	264.64	429,510.13	639,841.67
7,546.00	0.80	222.40	7,516.51	-510.83	-50.03	-510.97	513.41	264.41	429,507.97	639,841.03
7,641.00	1.50	193.20	7,611.49	-511.56	-51.73	-511.70	514.31	264.23	429,506.27	639,840.30
7,736.00	0.80	196.40	7,706.47	-512.02	-53.57	-512.17	514.97	264.03	429,504.43	639,839.83
7,831.00	1.70	138.60	7,801.45	-511.27	-55.27	-511.43	514.41	263.83	429,502.73	639,840.57



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	7,926.00	3.20	155.70	7,896.36	-509.24	-58.74	-509.41	512.78	263.42	429,499.26	639,842.59
	8,021.00	1.00	137.70	7,991.30	-507.58	-61.77	-507.76	511.50	263.06	429,496.23	639,844.24
	8,117.00	0.80	215.30	8,087.29	-507.40	-62.94	-507.58	511.47	262.93	429,495.06	639,844.42
	8,212.00	1.40	19.10	8,182.28	-507.41	-62.38	-507.58	511.40	262.99	429,495.62	639,844.42
	8,307.00	1.90	76.50	8,277.25	-505.50	-60.92	-505.67	509.33	263.13	429,497.08	639,846.33
	8,402.00	1.80	84.90	8,372.20	-502.48	-60.42	-502.66	506.27	263.15	429,497.58	639,849.34
	8,498.00	1.00	18.10	8,468.17	-500.73	-59.49	-500.89	504.41	263.23	429,498.51	639,851.11
	8,593.00	0.60	10.90	8,563.16	-500.38	-58.21	-500.54	503.92	263.37	429,499.79	639,851.46
	8,688.00	0.80	237.20	8,658.16	-500.84	-58.08	-501.00	504.36	263.39	429,499.92	639,851.00
	8,784.00	1.30	265.00	8,754.14	-502.49	-58.54	-502.65	506.05	263.36	429,499.46	639,849.35
	8,878.00	2.30	245.20	8,848.10	-505.26	-59.42	-505.43	508.91	263.29	429,498.58	639,846.57
	8,974.00	1.50	244.50	8,944.04	-508.14	-60.77	-508.31	511.93	263.18	429,497.23	639,843.69
	9,069.00	0.80	25.80	9,039.03	-508.97	-60.71	-509.14	512.75	263.20	429,497.29	639,842.86
	9,164.00	0.50	142.00	9,134.03	-508.43	-60.44	-508.60	512.18	263.22	429,497.56	639,843.40
	9,259.00	0.70	175.60	9,229.03	-508.13	-61.35	-508.30	511.99	263.12	429,496.65	639,843.70
	9,354.00	0.70	14.30	9,324.02	-507.94	-61.36	-508.11	511.80	263.11	429,496.64	639,843.89
	9,450.00	0.60	51.30	9,420.02	-507.40	-60.48	-507.58	511.17	263.20	429,497.52	639,844.42
	9,545.00	0.30	86.20	9,515.01	-506.77	-60.15	-506.94	510.50	263.23	429,497.85	639,845.06
	9,641.00	0.30	146.50	9,611.01	-506.38	-60.35	-506.55	510.13	263.21	429,497.65	639,845.45
	9,736.00	0.60	185.90	9,706.01	-506.29	-61.05	-506.46	510.13	263.13	429,496.95	639,845.54
	9,830.00	1.00	189.90	9,800.00	-506.48	-62.35	-506.66	510.48	262.98	429,495.65	639,845.34
	9,926.00	1.10	323.00	9,895.99	-507.18	-62.44	-507.35	511.18	262.98	429,495.56	639,844.65
	10,021.00	1.30	289.50	9,990.97	-508.75	-61.35	-508.92	512.60	263.13	429,496.65	639,843.08
	10,117.00	1.70	271.40	10,086.94	-511.20	-60.95	-511.37	514.99	263.20	429,497.05	639,840.63
	10,197.00	1.90	249.20	10,166.90	-513.62	-61.39	-513.79	517.45	263.19	429,496.61	639,838.21
	10,317.00	1.40	130.80	10,286.88	-514.37	-63.06	-514.54	518.39	263.01	429,494.94	639,837.46
	10,364.00	4.70	102.60	10,333.81	-512.05	-63.85	-512.23	516.19	262.89	429,494.15	639,839.77



