

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

EMNRD-OCD ARTESIA
REC'D: 6/01/2020
FORM C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-46475		² Pool Code 98220		³ Pool Name Purple Sage;Wolfcamp (Gas)	
⁴ Property Code 326434		⁵ Property Name RAY STATE COM			⁶ Well Number 203H
⁷ OGRID No. 228937		⁸ Operator Name MATADOR PRODUCTION COMPANY			⁹ Elevation 2962'

¹⁰Surface Location

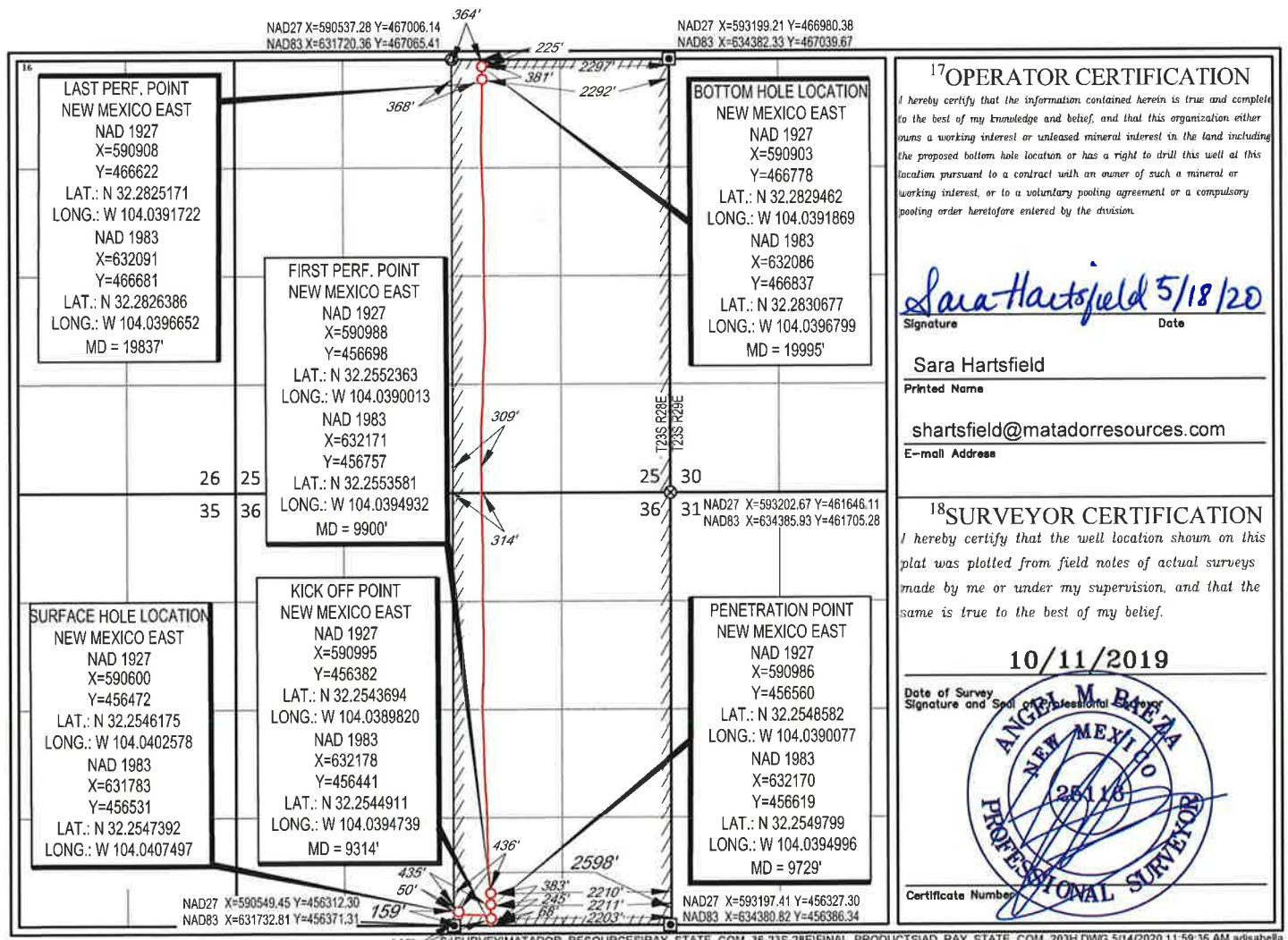
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	36	23-S	28-E	-	159'	SOUTH	2598'	EAST	EDDY

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	25	23-S	28-E	-	225'	NORTH	2297'	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Intent ☐ As Drilled ☒

API # 30-015-46475			
Operator Name: MATADOR PRODUCTION COMPANY		Property Name: RAY STATE COM	Well Number 203H

Kick Off Point (KOP)

