

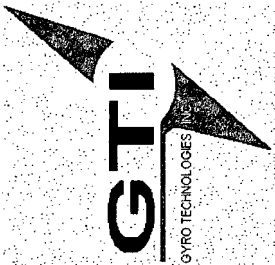


30-015-43693

I Eric Warner certify that I am employed by VES Survey International. That I did on the day(s) of 04/24/16 through 04/24/16 conduct or supervise the taking of a Rate Gyro survey from a depth of 0.00 feet to a depth of 511.69 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador for the Guitar 10-24S-28E RB Well # 222H API # 30-015-43693 in Eddy County / Parish New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

A handwritten signature in black ink, appearing to read "Eric Warner", is written over a horizontal line.

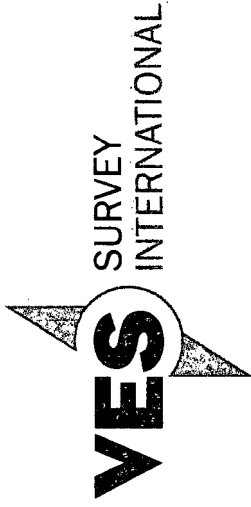
Eric Warner
Service Technician
Vaughn Energy Services



Company: Matador Production Company
Lease/Well: Guitar 10 24 28 RB No. /222H

Rig Name: Patterson 809
State/County: New Mexico/Eddy
VS-Azi: 0.00 Degrees

Latitude: 32.23488, Longitude: -104.06710
Grid North = True North -0.14 degs (NAD 27)
Grid Correction Applied = -0.14 degs



Depth Reference : RKB= 28.5 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: guitar 10-24s-28e rb #222h.ut
Minimum Curvature Method
Report Date/Time: 4/27/2016 / 14:24

VES Survey International
West Texas
432-563-5444

Surveyor: Eric Warner

Guitar 10 24 28 RB No 222H / API 30-015-43693

NM OIL CONSERVATION
ARTESIA DISTRICT

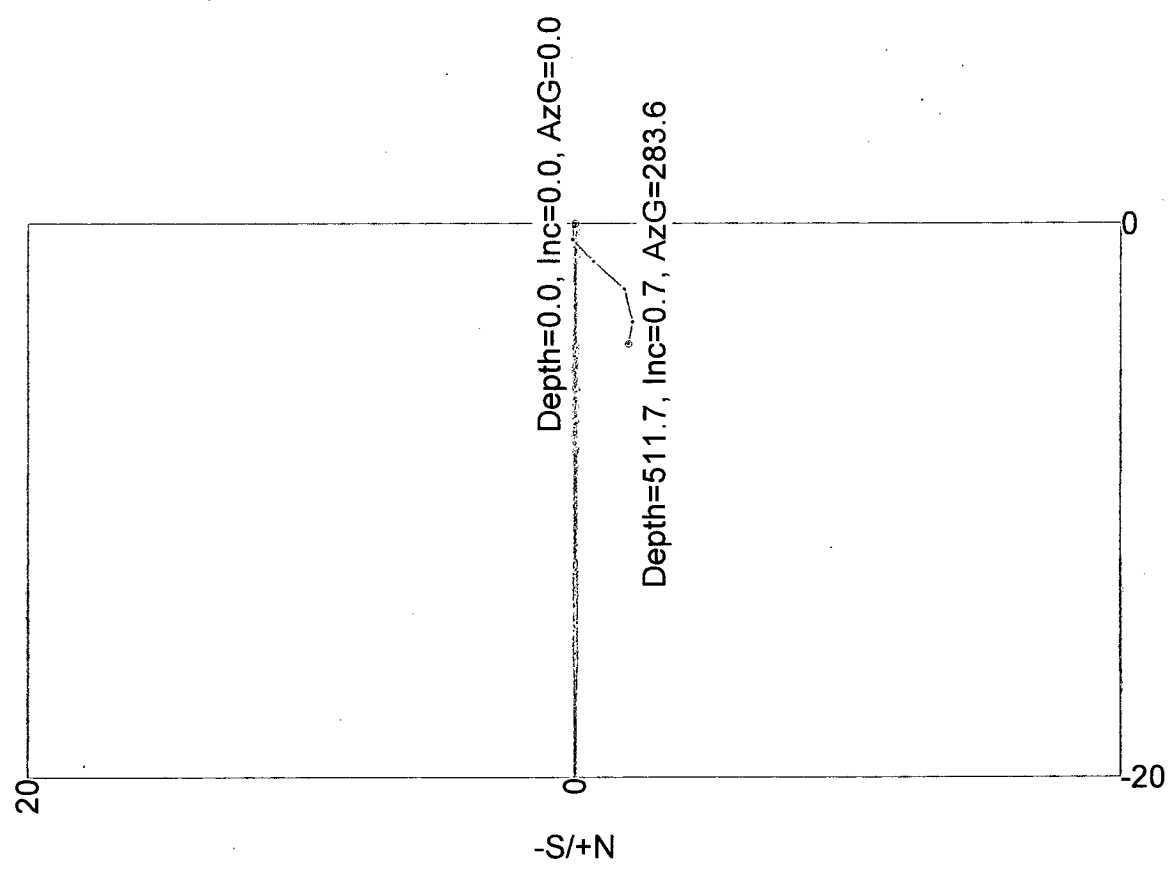
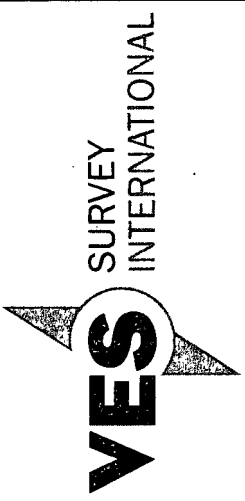
SEP 28 2016