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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)
	10,412.00	6.10	91.40	10,381.59	-507.58	-64.34	-507.76	511.82	262.78	429,493.66	639,844.24
	10,459.00	8.30	89.60	10,428.22	-501.69	-64.38	-501.87	505.98	262.69	429,493.62	639,850.13
	10,507.00	8.10	89.90	10,475.73	-494.84	-64.35	-495.03	499.19	262.59	429,493.65	639,856.97
	10,539.00	7.80	94.80	10,507.42	-490.43	-64.53	-490.61	494.83	262.51	429,493.47	639,861.39
	10,571.00	9.00	93.60	10,539.08	-485.76	-64.87	-485.95	490.26	262.40	429,493.13	639,866.05
	10,602.00	11.00	89.80	10,569.61	-480.38	-65.01	-480.57	484.94	262.30	429,492.99	639,871.43
	10,634.00	13.00	86.20	10,600.91	-473.74	-64.76	-473.92	478.33	262.22	429,493.24	639,878.08
	10,666.00	14.50	84.80	10,631.99	-466.16	-64.16	-466.34	470.73	262.17	429,493.84	639,885.66
	10,698.00	16.80	86.90	10,662.80	-457.55	-63.54	-457.73	462.12	262.10	429,494.46	639,894.27
	10,729.00	21.20	92.10	10,692.11	-447.47	-63.51	-447.65	452.13	261.93	429,494.49	639,904.35
	10,761.00	25.80	97.80	10,721.45	-434.78	-64.66	-434.96	439.74	261.54	429,493.34	639,917.04
	10,793.00	30.20	100.40	10,749.70	-419.95	-67.06	-420.14	425.46	260.93	429,490.94	639,931.86
	10,825.00	36.20	98.40	10,776.46	-402.66	-69.90	-402.86	408.88	260.16	429,488.10	639,949.14
	10,840.00	38.30	97.50	10,788.40	-393.67	-71.15	-393.87	400.24	259.76	429,486.85	639,958.13
	10,893.00	46.70	92.30	10,827.45	-358.03	-74.08	-358.24	365.82	258.32	429,483.92	639,993.76
	10,924.00	53.20	90.70	10,847.39	-334.32	-74.68	-334.53	342.76	257.42	429,483.32	640,017.47
	10,955.00	57.80	89.10	10,864.94	-308.78	-74.63	-308.99	317.87	256.42	429,483.37	640,043.01
	10,987.00	62.70	90.50	10,880.82	-281.01	-74.54	-281.22	290.93	255.15	429,483.46	640,070.78
	11,018.00	65.20	92.50	10,894.43	-253.17	-75.27	-253.38	264.32	253.45	429,482.73	640,098.62
	11,049.00	69.70	96.40	10,906.32	-224.63	-77.51	-224.85	237.84	250.98	429,480.49	640,127.15
	11,081.00	71.50	97.10	10,916.95	-194.65	-81.06	-194.88	211.07	247.42	429,476.94	640,157.12
	11,112.00	73.20	97.80	10,926.35	-165.35	-84.89	-165.59	186.08	242.86	429,473.11	640,186.41
	11,144.00	75.30	97.90	10,935.04	-134.83	-89.10	-135.08	161.82	236.59	429,468.90	640,216.92
	11,175.00	77.50	97.10	10,942.32	-104.95	-93.03	-105.21	140.44	228.52	429,464.97	640,246.79
	11,206.00	78.30	97.40	10,948.82	-74.87	-96.85	-75.14	122.58	217.81	429,461.15	640,276.86
	11,245.00	78.60	97.20	10,956.63	-36.96	-101.71	-37.24	108.31	200.11	429,456.29	640,314.76
	11,276.00	80.50	96.60	10,962.25	-6.68	-105.37	-6.98	105.60	183.79	429,452.63	640,345.02



ProDirectional Survey Report



Company: Matador Resources
Project: Eddy County, NM(NAD 83)
Site: Garrett Fed Com
Well: No. 221H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference: Well No. 221H
TVD Reference: Well @ 2967.00ust
MD Reference: Well @ 2967.00ust
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: WellPlanner1