UL O	Section 36	Township 23S	Range 28E	Lot 15	Feet 68	From N/S S	Feet 2203	From E/W E	County EDDY
Latitude N 32.2544911					Longitude W 104.0394739			NAD 83	

First Take Point (FTP)

UL O	Section 36	Township 23S	Range 28E	Lot 15	Feet 383	From N/S S	Feet 2210	From E/W E	County EDDY
Latitude N 32.2553581					Longitude W 104.0394932			NAD 83	

Last Take Point (LTP)

UL B	Section 25	Township 23S	Range 28E	Lot 2	Feet 381	From N/S N	Feet 2292	From E/W E	County EDDY
Latitude N 32.2826386					Longitude W 104.0396652			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #			
Operator Name:		Property Name:	Well Number

SCALE: 1" = 2000'

0' 1000' 2000'



SECTION 36, TOWNSHIP 23-S, RANGE 28-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

FND. BRASS CAP,
U.S. G.L.O. SUR.



LAST PERF. POINT
NEW MEXICO EAST
NAD 1927
X=590908
Y=466622
LAT.: N 32.2825171
LONG.: W 104.0391722
NAD 1983
X=632091
Y=466681
LAT.: N 32.2826386
LONG.: W 104.0396652
MD = 19837'

BOTTOM HOLE LOCATION
NEW MEXICO EAST
NAD 1927
X=590903
Y=466778
LAT.: N 32.2829462
LONG.: W 104.0391869
NAD 1983
X=632086
Y=466837
LAT.: N 32.2830677
LONG.: W 104.0396799
MD = 19995'

SURFACE LOCATION
NEW MEXICO EAST
NAD 1927
X=590600
Y=456472
LAT.: N 32.2546175
LONG.: W 104.0402578
NAD 1983
X=631783
Y=456531
LAT.: N 32.2547392
LONG.: W 104.0407497

KICK OFF POINT
NEW MEXICO EAST
NAD 1927
X=590995
Y=456382
LAT.: N 32.2543694
LONG.: W 104.0389820
NAD 1983
X=632178
Y=456441
LAT.: N 32.2544911
LONG.: W 104.0394739
MD = 9314'

FIRST PERF. POINT
NEW MEXICO EAST
NAD 1927
X=590988
Y=456698
LAT.: N 32.2552363
LONG.: W 104.0390013
NAD 1983
X=632171
Y=456757
LAT.: N 32.2553581
LONG.: W 104.0394932
MD = 9900'

PENETRATION POINT
NEW MEXICO EAST
NAD 1927
X=590986
Y=456560
LAT.: N 32.2548582
LONG.: W 104.0390077
NAD 1983
X=632170
Y=456619
LAT.: N 32.2549799
LONG.: W 104.0394996
MD = 9729'

FND. BRASS CAP,
U.S. G.L.O. SUR.
1942

FND. BRASS CAP,
U.S. G.L.O. SUR.

FND. BRASS CAP,
U.S. G.L.O. SUR.
1942

LEASE NAME & WELL NO.: RAY STATE COM 203H
SECTION 36 TWP 23-S RGE 28-E SURVEY N.M.P.M.
COUNTY EDDY STATE NM
DESCRIPTION 159' FSL & 2598' FEL

DISTANCE & DIRECTION
FROM INT. OF NM-31 & STATE HWY 387 GO SOUTH ON STATE HWY 387 ±2.0
MILES, THENCE CONTINUING ON STATE HWY 387 EAST (LEFT) ±1.0 MILES, THENCE
SOUTH (RIGHT) ON GIOVENGO RD. ±1.0 MILES, THENCE EAST (LEFT) ON RABBIT
HILL RD. ±0.5 MILES, THENCE SOUTHEAST (RIGHT) ON LEASE RD. ±0.9 MILES,
THENCE SOUTHEAST (LEFT) ON PROPOSED RD. ±647 FEET TO A POINT ±356 FEET
NORTHEAST OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



Angel M. Baeza, P.S. No. 25116
MAY 07, 2020

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 146 • FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 • FAX: (817) 744-7554
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705
TELEPHONE: (432) 682-1653 OR (800) 787-1653 • FAX: (432) 682-1743
WWW.TOPOGRAPHIC.COM



Final MWD Survey Certification

Eddy County, NM

Client: Matador Resources Company

Well Name: Ray State Com 203 H

Total Job No: 2019-859-297

API No: 30-015-46475

Start Date: December 24, 2019

End Date: February 13, 2020

Start Depth: 234'

End Depth: 19995'

I, Jason Fodness, MWD Operator, hereby certify that; I am employed by Total Directional Services, LLC and we conducted or supervised the taking of these open hole MWD surveys at the request of this client. This data is true, correct, complete and within the limitations of the tool as set forth by Total Directional Services, LLC. I am authorized and qualified to make this report and have reviewed this report and find that it conforms to the principals and procedures as set forth by Total Directional Services, LLC.