RECEIVED

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
77.17	0.20	295.33	77.17	0.06	-0.12	0.06	0.14	295.33	0.26
171.05	0.39	264.75	171.05	0.10	-0.59	0.10	0.60	279.63	0.25
264.93	1.08	212.77	264.92	-0.67	-1.38	-0.67	1.54	244.11	0.95
358.81	0.79	232.81	358.79	-1.81	-2.38	-1.81	2.99	232.79	0.46
452.69	0.82	278.60	452.66	-2.10	-3.56	-2.10	4.13	239.49	0.67
511.69	0.72	283.57	511.66	-1.95	-4.34	-1.95	4.76	245.83	0.20



VES Survey International
West Texas
432-563-5444
Surveyor: Eric Warner
Guitar 10 24 28 RB No 222H / API 30-015-43693



-W/+E
V.E.S. Survey Date: 4/24/2016



PRODIRECTIONAL

NM OIL CONSERVATION
ARTESIA DISTRICT

SEP 28 2016

RECEIVED



Guitar No. 222H

Eddy County, NM

May 15, 2016

Job No. LNM5123116

ORIGINAL

Survey Completion Report



PRODIRECTIONAL

Survey Certification Letter

May 15, 2016



Operator Name: Matador Resources
Well Name: Guitar No. 222H
County/Parish: Eddy County,
State: NM
Rig Name: Patterson 809
Job Number: LNM5123116

This is to certify the surveys performed on the referenced well by Professional Directional Ent., Inc. are true and correct MWD Surveys, data provided as follows:

<u>Surveyor</u>	<u>Surveyed Depths</u>	<u>Projection to Bit</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
ProDirectional	697' MD – 15,153' MD	15,214' MD	04/26/16 – 05/15/16	MWD-OWSG

Sincerely,

Mike Coats
Well Planning
Professional Directional

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

prodirectional.com

The Standard of Excellence in Directional Supervision



Matador Resources

Eddy County, NM
Guitar Pad
No. 222H
OH

Survey: ProDirectional

Survey Report

23 May, 2016

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 28 2016
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ProDirectional Survey Report



Company: Matador Resources		Well No. 222H	
Project: Eddy County, NM	Local Co-ordinate Reference:		
Site: Guitar Pad	TVD Reference:		
Well: No. 222H	MD Reference:		
Wellbore: OH	North Reference:		
Design: Gyros/MWD-77.17-15153, Proj. 15214	Survey Calculation Method:		
		Database:	
Project Eddy County, NM		System Datum: Mean Sea Level	
Map System: US State Plane 1927 (Exact solution)			
Geo Datum: NAD 1927 (NADCON CONUS)			
Map Zone: New Mexico East 3001			
Site Guitar Pad			
Site Position:		Latitude:	
From: Map	Northing:	449,271.00 usft	32° 14' 5.577388 N
Position Uncertainty:	Easting:	582,319.00 usft	104° 4' 1.571278 W
	Slot Radius:	13-3/16 "	Grid Convergence: 0.14 °
Well No. 222H			
Well Position	+N/-S	0.00 usft	Latitude:
	+E/-W	0.00 usft	32° 14' 5.577388 N
Position Uncertainty	Wellhead Elevation:	0.00 usft	Longitude:
			104° 4' 1.571278 W
			Ground Level: 2,994.00 usft
Wellbore OH			
Magnetics		Dip Angle	Field Strength
	Model Name	(°)	(nT)
	HDGM	7.40	48,233
Design Gyros/MWD-77.17-15153, Proj. 15214			
Audit Notes:			
Version: 1.0	Phase: ACTUAL	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD)	Direction
		(usft)	(°)
		0.00	269.96



ProDirectional Survey Report



Company: Matador Resources
Project: Eddy County, NM
Site: Guitar Pad
Well: No. 222H
Wellbore: OH
Design: Gyros/MWD-77.17-15153, Proj. 15214'