Survey	MD (ust)	Inc (°)	Azi (°)	TVD (ust)	V. Sec (ust)	NS (ust)	EW (ust)	Closure Distance (ust)	Closure Azimuth (°)	Northing (ust)	Easting (ust)
	11,308.00	83.30	97.30	10,966.76	24.77	-109.20	24.47	111.91	167.37	429,448.80	640,376.47
	11,370.00	89.30	96.20	10,970.76	86.20	-116.47	85.88	144.71	143.60	429,441.53	640,437.88
	11,464.00	89.30	95.80	10,971.91	179.71	-126.30	179.36	219.36	125.15	429,431.70	640,531.36
	11,559.00	90.10	97.10	10,972.41	274.13	-136.97	273.75	306.10	116.58	429,421.03	640,625.75
	11,653.00	88.20	96.40	10,973.80	367.50	-148.01	367.09	395.80	111.96	429,409.99	640,719.09
	11,748.00	88.80	96.30	10,976.29	461.91	-158.52	461.47	487.94	108.96	429,399.48	640,813.47
	11,843.00	88.60	94.30	10,978.44	556.50	-167.29	556.03	580.65	106.74	429,390.71	640,908.03
	11,938.00	87.90	92.70	10,981.35	651.29	-173.09	650.81	673.43	104.89	429,384.91	641,002.81
	12,032.00	85.40	92.20	10,986.84	745.05	-177.10	744.56	765.33	103.38	429,380.90	641,096.56
	12,127.00	83.50	87.60	10,996.03	839.57	-176.94	839.08	857.53	101.91	429,381.06	641,191.08
	12,221.00	85.50	86.30	11,005.04	932.98	-171.96	932.51	948.23	100.45	429,386.04	641,284.51
	12,315.00	88.70	86.80	11,009.80	1,026.66	-166.31	1,026.20	1,039.59	99.21	429,391.69	641,378.20
	12,410.00	89.50	86.90	11,011.29	1,121.49	-161.09	1,121.05	1,132.56	98.18	429,396.91	641,473.05
	12,505.00	88.20	86.50	11,013.19	1,216.30	-155.62	1,215.87	1,225.79	97.29	429,402.38	641,567.87
	12,599.00	89.40	88.50	11,015.16	1,310.17	-151.53	1,309.75	1,318.49	96.60	429,406.47	641,661.75
	12,693.00	86.70	88.30	11,018.36	1,404.06	-148.90	1,403.65	1,411.53	96.06	429,409.10	641,755.65
	12,787.00	88.30	88.60	11,022.46	1,497.93	-146.36	1,497.53	1,504.66	95.58	429,411.64	641,849.53
	12,881.00	88.20	87.30	11,025.33	1,591.81	-143.00	1,591.42	1,597.83	95.13	429,415.00	641,943.42
	12,976.00	89.20	87.40	11,027.49	1,686.67	-138.61	1,686.29	1,691.98	94.70	429,419.39	642,038.29
	13,070.00	89.50	88.40	11,028.55	1,780.59	-135.17	1,780.22	1,785.35	94.34	429,422.83	642,132.22
	13,165.00	91.70	91.00	11,027.56	1,875.57	-134.67	1,875.20	1,880.03	94.11	429,423.33	642,227.20
	13,259.00	92.30	91.90	11,024.28	1,969.49	-137.05	1,969.11	1,973.88	93.98	429,420.95	642,321.11
	13,353.00	90.90	92.50	11,021.65	2,063.39	-140.65	2,063.00	2,067.79	93.90	429,417.35	642,415.00
	13,448.00	86.60	93.40	11,023.73	2,158.23	-145.54	2,157.83	2,162.74	93.86	429,412.46	642,509.83
	13,542.00	88.10	91.80	11,028.07	2,252.04	-149.80	2,251.63	2,256.61	93.81	429,408.20	642,603.63
	13,636.00	87.40	91.20	11,031.76	2,345.94	-152.26	2,345.52	2,350.46	93.71	429,405.74	642,697.52
	13,731.00	89.40	91.30	11,034.41	2,440.88	-154.33	2,440.46	2,445.33	93.62	429,403.67	642,792.46



ProDirectional Survey Report



Company: Matador Resources
Project: Eddy County, NM(NAD 83)
Site: Garrett Fed Com
Well: No. 221H
Wellbore: OH
Design: MWD