Date: 02/13/2020

Signed: *Jason Fodness*



Matador Resources Company

Eddy County, NM (NAD27-Grid)

Ray State Com

Ray State Com 203H

OH

Design: OH

Standard Survey Report

20 February, 2020





Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Project	Eddy County, NM (NAD27-Grid)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Ray State Com				
Site Position:		Northing:	455,390.00 usft	Latitude:	32.251627	
From:	Map	Easting:	592,880.00 usft	Longitude:	-104.032893	
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.16 °

Well	Ray State Com 203H					
Well Position	+N/-S	0.00 usft	Northing:	456,472.00 usft	Latitude:	32.254619
	+E/-W	0.00 usft	Easting:	590,600.00 usft	Longitude:	-104.040258
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,962.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/10/2019	6.91	59.98	47,655.11639911

Design	OH				
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	1.68	

Survey Program	Date	2/20/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
172.00	19,942.00	Survey #1 (OH)	MWD+HRGM	OWSG MWD + HRGM	
19,995.00	19,995.00	Survey #2 - Proj to TD (OH)	BLIND	OWSG BLIND	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Malaga Offset - 182.27' Radius - SHL (Ray State Com 203H)									
172.00	1.60	179.20	171.98	-2.40	0.03	-2.40	0.93	0.93	0.00
261.00	2.00	113.70	260.94	-4.27	1.47	-4.22	2.22	0.45	-73.60
380.00	2.00	129.00	379.87	-6.41	4.99	-6.26	0.45	0.00	12.86
473.00	2.20	125.30	472.81	-8.46	7.71	-8.23	0.26	0.22	-3.98
562.00	2.40	138.00	561.74	-10.83	10.35	-10.53	0.61	0.22	14.27
653.00	1.30	126.00	652.69	-12.86	12.46	-12.49	1.28	-1.21	-13.19
744.00	0.80	86.20	743.67	-13.42	13.93	-13.01	0.94	-0.55	-43.74
835.00	0.70	74.80	834.67	-13.23	15.10	-12.79	0.20	-0.11	-12.53



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
925.00	0.80	93.10	924.66	-13.12	16.25	-12.64	0.29	0.11	20.33
1,016.00	0.70	315.30	1,015.66	-12.76	16.50	-12.27	1.54	-0.11	-151.43
1,106.00	2.00	313.70	1,105.63	-11.29	14.98	-10.84	1.44	1.44	-1.78
1,196.00	1.90	311.50	1,195.58	-9.21	12.72	-8.84	0.14	-0.11	-2.44
1,287.00	1.50	304.20	1,286.54	-7.54	10.61	-7.23	0.50	-0.44	-8.02
1,377.00	1.30	302.20	1,376.51	-6.34	8.77	-6.08	0.23	-0.22	-2.22
1,471.00	1.10	301.50	1,470.49	-5.30	7.10	-5.09	0.21	-0.21	-0.74
1,564.00	1.10	298.70	1,563.47	-4.40	5.55	-4.24	0.06	0.00	-3.01