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

Well No. 222H
Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Grid
Minimum Curvature
Well_Planner1

Survey Program Date 5/23/2016

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
77.17	511.69	Gyros 77.17-511.69' (OH)	GYD_DP_MS	Gyrodata gyro-compassing and drop
697.00	15,214.00	Survey #2 (OH)	MWD - OWSG	MWD - OWSG

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	449,271.00	582,319.00
77.17	0.20	295.33	77.17	0.12	0.06	-0.12	0.13	295.33	449,271.06	582,318.88
171.05	0.39	264.75	171.05	0.59	0.10	-0.59	0.60	279.51	449,271.10	582,318.41
264.93	1.08	212.77	264.92	1.39	-0.67	-1.39	1.54	244.03	449,270.33	582,317.61
358.81	0.79	232.81	358.79	2.38	-1.81	-2.38	2.99	232.74	449,269.19	582,316.62
452.69	0.82	278.60	452.66	3.56	-2.10	-3.56	4.13	239.45	449,268.90	582,315.44
511.69	0.72	283.57	511.66	4.34	-1.95	-4.34	4.76	245.79	449,269.05	582,314.66
697.00	0.50	293.00	696.95	6.21	-1.36	-6.21	6.36	257.64	449,269.64	582,312.79
Pro MWD First Survey: 697' MD										
788.00	0.50	293.90	787.95	6.94	-1.05	-6.94	7.02	261.44	449,269.95	582,312.06
882.00	2.00	43.60	881.93	6.19	0.31	-6.19	6.19	272.86	449,271.31	582,312.81
975.00	3.90	48.60	974.81	2.69	3.58	-2.69	4.48	323.01	449,274.58	582,316.31
1,069.00	6.20	53.50	1,068.43	-3.79	8.71	3.79	9.50	23.49	449,279.71	582,322.79
1,162.00	6.60	56.00	1,160.85	-12.26	14.69	12.25	19.13	39.84	449,285.69	582,331.25
1,256.00	6.00	51.80	1,254.29	-20.61	20.74	20.59	29.23	44.79	449,291.74	582,339.59
1,350.00	5.30	46.20	1,347.83	-27.61	26.79	27.59	38.45	45.84	449,297.79	582,346.59
1,443.00	5.20	46.60	1,440.44	-33.77	32.66	33.75	46.96	45.94	449,303.66	582,352.75
1,537.00	5.00	46.70	1,534.07	-39.85	38.39	39.83	55.32	46.05	449,309.39	582,358.83
1,631.00	4.60	46.00	1,627.74	-45.55	43.82	45.52	63.18	46.09	449,314.82	582,364.52
1,724.00	4.40	46.40	1,720.45	-50.82	48.87	50.78	70.48	46.10	449,319.87	582,369.78
1,818.00	4.30	47.90	1,814.18	-56.05	53.72	56.01	77.61	46.20	449,324.72	582,375.01