Local Co-ordinate Reference: Well No. 221H
TVD Reference: Well @ 2967.00usft
MD Reference: Well @ 2967.00usft
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)
	13,825.00	90.90	90.90	11,034.17	2,534.87	-156.13	2,534.44	2,539.24	93.53	429,401.87	642,886.44
	13,919.00	89.90	90.50	11,033.51	2,628.86	-157.28	2,628.43	2,633.13	93.42	429,400.72	642,980.43
	14,013.00	90.60	91.60	11,033.10	2,722.84	-159.00	2,722.41	2,727.05	93.34	429,399.00	643,074.41
	14,108.00	90.50	90.70	11,032.19	2,817.82	-160.91	2,817.39	2,821.98	93.27	429,397.09	643,169.39
	14,202.00	89.20	90.40	11,032.44	2,911.82	-161.81	2,911.38	2,915.87	93.18	429,396.19	643,263.38
	14,297.00	89.90	90.80	11,033.18	3,006.81	-162.81	3,006.37	3,010.77	93.10	429,395.19	643,358.37
	14,392.00	89.20	90.60	11,033.93	3,101.80	-163.97	3,101.36	3,105.69	93.03	429,394.03	643,453.36
	14,486.00	89.80	89.00	11,034.75	3,195.80	-163.64	3,195.35	3,199.54	92.93	429,394.36	643,547.35
	14,580.00	90.30	89.30	11,034.67	3,289.78	-162.25	3,289.34	3,293.34	92.82	429,395.75	643,641.34
	14,674.00	90.30	88.60	11,034.17	3,383.76	-160.52	3,383.32	3,387.13	92.72	429,397.48	643,735.32
	14,769.00	90.00	87.80	11,033.93	3,478.70	-157.54	3,478.28	3,481.84	92.59	429,400.46	643,830.28
	14,863.00	88.70	86.40	11,034.99	3,572.56	-152.78	3,572.14	3,575.41	92.45	429,405.22	643,924.14
	14,957.00	88.50	87.20	11,037.29	3,666.37	-147.54	3,665.97	3,668.94	92.30	429,410.46	644,017.97
	15,051.00	88.70	87.10	11,039.59	3,760.21	-142.87	3,759.82	3,762.54	92.18	429,415.13	644,111.82
	15,145.00	88.00	86.50	11,042.29	3,854.01	-137.62	3,853.64	3,856.09	92.05	429,420.38	644,205.64
	15,239.00	88.30	86.60	11,045.33	3,947.77	-131.97	3,947.42	3,949.62	91.91	429,426.03	644,299.42
	15,333.00	89.00	87.10	11,047.54	4,041.59	-126.80	4,041.25	4,043.24	91.80	429,431.20	644,393.25
	15,428.00	91.10	88.20	11,047.46	4,136.49	-122.91	4,136.16	4,137.99	91.70	429,435.09	644,488.16
	15,522.00	89.90	86.50	11,046.64	4,230.37	-118.56	4,230.05	4,231.71	91.61	429,439.44	644,582.05
	15,616.00	90.60	86.60	11,046.23	4,324.18	-112.91	4,323.88	4,325.36	91.50	429,445.09	644,675.88
	15,689.00	88.50	85.80	11,046.80	4,397.00	-108.07	4,396.71	4,398.04	91.41	429,449.93	644,748.71
Last Survey: 15689' MD											
PTB: 15758' MD											
	15,758.00	88.50	85.80	11,048.61	4,465.78	-103.02	4,465.51	4,466.69	91.32	429,454.98	644,817.51



ProDirectional Survey Report



Company:	Matador Resources	Well No.:	221H
Project:	Eddy County, NM(NAD 83)	Well @:	2967.00usft
Site:	Garrett Fed Com	Well @:	2967.00usft
Well:	No. 221H	Grid:	Minimum Curvature
Wellbore:	OH	Survey Calculation Method:	WellPlanner1
Design:	MWD		

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

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	
		+N-S (usft)	+E-W (usft)
173.00	172.99	-1.20	0.17
15,689.00	11,046.80	-108.07	4,396.71
15,758.00	11,048.61	-103.02	4,465.51
			Pro MWD First Survey: 173' MD
			Last Survey: 15689' MD
			PTB: 15758' MD