1,658.00	1.60	290.10	1,657.45	-3.52	3.53	-3.41	0.57	0.53	-9.15
1,751.00	2.10	283.90	1,750.40	-2.66	0.66	-2.64	0.58	0.54	-6.67
1,845.00	0.80	246.90	1,844.37	-2.51	-1.62	-2.55	1.64	-1.38	-39.36
1,938.00	1.00	161.80	1,937.36	-3.53	-1.96	-3.59	1.32	0.22	-91.51
2,032.00	1.40	144.60	2,031.34	-5.25	-1.04	-5.28	0.57	0.43	-18.30
2,125.00	1.60	139.10	2,124.31	-7.16	0.47	-7.14	0.26	0.22	-5.91
2,218.00	2.30	121.30	2,217.25	-9.11	2.91	-9.02	0.99	0.75	-19.14
2,312.00	3.80	121.80	2,311.12	-11.73	7.17	-11.51	1.60	1.60	0.53
2,405.00	4.30	128.50	2,403.88	-15.52	12.52	-15.15	0.74	0.54	7.20
2,498.00	4.10	129.60	2,496.63	-19.81	17.81	-19.28	0.23	-0.22	1.18
2,592.00	4.60	110.10	2,590.37	-23.25	23.94	-22.54	1.65	0.53	-20.74
2,685.00	6.00	103.10	2,682.97	-25.63	32.18	-24.68	1.66	1.51	-7.53
2,717.00	5.60	102.20	2,714.81	-26.34	35.33	-25.29	1.28	-1.25	-2.81
2,808.00	5.10	110.00	2,805.41	-28.66	43.47	-27.38	0.97	-0.55	8.57
2,901.00	6.10	105.30	2,897.97	-31.38	52.12	-29.84	1.18	1.08	-5.05
2,995.00	7.30	96.50	2,991.32	-33.38	62.87	-31.52	1.68	1.28	-9.36
3,088.00	7.70	92.60	3,083.53	-34.33	74.97	-32.11	0.70	0.43	-4.19
3,181.00	9.10	97.00	3,175.53	-35.51	88.49	-32.89	1.66	1.51	4.73
3,275.00	9.10	96.80	3,268.35	-37.29	103.25	-34.25	0.03	0.00	-0.21
3,369.00	8.80	95.30	3,361.20	-38.84	117.79	-35.36	0.40	-0.32	-1.60
3,462.00	8.80	92.70	3,453.11	-39.83	131.98	-35.94	0.43	0.00	-2.80
3,555.00	7.00	91.60	3,545.22	-40.32	144.75	-36.06	1.94	-1.94	-1.18
3,648.00	6.60	88.90	3,637.57	-40.38	155.76	-35.79	0.55	-0.43	-2.90
3,742.00	8.10	90.80	3,730.79	-40.37	167.79	-35.43	1.62	1.60	2.02
3,835.00	8.50	92.70	3,822.82	-40.78	181.20	-35.45	0.52	0.43	2.04
3,929.00	10.00	90.50	3,915.59	-41.18	196.30	-35.40	1.64	1.60	-2.34
4,023.00	10.00	89.60	4,008.17	-41.19	212.63	-34.94	0.17	0.00	-0.96
4,116.00	8.90	90.00	4,099.90	-41.14	227.89	-34.43	1.18	-1.18	0.43
4,210.00	7.70	90.20	4,192.92	-41.16	241.46	-34.06	1.28	-1.28	0.21
4,303.00	9.30	92.50	4,284.89	-41.51	255.20	-34.00	1.76	1.72	2.47
4,397.00	10.40	93.80	4,377.50	-42.40	271.26	-34.43	1.19	1.17	1.38
4,490.00	10.10	95.00	4,469.02	-43.67	287.76	-35.21	0.40	-0.32	1.29
4,584.00	10.10	94.50	4,561.56	-45.04	304.18	-36.09	0.09	0.00	-0.53
4,677.00	9.90	94.60	4,653.15	-46.32	320.28	-36.90	0.22	-0.22	0.11
4,771.00	9.40	96.00	4,745.82	-47.77	335.97	-37.89	0.59	-0.53	1.49