ProDirectional Survey Report



Company: Matador Resources			Local Co-ordinate Reference:							Well No. 222H	
Project:	Eddy County, NM	TVD Reference:								Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))	
Site:	Guitar Pad	MD Reference:								Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))	
Well:	No. 222H	North Reference:								Grid	
Wellbore:	OH	Survey Calculation Method:								Minimum Curvature	
Design:	Gyros/MWD-77.17-15153', Proj. 15214'	Database:								Well_Planner1	
Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
1,911.00	4.30	57.90	1,906.92	-61.59	57.91	61.55	84.51	46.75	449,328.91	582,380.55	
2,005.00	4.30	67.40	2,000.66	-67.83	61.14	67.79	91.29	47.95	449,332.14	582,386.79	
2,099.00	3.90	68.60	2,094.42	-74.06	63.66	74.02	97.63	49.30	449,334.66	582,393.02	
2,193.00	3.90	83.30	2,188.20	-80.22	65.20	80.17	103.33	50.88	449,336.20	582,399.17	
2,286.00	4.10	94.80	2,280.98	-86.67	65.29	86.62	108.47	52.99	449,336.29	582,405.62	
2,380.00	3.90	87.70	2,374.75	-93.21	65.14	93.17	113.68	55.04	449,336.14	582,412.17	
2,474.00	3.30	75.50	2,468.56	-99.03	65.94	98.98	118.93	56.33	449,336.94	582,417.98	
2,567.00	3.10	80.70	2,561.42	-104.10	67.02	104.05	123.77	57.22	449,338.02	582,423.05	
2,661.00	3.60	57.00	2,655.26	-109.09	69.04	109.04	129.06	57.66	449,340.04	582,428.04	
2,705.00	4.30	48.70	2,699.16	-111.49	70.88	111.44	132.07	57.54	449,341.88	582,430.44	
2,849.00	4.30	53.30	2,842.75	-119.87	77.67	119.82	142.79	57.05	449,348.67	582,438.82	
2,942.00	3.80	54.10	2,935.52	-125.17	81.56	125.11	149.35	56.90	449,352.56	582,444.11	
3,035.00	3.60	55.40	3,028.33	-130.07	85.02	130.01	155.34	56.82	449,356.02	582,449.01	
3,129.00	3.30	59.30	3,122.16	-134.83	88.08	134.77	161.00	56.83	449,359.08	582,453.77	
3,223.00	3.20	56.40	3,216.00	-139.34	90.91	139.28	166.32	56.87	449,361.91	582,458.28	
3,316.00	3.00	50.80	3,308.87	-143.39	93.89	143.33	171.34	56.77	449,364.89	582,462.33	
3,410.00	2.90	49.70	3,402.74	-147.11	96.98	147.05	176.15	56.59	449,367.98	582,466.05	
3,503.00	2.70	47.70	3,495.63	-150.53	99.98	150.46	180.65	56.40	449,370.98	582,469.46	
3,597.00	2.50	47.30	3,589.54	-153.68	102.86	153.60	184.86	56.19	449,373.86	582,472.60	
3,691.00	2.60	43.70	3,683.44	-156.66	105.79	156.58	188.97	55.96	449,376.79	582,475.58	
3,784.00	1.60	23.10	3,776.38	-158.63	108.51	158.55	192.13	55.61	449,379.51	582,477.55	
3,878.00	1.40	336.10	3,870.35	-158.68	110.76	158.60	193.45	55.07	449,381.76	582,477.60	
3,971.00	1.40	337.80	3,963.32	-157.79	112.85	157.71	193.93	54.41	449,383.85	582,476.71	
4,065.00	1.50	336.50	4,057.29	-156.87	115.05	156.79	194.47	53.73	449,386.05	582,475.79	
4,159.00	1.50	331.50	4,151.26	-155.79	117.26	155.71	194.92	53.02	449,388.26	582,474.71	
4,252.00	1.50	330.30	4,244.23	-154.61	119.38	154.53	195.27	52.31	449,390.38	582,473.53	
4,346.00	1.40	330.20	4,338.20	-153.43	121.45	153.34	195.61	51.62	449,392.45	582,472.34	



ProDirectional Survey Report



Company:		Matador Resources		Local Co-ordinate Reference:		Well No. 222H
Project:		Eddy County, NM		TVD Reference:		Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Site:		Guitar Pad		MD Reference:		Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Well:		No. 222H		North Reference:		Grid
Wellbore:		OH		Survey Calculation Method:		Minimum Curvature
Design:		Gyros/MWD-77.17-15153, Proj. 15214'		Database:		Well Planner1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
4,440.00	1.40	333.10	4,432.17	-152.34	123.47	152.25	196.03	50.96	449,394.47	582,471.25
4,533.00	1.20	333.80	4,525.15	-151.40	125.36	151.31	196.49	50.36	449,396.36	582,470.31
4,627.00	0.90	300.50	4,619.13	-150.33	126.61	150.24	196.48	49.88	449,397.61	582,469.24
4,720.00	0.90	282.80	4,712.12	-148.99	127.15	148.90	195.80	49.51	449,398.15	582,467.90
4,814.00	1.10	277.50	4,806.11	-147.37	127.43	147.28	194.76	49.13	449,398.43	582,466.28
4,907.00	1.10	274.10	4,899.09	-145.60	127.61	145.51	193.54	48.75	449,398.61	582,464.51
5,001.00	1.20	273.60	4,993.07	-143.72	127.73	143.63	192.21	48.35	449,398.73	582,462.63
5,094.00	1.30	271.70	5,086.05	-141.69	127.83	141.60	190.76	47.93	449,398.83	582,460.60
5,188.00	0.40	265.90	5,180.04	-140.30	127.83	140.21	189.74	47.64	449,398.83	582,459.21
5,282.00	0.40	282.50	5,274.04	-139.65	127.88	139.56	189.29	47.50	449,398.88	582,458.56
5,375.00	0.60	281.10	5,367.03	-138.85	128.05	138.76	188.82	47.30	449,399.05	582,457.76
5,469.00	0.50	271.60	5,461.03	-137.96	128.15	137.87	188.23	47.09	449,399.15	582,456.87
5,562.00	0.50	287.80	5,554.02	-137.17	128.29	137.08	187.75	46.90	449,399.29	582,456.08
5,656.00	0.50	273.50	5,648.02	-136.37	128.44	136.28	187.27	46.70	449,399.44	582,455.28
5,750.00	0.40	272.60	5,742.02	-135.63	128.48	135.54	186.76	46.53	449,399.48	582,454.54
5,843.00	0.20	265.10	5,835.02	-135.15	128.48	135.06	186.41	46.43	449,399.48	582,454.06
5,937.00	0.20	238.30	5,929.02	-134.84	128.38	134.75	186.12	46.39	449,399.38	582,453.75
6,031.00	0.30	235.10	6,023.01	-134.50	128.15	134.41	185.71	46.37	449,399.15	582,453.41
6,125.00	0.50	243.30	6,117.01	-133.93	127.83	133.84	185.08	46.32	449,398.83	582,452.84
6,218.00	0.80	230.90	6,210.01	-133.07	127.23	132.98	184.04	46.26	449,398.23	582,451.98
6,312.00	0.30	194.70	6,304.00	-132.49	126.58	132.41	183.18	46.29	449,397.58	582,451.41
6,406.00	0.30	103.60	6,398.00	-132.67	126.29	132.58	183.10	46.39	449,397.29	582,451.58
6,499.00	0.70	353.50	6,491.00	-132.84	126.79	132.75	183.58	46.32	449,397.79	582,451.75
6,593.00	1.00	356.20	6,584.99	-132.72	128.18	132.64	184.45	45.98	449,399.18	582,451.64
6,686.00	0.70	358.00	6,677.98	-132.65	129.56	132.56	185.36	45.66	449,400.56	582,451.56
6,780.00	0.40	345.40	6,771.97	-132.55	130.45	132.46	185.91	45.44	449,401.45	582,451.46
6,874.00	0.00	94.40	6,865.97	-132.47	130.77	132.38	186.08	45.35	449,401.77	582,451.38