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,864.00	8.10	96.00	4,837.74	-49.25	350.04	-38.95	1.40	-1.40	0.00	
4,958.00	8.90	105.30	4,930.71	-51.86	363.64	-41.17	1.69	0.85	9.89	
5,051.00	8.50	107.40	5,022.64	-55.81	377.14	-44.72	0.55	-0.43	2.26	
5,145.00	7.80	107.70	5,115.69	-59.83	389.85	-48.36	0.75	-0.74	0.32	
5,238.00	6.00	108.40	5,208.01	-63.28	400.47	-51.50	1.94	-1.94	0.75	
5,332.00	5.60	109.50	5,301.53	-66.36	409.46	-54.32	0.44	-0.43	1.17	
5,425.00	5.00	107.70	5,394.13	-69.11	417.59	-56.83	0.67	-0.65	-1.94	
5,519.00	5.10	109.30	5,487.77	-71.74	425.44	-59.22	0.18	0.11	1.70	
5,612.00	4.10	120.00	5,580.47	-74.76	432.22	-62.05	1.41	-1.08	11.51	
5,706.00	3.00	137.70	5,674.29	-78.26	436.79	-65.41	1.64	-1.17	18.83	
5,799.00	3.00	139.40	5,767.16	-81.91	440.01	-68.97	0.10	0.00	1.83	
5,892.00	2.00	175.40	5,860.08	-85.38	441.72	-72.38	1.95	-1.08	38.71	
5,986.00	1.80	188.90	5,954.03	-88.47	441.63	-75.48	0.52	-0.21	14.36	
6,080.00	1.70	197.70	6,047.98	-91.26	440.97	-78.28	0.30	-0.11	9.36	
6,173.00	1.50	201.70	6,140.95	-93.70	440.10	-80.75	0.25	-0.22	4.30	
6,267.00	1.70	197.40	6,234.91	-96.18	439.23	-83.25	0.25	0.21	-4.57	
6,360.00	1.50	201.90	6,327.87	-98.62	438.36	-85.72	0.25	-0.22	4.84	
6,454.00	1.50	226.90	6,421.84	-100.60	437.01	-87.74	0.69	0.00	26.60	
6,547.00	1.80	245.60	6,514.80	-102.04	434.79	-89.24	0.66	0.32	20.11	
6,640.00	1.90	309.90	6,607.76	-101.65	432.28	-88.93	2.12	0.11	69.14	
6,734.00	2.40	311.70	6,701.70	-99.34	429.61	-86.70	0.54	0.53	1.91	
6,827.00	2.40	305.20	6,794.62	-96.93	426.57	-84.37	0.29	0.00	-6.99	
6,921.00	2.40	323.60	6,888.53	-94.21	423.79	-81.73	0.82	0.00	19.57	
7,014.00	1.30	4.20	6,981.49	-91.59	422.71	-79.15	1.77	-1.18	43.66	
7,107.00	1.50	281.60	7,074.47	-90.29	421.60	-77.88	1.99	0.22	-88.82	
7,201.00	2.00	271.70	7,168.42	-90.00	418.75	-77.67	0.62	0.53	-10.53	
7,294.00	1.80	267.20	7,261.37	-90.02	415.67	-77.78	0.27	-0.22	-4.84	
7,388.00	2.10	250.80	7,355.32	-90.66	412.57	-78.51	0.67	0.32	-17.45	
7,481.00	2.20	237.50	7,448.25	-92.18	409.45	-80.12	0.55	0.11	-14.30	
7,575.00	0.80	252.60	7,542.22	-93.34	407.31	-81.35	1.53	-1.49	16.06	
7,668.00	0.90	23.30	7,635.22	-92.87	406.98	-80.89	1.66	0.11	140.54	
7,761.00	1.00	25.40	7,728.20	-91.46	407.61	-79.46	0.11	0.11	2.26	
7,855.00	0.50	58.50	7,822.20	-90.51	408.31	-78.49	0.68	-0.53	35.21	
7,948.00	0.20	174.30	7,915.19	-90.46	408.68	-78.43	0.66	-0.32	124.52	
8,042.00	1.60	276.50	8,009.18	-90.47	407.39	-78.48	1.76	1.49	108.72	
8,136.00	1.80	317.30	8,103.14	-89.24	405.08	-77.31	1.28	0.21	43.40	
8,230.00	1.60	226.00	8,197.12	-89.06	403.14	-77.20	2.59	-0.21	-97.13	
8,323.00	3.00	196.90	8,290.04	-92.29	401.50	-80.47	1.91	1.51	-31.29	
8,417.00	1.80	209.10	8,383.96	-95.94	400.06	-84.16	1.38	-1.28	12.98	
8,510.00	1.20	355.70	8,476.94	-96.24	399.28	-84.49	3.10	-0.65	157.63	
8,603.00	2.80	7.60	8,569.89	-93.02	399.51	-81.26	1.77	1.72	12.80	
8,697.00	1.10	69.30	8,663.84	-90.43	400.66	-78.63	2.63	-1.81	65.64	
8,791.00	2.20	47.80	8,757.80	-88.89	402.84	-77.04	1.32	1.17	-22.87	



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,884.00	1.10	58.70	8,850.76	-87.23	404.92	-75.31	1.22	-1.18	11.72
8,978.00	1.80	213.80	8,944.74	-87.99	404.87	-76.07	3.02	0.74	165.00
9,071.00	2.00	229.40	9,037.69	-90.26	402.83	-78.40	0.59	0.22	16.77
9,165.00	2.10	245.60	9,131.63	-92.04	400.01	-80.26	0.62	0.11	17.23
9,196.00	2.10	258.20	9,162.61	-92.39	398.94	-80.64	1.49	0.00	40.65
9,267.00	2.30	294.40	9,233.56	-92.07	396.37	-80.40	1.94	0.28	50.99
9,314.00	6.50	341.30	9,280.43	-89.16	394.66	-77.54	11.08	8.94	99.79
9,361.00	11.60	351.00	9,326.83	-81.96	393.06	-70.40	11.29	10.85	20.64
9,408.00	16.40	350.90	9,372.42	-70.74	391.27	-59.23	10.21	10.21	-0.21
9,454.00	20.00	355.90	9,416.11	-56.47	389.68	-45.02	8.52	7.83	10.87
9,501.00	24.70	358.90	9,459.57	-38.63	388.92	-27.20	10.29	10.00	6.38
9,548.00	28.80	358.70	9,501.53	-17.48	388.47	-6.08	8.73	8.72	-0.43
9,641.00	36.10	355.90	9,579.96	32.31	386.00	43.62	8.01	7.85	-3.01
9,740.00	43.30	3.90	9,656.13	95.39	386.23	106.69	8.91	7.27	8.08
9,787.00	49.40	3.10	9,688.56	129.32	388.29	140.66	13.04	12.98	-1.70
9,835.00	56.20	0.30	9,717.57	167.51	389.38	178.86	14.91	14.17	-5.83
9,841.25	57.54	359.97	9,720.98	172.75	389.39	184.10	21.91	21.45	-5.34
330' FSL HL Crossing									
9,882.00	66.30	358.00	9,740.15	208.66	388.73	219.97	21.91	21.50	-4.83
9,921.77	75.00	356.33	9,753.31	246.09	386.86	257.34	22.23	21.87	-4.21
75 INC Marker									
9,930.00	76.80	356.00	9,755.32	254.06	386.33	265.28	22.23	21.89	-3.97
9,989.00	85.00	353.70	9,764.64	312.03	381.09	323.07	14.42	13.90	-3.90
10,083.00	88.30	355.10	9,770.14	405.40	371.93	416.14	3.81	3.51	1.49
10,167.16	90.27	354.74	9,771.19	489.22	364.48	499.71	2.38	2.34	-0.43
LP (Ray State Com 203H)									
10,177.00	90.50	354.70	9,771.12	499.02	363.58	509.47	2.38	2.34	-0.43
10,271.00	93.20	358.80	9,768.08	592.79	358.25	603.05	5.22	2.87	4.36
10,364.00	91.70	358.00	9,764.11	685.67	355.66	695.81	1.83	-1.61	-0.86
10,458.00	90.10	358.80	9,762.63	779.61	353.03	789.64	1.90	-1.70	0.85
10,552.00	90.20	359.00	9,762.39	873.60	351.23	883.52	0.24	0.11	0.21
10,643.00	89.40	0.40	9,762.70	964.59	350.75	974.47	1.77	-0.88	1.54
10,735.00	92.40	0.10	9,761.26	1,056.57	351.15	1,066.42	3.28	3.26	-0.33
10,827.00	89.50	356.40	9,759.73	1,148.49	348.34	1,158.21	5.11	-3.15	-4.02
10,919.00	92.60	358.00	9,758.05	1,240.35	343.85	1,249.90	3.79	3.37	1.74
11,010.00	92.30	356.50	9,754.16	1,331.16	339.49	1,340.54	1.68	-0.33	-1.65
11,102.00	92.80	356.50	9,750.06	1,422.89	333.88	1,432.08	0.54	0.54	0.00
11,194.00	87.20	356.10	9,750.06	1,514.67	327.94	1,523.64	6.10	-6.09	-0.43
11,285.00	88.20	357.10	9,753.72	1,605.43	322.55	1,614.20	1.55	1.10	1.10
11,377.00	91.40	358.30	9,754.04	1,697.34	318.86	1,705.97	3.71	3.48	1.30
11,469.00	87.70	357.80	9,754.76	1,789.27	315.73	1,797.76	4.06	-4.02	-0.54
11,561.00	92.80	359.70	9,754.36	1,881.21	313.72	1,889.61	5.92	5.54	2.07
11,653.00	89.10	358.50	9,752.83	1,973.17	312.28	1,981.48	4.23	-4.02	-1.30
11,745.00	89.10	358.00	9,754.28	2,065.12	309.47	2,073.31	0.54	0.00	-0.54