ProDirectional Survey Report



Company:				Local Co-ordinate Reference:				Well No. 222H			
Project:				TVD Reference:				Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Patt809))			
Site:				MD Reference:				Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Patt809))			
Well:				North Reference:				Grid			
Wellbore:				Survey Calculation Method:				Minimum Curvature			
Design:				Database:				Well_Planner1			
Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)	
6,967.00	1.00	274.50	6,958.97	-131.66	130.83	131.57	185.55	45.16	449,401.83	582,450.57	
7,061.00	2.00	255.60	7,052.94	-129.25	130.49	129.16	183.60	44.71	449,401.49	582,448.16	
7,155.00	1.70	243.80	7,146.89	-126.41	129.47	126.32	180.88	44.30	449,400.47	582,445.32	
7,248.00	1.30	239.30	7,239.85	-124.27	128.32	124.18	178.56	44.06	449,399.32	582,443.18	
7,342.00	0.90	223.20	7,333.84	-122.84	127.24	122.75	176.80	43.97	449,398.24	582,441.75	
7,436.00	0.70	168.70	7,427.83	-122.45	126.13	122.36	175.73	44.13	449,397.13	582,441.36	
7,529.00	1.60	117.10	7,520.81	-123.72	124.99	123.63	175.80	44.69	449,395.99	582,442.63	
7,623.00	2.70	93.70	7,614.75	-127.09	124.24	127.01	177.67	45.63	449,395.24	582,446.01	
7,717.00	3.20	98.20	7,708.62	-131.90	123.73	131.81	180.78	46.81	449,394.73	582,450.81	
7,810.00	4.40	112.60	7,801.42	-137.76	121.99	137.68	183.94	48.46	449,392.99	582,456.68	
7,904.00	3.70	118.10	7,895.18	-143.76	119.17	143.68	186.67	50.33	449,390.17	582,462.68	
7,997.00	3.20	112.00	7,988.01	-148.81	116.79	148.73	189.10	51.86	449,387.79	582,467.73	
8,091.00	2.50	117.80	8,081.90	-153.06	114.85	152.98	191.29	53.10	449,385.85	582,471.98	
8,184.00	1.60	128.20	8,174.84	-155.87	113.10	155.79	192.52	54.02	449,384.10	582,474.79	
8,278.00	1.60	144.10	8,268.80	-157.67	111.22	157.59	192.89	54.79	449,382.22	582,476.59	
8,372.00	1.20	137.60	8,362.77	-159.10	109.43	159.03	193.04	55.47	449,380.43	582,478.03	
8,465.00	1.50	137.10	8,455.75	-160.59	107.82	160.51	193.37	56.11	449,378.82	582,479.51	
8,559.00	2.00	116.80	8,549.70	-162.89	106.18	162.81	194.38	56.89	449,377.18	582,481.81	
8,653.00	1.90	133.90	8,643.65	-165.47	104.36	165.40	195.57	57.75	449,375.36	582,484.40	
8,747.00	1.70	158.70	8,737.60	-167.10	101.98	167.03	195.70	58.59	449,372.98	582,486.03	
8,840.00	1.40	177.30	8,830.57	-167.66	99.56	167.59	194.93	59.29	449,370.56	582,486.59	
8,934.00	1.30	174.30	8,924.54	-167.81	97.35	167.75	193.95	59.87	449,368.35	582,486.75	
9,027.00	1.10	149.90	9,017.52	-168.36	95.53	168.30	193.52	60.42	449,366.53	582,487.30	
9,121.00	1.90	129.60	9,111.49	-170.02	93.76	169.95	194.10	61.12	449,364.76	582,488.95	
9,214.00	2.20	137.40	9,204.43	-172.41	91.46	172.35	195.11	62.05	449,362.46	582,491.35	
9,307.00	1.90	143.70	9,297.37	-174.53	88.91	174.47	195.81	63.00	449,359.91	582,493.47	
9,401.00	1.70	149.00	9,391.33	-176.17	86.45	176.11	196.19	63.85	449,357.45	582,495.11	