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,836.00	89.80	357.30	9,755.15	2,156.03	305.74	2,164.08	1.09	0.77	-0.77
11,930.00	89.30	357.80	9,755.89	2,249.94	301.72	2,257.83	0.75	-0.53	0.53
12,024.00	93.50	359.20	9,753.59	2,343.86	299.26	2,351.63	4.71	4.47	1.49
12,117.00	90.90	358.00	9,750.02	2,436.75	296.99	2,444.42	3.08	-2.80	-1.29
12,211.00	88.40	0.30	9,750.60	2,530.73	295.59	2,538.31	3.61	-2.66	2.45
12,305.00	90.30	2.00	9,751.66	2,624.70	297.48	2,632.29	2.71	2.02	1.81
12,399.00	86.80	1.70	9,754.04	2,718.60	300.51	2,726.25	3.74	-3.72	-0.32
12,493.00	88.20	3.50	9,758.14	2,812.41	304.77	2,820.14	2.42	1.49	1.91
12,586.00	91.40	1.10	9,758.47	2,905.32	308.51	2,913.12	4.30	3.44	-2.58
12,680.00	91.90	0.80	9,755.76	2,999.26	310.06	3,007.07	0.62	0.53	-0.32
12,774.00	90.40	0.10	9,753.87	3,093.24	310.80	3,101.03	1.76	-1.60	-0.74
12,868.00	91.30	0.70	9,752.48	3,187.22	311.46	3,194.99	1.15	0.96	0.64
12,961.00	94.40	0.50	9,747.86	3,280.09	312.43	3,287.85	3.34	3.33	-0.22
13,055.00	92.60	359.30	9,742.12	3,373.91	312.27	3,381.62	2.30	-1.91	-1.28
13,149.00	90.80	357.70	9,739.33	3,467.83	309.81	3,475.43	2.56	-1.91	-1.70
13,243.00	92.00	358.60	9,737.03	3,561.75	306.77	3,569.22	1.60	1.28	0.96
13,337.00	88.80	358.50	9,736.38	3,655.71	304.39	3,663.06	3.41	-3.40	-0.11
13,431.00	91.40	358.90	9,736.21	3,749.67	302.26	3,756.93	2.80	2.77	0.43
13,523.00	90.70	359.90	9,734.53	3,841.65	301.30	3,848.84	1.33	-0.76	1.09
13,617.00	90.60	1.80	9,733.46	3,935.63	302.69	3,942.82	2.02	-0.11	2.02
13,710.00	89.30	0.90	9,733.54	4,028.60	304.88	4,035.81	1.70	-1.40	-0.97
13,804.00	88.80	1.10	9,735.10	4,122.58	306.52	4,129.79	0.57	-0.53	0.21
13,899.00	89.70	359.40	9,736.34	4,217.56	306.94	4,224.75	2.02	0.95	-1.79
13,993.00	88.10	359.20	9,738.15	4,311.53	305.79	4,318.65	1.72	-1.70	-0.21
14,086.00	89.00	359.40	9,740.50	4,404.50	304.65	4,411.54	0.99	0.97	0.22
14,180.00	91.00	358.70	9,740.50	4,498.48	303.10	4,505.43	2.25	2.13	-0.74
14,274.00	89.80	358.00	9,739.84	4,592.43	300.39	4,599.27	1.48	-1.28	-0.74
14,367.00	86.80	358.70	9,742.60	4,685.34	297.71	4,692.06	3.31	-3.23	0.75
14,460.00	91.70	358.00	9,743.82	4,778.27	295.04	4,784.87	5.32	5.27	-0.75
14,554.00	91.50	359.60	9,741.20	4,872.21	293.07	4,878.71	1.71	-0.21	1.70
14,648.00	88.30	0.40	9,741.36	4,966.19	293.07	4,972.66	3.51	-3.40	0.85
14,741.00	87.40	0.00	9,744.85	5,059.13	293.39	5,065.56	1.06	-0.97	-0.43
14,835.00	87.10	359.40	9,749.36	5,153.02	292.90	5,159.39	0.71	-0.32	-0.64
14,928.00	90.90	358.00	9,750.98	5,245.96	290.79	5,252.23	4.35	4.09	-1.51
15,022.00	88.10	358.00	9,751.80	5,339.89	287.51	5,346.03	2.98	-2.98	0.00
15,117.00	85.80	0.00	9,756.86	5,434.73	285.85	5,440.78	3.21	-2.42	2.11
15,212.00	84.70	359.80	9,764.72	5,529.40	285.69	5,535.40	1.18	-1.16	-0.21
15,307.00	86.10	1.20	9,772.34	5,624.09	286.52	5,630.07	2.08	1.47	1.47
15,402.00	89.20	0.70	9,776.24	5,718.98	288.09	5,724.97	3.31	3.26	-0.53
15,497.00	95.70	1.00	9,772.18	5,813.83	289.50	5,819.83	6.85	6.84	0.32
15,592.00	93.40	0.50	9,764.64	5,908.52	290.73	5,914.51	2.48	-2.42	-0.53
15,686.00	90.70	3.10	9,761.28	6,002.40	293.69	6,008.43	3.99	-2.87	2.77
15,781.00	91.30	4.40	9,759.62	6,097.18	299.90	6,103.35	1.51	0.63	1.37
15,875.00	88.80	1.90	9,759.54	6,191.02	305.06	6,197.30	3.76	-2.66	-2.66