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 222H
Project:	Eddy County, NM	TVD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Site:	Guitar Pad	MD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Well:	No. 222H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyros/MWD-77.17'-15153', Proj. 15214'	Database:	Well_Planner1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	EW (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
9,494.00	1.50	167.30	9,484.29	-177.15	84.08	177.09	196.04	64.60	449,355.08	582,496.09
9,588.00	1.50	180.10	9,578.26	-177.41	81.65	177.36	195.25	65.28	449,352.65	582,496.36
9,682.00	2.00	193.10	9,672.22	-177.04	78.83	176.98	193.74	65.99	449,349.83	582,495.98
9,753.00	3.30	237.10	9,743.14	-175.04	76.51	174.98	190.98	66.38	449,347.51	582,493.98
9,799.00	7.60	260.10	9,788.93	-170.93	75.27	170.87	186.72	66.23	449,346.27	582,489.87
9,847.00	11.20	266.40	9,836.28	-163.14	74.43	163.09	179.27	65.47	449,345.43	582,482.09
9,893.00	14.10	266.90	9,881.16	-153.09	73.84	153.04	169.92	64.24	449,344.84	582,472.04
9,941.00	17.80	268.00	9,927.30	-139.91	73.27	139.86	157.89	62.35	449,344.27	582,468.86
9,987.00	20.40	273.70	9,970.77	-124.88	73.54	124.83	144.88	59.50	449,344.54	582,443.83
10,018.00	22.20	275.50	9,999.65	-113.66	74.45	113.61	135.83	56.76	449,345.45	582,432.61
10,050.00	24.40	276.60	10,029.04	-101.08	75.79	101.02	126.29	53.12	449,346.79	582,420.02
10,081.00	26.40	276.80	10,057.04	-87.87	77.34	87.82	117.02	48.63	449,348.34	582,406.82
10,112.00	28.30	276.50	10,084.58	-73.73	78.99	73.67	108.02	43.00	449,349.99	582,392.67
10,144.00	30.00	274.30	10,112.52	-58.21	80.45	58.16	99.27	35.86	449,351.45	582,377.16
10,175.00	32.20	274.30	10,139.07	-42.25	81.65	42.19	91.91	27.33	449,352.65	582,361.19
10,206.00	35.00	273.70	10,164.88	-25.14	82.85	25.08	86.56	16.84	449,353.85	582,344.08
10,237.00	37.50	273.90	10,189.88	-6.85	84.06	6.79	84.33	4.62	449,355.06	582,325.79
10,268.00	40.30	273.90	10,214.00	12.57	85.38	-12.63	86.31	351.59	449,356.38	582,306.37
10,299.00	43.20	274.20	10,237.13	33.16	86.84	-33.22	92.98	339.07	449,357.84	582,285.78
10,331.00	45.50	274.70	10,260.01	55.46	88.58	-55.52	104.54	327.92	449,359.58	582,263.48
10,361.00	47.40	275.80	10,280.68	77.11	90.57	-77.17	118.99	319.57	449,361.57	582,241.83
10,392.00	50.20	275.70	10,301.10	100.31	92.91	-100.37	136.77	312.79	449,363.91	582,218.63
10,423.00	53.50	275.10	10,320.24	124.57	95.20	-124.64	156.84	307.37	449,366.20	582,194.36
10,428.00	54.13	274.98	10,323.20	128.59	95.56	-128.66	160.26	306.60	449,366.56	582,190.34
330° HL Xing: 10428' MD										
10,454.00	57.40	274.40	10,337.82	150.01	97.31	-150.08	178.87	302.96	449,368.31	582,168.92
10,485.00	62.00	274.20	10,353.46	176.69	99.32	-176.76	202.75	299.33	449,370.32	582,142.24