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,970.00	88.60	1.20	9,761.70	6,285.96	307.63	6,292.28	0.77	-0.21	-0.74
16,065.00	89.80	0.50	9,763.02	6,380.94	309.04	6,387.26	1.46	1.26	-0.74
16,159.00	89.00	0.70	9,764.01	6,474.93	310.03	6,481.24	0.88	-0.85	0.21
16,255.00	93.50	3.30	9,761.91	6,570.81	313.37	6,577.18	5.41	4.69	2.71
16,350.00	93.70	2.90	9,755.95	6,665.49	318.50	6,671.96	0.47	0.21	-0.42
16,445.00	90.20	3.10	9,752.71	6,760.29	323.47	6,766.87	3.69	-3.68	0.21
16,540.00	88.70	4.60	9,753.63	6,855.06	329.85	6,861.79	2.23	-1.58	1.58
16,634.00	89.80	1.90	9,754.86	6,948.89	335.17	6,955.74	3.10	1.17	-2.87
16,730.00	88.80	0.20	9,756.03	7,044.86	336.93	7,051.72	2.05	-1.04	-1.77
16,824.00	91.70	359.40	9,755.62	7,138.85	336.60	7,145.66	3.20	3.09	-0.85
16,919.00	92.00	358.30	9,752.55	7,233.78	334.70	7,240.49	1.20	0.32	-1.16
17,013.00	91.10	356.90	9,750.01	7,327.66	330.76	7,334.21	1.77	-0.96	-1.49
17,108.00	95.20	359.10	9,744.79	7,422.43	327.45	7,428.85	4.90	4.32	2.32
17,203.00	93.50	359.50	9,737.59	7,517.15	326.29	7,523.49	1.84	-1.79	0.42
17,298.00	90.60	0.70	9,734.19	7,612.08	326.46	7,618.38	3.30	-3.05	1.26
17,395.00	86.00	359.50	9,737.06	7,709.01	326.63	7,715.27	4.90	-4.74	-1.24
17,489.00	86.20	358.50	9,743.46	7,802.77	324.99	7,808.95	1.08	0.21	-1.06
17,584.00	86.60	359.50	9,749.42	7,897.57	323.34	7,903.66	1.13	0.42	1.05
17,678.00	89.20	0.10	9,752.87	7,991.50	323.01	7,997.53	2.84	2.77	0.64
17,774.00	89.40	0.20	9,754.04	8,087.49	323.26	8,093.49	0.23	0.21	0.10
17,868.00	90.40	0.50	9,754.20	8,181.49	323.84	8,187.47	1.11	1.06	0.32
17,962.00	94.10	1.90	9,750.51	8,275.38	325.80	8,281.37	4.21	3.94	1.49
18,057.00	93.60	359.00	9,744.13	8,370.15	326.55	8,376.13	3.09	-0.53	-3.05
18,152.00	90.10	358.80	9,741.07	8,465.07	324.72	8,470.95	3.69	-3.68	-0.21
18,246.00	89.70	358.30	9,741.23	8,559.04	322.35	8,564.81	0.68	-0.43	-0.53
18,341.00	90.70	357.50	9,740.90	8,653.97	318.86	8,659.60	1.35	1.05	-0.84
18,435.00	89.50	355.70	9,740.74	8,747.80	313.29	8,753.22	2.30	-1.28	-1.91
18,530.00	89.90	358.30	9,741.23	8,842.66	308.32	8,847.90	2.77	0.42	2.74
18,625.00	89.10	357.40	9,742.06	8,937.59	304.76	8,942.68	1.27	-0.84	-0.95
18,720.00	91.40	359.10	9,741.65	9,032.53	301.85	9,037.50	3.01	2.42	1.79
18,814.00	89.40	356.40	9,740.99	9,126.44	298.16	9,131.26	3.57	-2.13	-2.87
18,909.00	89.20	358.80	9,742.15	9,221.34	294.19	9,226.01	2.53	-0.21	2.53
19,004.00	93.00	1.00	9,740.33	9,316.30	294.02	9,320.92	4.62	4.00	2.32
19,098.00	92.20	1.00	9,736.06	9,410.19	295.66	9,414.82	0.85	-0.85	0.00
19,193.00	92.80	0.60	9,731.92	9,505.09	296.98	9,509.71	0.76	0.63	-0.42
19,287.00	90.70	1.70	9,729.05	9,599.02	298.87	9,603.66	2.52	-2.23	1.17
19,383.00	91.40	2.10	9,727.29	9,694.95	302.05	9,699.64	0.84	0.73	0.42
19,477.00	88.50	1.20	9,727.37	9,788.90	304.76	9,793.63	3.23	-3.09	-0.96
19,572.00	88.00	0.30	9,730.27	9,883.85	306.00	9,888.57	1.08	-0.53	-0.95
19,666.00	92.30	1.60	9,730.03	9,977.81	307.56	9,982.54	4.78	4.57	1.38
19,761.00	89.80	359.80	9,728.29	10,072.78	308.72	10,077.50	3.24	-2.63	-1.89
19,856.00	86.50	358.40	9,731.35	10,167.70	307.23	10,172.34	3.77	-3.47	-1.47
19,888.75	86.69	358.21	9,733.30	10,200.38	306.26	10,204.97	0.82	0.58	-0.58



Total Directional Services

Survey Report



Company:	Matador Resources Company	Local Co-ordinate Reference:	Well Ray State Com 203H
Project:	Eddy County, NM (NAD27-Grid)	TVD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Site:	Ray State Com	MD Reference:	2962' GE + 28.5' KB @ 2990.50usft
Well:	Ray State Com 203H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
330' FNL HL Crossing									
19,942.00	87.00	357.90	9,736.23	10,253.52	304.46	10,258.04	0.82	0.58	-0.58
19,980.22	87.00	357.90	9,738.23	10,291.66	303.06	10,296.12	0.00	0.00	0.00
PBHL (Ray State Com 203H)									
19,995.00	87.00	357.90	9,739.00	10,306.41	302.52	10,310.85	0.00	0.00	0.00
BHL									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,841.25	9,720.98	172.75	389.39	330' FSL HL Crossing	
9,921.77	9,753.31	246.09	386.86	75 INC Marker	
19,888.75	9,733.30	10,200.38	306.26	330' FNL HL Crossing	
19,995.00	9,739.00	10,306.41	302.52	BHL	

Checked By: _____	Approved By: _____	Date: _____
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