ProDirectional Survey Report



Company: Matador Resources		Local Co-ordinate Reference:					Well No. 222H			
Project: Eddy County, NM		TVD Reference:					Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Patt809))			
Site: Guitar Pad		MD Reference:					Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Patt809))			
Well: No. 222H		North Reference:					Grid			
Wellbore: OH		Survey Calculation Method:					Minimum Curvature			
Design: Gyros/MWD-77.17'-15153', Proj. 15214'		Database:					Well_Planner1			
Survey										
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
10,517.00	66.40	274.40	10,367.38	205.41	101.48	-205.49	229.18	296.28	449,372.48	582,113.51
10,548.00	69.70	274.90	10,378.97	234.07	103.81	-234.14	256.12	293.91	449,374.81	582,084.86
10,579.00	73.10	273.40	10,388.85	263.36	105.93	-263.44	283.94	291.91	449,376.93	582,055.56
10,610.00	77.60	272.10	10,396.69	293.31	107.37	-293.39	312.42	290.10	449,378.37	582,025.61
10,707.00	90.00	271.90	10,407.15	389.50	110.72	-389.57	405.00	285.87	449,381.72	581,929.43
10,738.00	91.70	270.60	10,406.69	420.48	111.40	-420.56	435.07	284.84	449,382.40	581,898.44
10,832.00	95.10	270.20	10,401.11	514.30	112.06	-514.38	526.44	282.29	449,383.06	581,804.62
10,927.00	94.90	270.80	10,392.84	608.93	112.88	-609.01	619.39	280.50	449,383.88	581,709.99
11,021.00	94.00	269.50	10,385.54	702.65	113.13	-702.73	711.77	279.15	449,384.13	581,616.27
11,116.00	86.50	269.40	10,385.13	797.58	112.21	-797.65	805.51	278.01	449,383.21	581,521.35
11,210.00	96.50	271.20	10,382.67	891.42	112.70	-891.50	898.59	277.21	449,383.70	581,427.50
11,304.00	92.50	271.70	10,375.30	985.08	115.07	-985.16	991.86	276.66	449,386.07	581,333.84
11,399.00	95.80	270.00	10,368.42	1,079.80	116.48	-1,079.88	1,086.15	276.16	449,387.48	581,239.12
11,493.00	91.20	267.70	10,362.68	1,173.58	114.60	-1,173.66	1,179.24	275.58	449,385.60	581,145.34
11,587.00	90.80	266.90	10,361.04	1,267.46	110.17	-1,267.54	1,272.32	274.97	449,381.17	581,051.46
11,677.00	95.40	268.10	10,356.18	1,357.22	106.25	-1,357.29	1,361.45	274.48	449,377.25	580,961.71
11,771.00	97.90	270.50	10,345.29	1,450.57	105.10	-1,450.64	1,454.44	274.14	449,376.10	580,868.36
11,865.00	96.10	270.70	10,333.84	1,543.86	106.08	-1,543.93	1,547.57	273.93	449,377.08	580,775.07
11,960.00	90.50	270.70	10,328.37	1,638.65	107.24	-1,638.73	1,642.23	273.74	449,378.24	580,680.27
12,054.00	91.60	271.50	10,326.65	1,732.62	109.04	-1,732.69	1,736.12	273.60	449,380.04	580,586.31
12,148.00	92.80	272.50	10,323.04	1,826.48	112.32	-1,826.56	1,830.01	273.52	449,383.32	580,492.44
12,243.00	90.40	271.20	10,320.39	1,921.39	115.38	-1,921.47	1,924.93	273.44	449,386.38	580,397.53
12,337.00	90.20	270.70	10,319.89	2,015.37	116.94	-2,015.45	2,018.84	273.32	449,387.94	580,303.55
12,431.00	93.10	273.00	10,317.19	2,109.26	119.97	-2,109.35	2,112.76	273.26	449,390.97	580,209.65
12,526.00	94.30	272.30	10,311.06	2,203.96	124.36	-2,204.05	2,207.55	273.23	449,395.36	580,114.95
12,619.00	89.50	269.40	10,307.97	2,296.86	125.73	-2,296.95	2,300.39	273.13	449,396.73	580,022.05
12,714.00	89.70	268.20	10,308.64	2,391.84	123.74	-2,391.92	2,395.12	272.96	449,394.74	579,927.08



ProDirectional Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well No. 222H
Project:	Eddy County, NM	TVD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Site:	Guitar Pad	MD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Well:	No. 222H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Gyros/MWD-77.17'-15153', Proj. 15214'	Database:	Well_Planner1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
12,808.00	91.10	268.70	10,307.98	2,485.80	121.20	-2,485.88	2,488.84	272.79	449,392.20	579,833.12
12,903.00	92.90	269.40	10,304.66	2,580.72	119.63	-2,580.81	2,583.58	272.65	449,390.63	579,738.19
12,997.00	94.10	268.90	10,298.93	2,674.54	118.23	-2,674.62	2,677.23	272.53	449,389.23	579,644.38
13,092.00	93.20	268.60	10,292.88	2,769.32	116.17	-2,769.41	2,771.84	272.40	449,387.17	579,549.59
13,186.00	92.30	268.60	10,288.37	2,863.19	113.87	-2,863.27	2,865.53	272.28	449,384.87	579,455.73
13,280.00	92.60	269.20	10,284.35	2,957.09	112.07	-2,957.16	2,959.29	272.17	449,383.07	579,361.84
13,374.00	89.30	269.00	10,282.79	3,051.05	110.59	-3,051.13	3,053.13	272.08	449,381.59	579,267.87
13,469.00	89.20	269.30	10,284.04	3,146.03	109.18	-3,146.11	3,148.00	271.99	449,380.18	579,172.89
13,563.00	90.80	269.60	10,284.04	3,240.02	108.28	-3,240.10	3,241.91	271.91	449,379.28	579,078.90
13,658.00	90.20	269.30	10,283.21	3,335.02	107.37	-3,335.09	3,336.82	271.84	449,378.37	578,983.91
13,752.00	92.50	271.30	10,280.99	3,428.98	107.86	-3,429.05	3,430.75	271.80	449,378.86	578,889.95
13,847.00	92.50	270.00	10,276.85	3,523.88	108.94	-3,523.95	3,525.64	271.77	449,379.94	578,795.05
13,942.00	91.70	269.30	10,273.37	3,618.81	108.36	-3,618.89	3,620.51	271.72	449,379.36	578,700.11
14,036.00	90.90	265.70	10,271.23	3,712.68	104.26	-3,712.76	3,714.22	271.61	449,375.26	578,606.24
14,131.00	92.20	270.00	10,268.66	3,807.56	100.70	-3,807.63	3,808.96	271.51	449,371.70	578,511.37
14,224.00	93.10	273.40	10,264.36	3,900.40	103.45	-3,900.48	3,901.85	271.52	449,374.45	578,418.52
14,318.00	93.30	273.70	10,259.11	3,994.07	109.26	-3,994.15	3,995.64	271.57	449,380.26	578,324.85
14,413.00	91.70	271.80	10,254.97	4,088.86	113.81	-4,088.94	4,090.53	271.59	449,384.81	578,230.06
14,508.00	91.30	273.70	10,252.48	4,183.71	118.37	-4,183.80	4,185.47	271.62	449,389.37	578,135.20
14,602.00	89.80	271.00	10,251.58	4,277.62	122.22	-4,277.70	4,279.45	271.64	449,393.22	578,041.30
14,696.00	89.20	272.00	10,252.40	4,371.58	124.68	-4,371.66	4,373.44	271.63	449,395.68	577,947.34
14,791.00	89.80	272.00	10,253.23	4,466.51	128.00	-4,466.60	4,468.44	271.64	449,399.00	577,852.40
14,885.00	89.10	271.70	10,254.13	4,560.46	131.03	-4,560.55	4,562.43	271.65	449,402.03	577,758.45
14,979.00	91.00	272.40	10,254.05	4,654.39	134.40	-4,654.48	4,656.42	271.65	449,405.40	577,664.52
15,074.00	93.70	271.30	10,250.16	4,749.25	137.46	-4,749.34	4,751.33	271.66	449,408.46	577,569.66
15,108.00	94.39	271.34	10,247.76	4,783.15	138.24	-4,783.25	4,785.25	271.66	449,409.24	577,535.75

330° HL Xing: 15108° MD



ProDirectional Survey Report



Company: Matador Resources		Local Co-ordinate Reference:	
Project: Eddy County, NM		TVD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Site: Guitar Pad		MD Reference:	Well @ 3022.50usft (GL: 2994' + KB: 28.5' (Pat809))
Well: No. 222H		North Reference:	Grid
Wellbore: OH		Survey Calculation Method:	Minimum Curvature
Design: Gyros/MWD-77.17'-15153', Proj. 15214'		Database:	Well_Planner1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	V. Sec (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)	Northing (usft)	Easting (usft)
15,153.00	95.30	271.40	10,243.96	4,827.98	139.32	-4,828.08	4,830.09	271.65	449,410.32	577,490.92
Last Survey: 15153' MD, 10243.96' TVD										
15,214.00	95.30	271.40	10,238.32	4,888.70	140.80	-4,888.80	4,890.82	271.65	449,411.80	577,430.20
PTB: 15214' MD, 10238.32' TVD										

Design Annotations

Measured		Vertical	Local Coordinates	
Depth (usft)	Depth (usft)		+N/-S (usft)	+E/-W (usft)
697.00	696.95		-1.36	-6.21
10,428.00	10,323.20		95.56	-128.66
15,108.00	10,247.76		138.24	-4,783.25
15,153.00	10,243.96		139.32	-4,828.08
15,214.00	10,238.32		140.80	-4,888.80
			Pro MWD First Survey: 697' MD	
			330' HL Xing: 10428' MD	
			330' HL Xing: 15108' MD	
			Last Survey: 15153' MD, 10243.96' TVD	
			PTB: 15214' MD, 10238.32' TVD	