



PHOENIX
TECHNOLOGY SERVICES

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 9 2015

RECEIVED

March 4, 2015

Oil Conservation Division
State of New Mexico
1625 N. French Drive
Hobbs, New Mexico 88240

Dear District 2 - Artesia

Re: Matador Resources
Guitar 10-24S-28E RB 202H
Eddy County, New Mexico
API #30-015-42660
Job No. 1411820

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Tyler Landers	202H	8,775	14,080	12/14/14	12/26/14	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Bobbi Jo Jorgensen

Bobbi Jo Jorgensen
Operations Administrator

BJD 3/13/15
RECEIVED
NMOCD

Certified mail receipt number: 7014 2120 0004 3423 7163

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1411820

ENERGY COMPANY

Matador Resources

WELL NAME

Guitar 10-24S-28E-RB-202H

COUNTY & STATE

Eddy County New Mexico

API WELL NUMBER

30-015-42660

PROPOSED DIRECTION

264.72

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
8700	8678.09	2.52	223.29	209.99 S	43.31 E	Gyro

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
14-Dec-14	8775	2.80	187.40

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
26-Dec-14	14080	91.40	268.50

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
26-Dec-14	14150	90.50	268.50

Tyler Landers

PRINT YOUR NAME ABOVE

Tyler Landers

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	7.42
DECLINATION OR GRID	GRID

12/27/2014

TODAY'S DATE

MWD SUPERVISOR 1

Tyler Landers / John Nivens

DIRECTIONAL DRILLER 1

Van Johnson

MWD SUPERVISOR 2

Alex Boggess

DIRECTIONAL DRILLER 2

Skip Smith

12329 Cutten Rd., Houston, Texas 777066

(713)337-0600 (Voice), (713)337-0599 (Fax)



NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 9 2015

RECEIVED

Matador Resources

Eddy County, New Mexico (NAD27)

Guitar 10-24S-28E RB

#202H

Wellbore #1 Job #1411820

Survey: Phoenix MWD Surveys

Standard Survey Report

04 March, 2015



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #202H
Project:	Eddy County, New Mexico (NAD27)	TVD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
Site:	Guitar 10-24S-28E RB	MD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
Well:	#202H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411820	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 203)	Database:	Compass 5000 GCR

Project	Eddy County, New Mexico (NAD27)		
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	Guitar 10-24S-28E RB		
Site Position:		Northing:	449,226.00 usft
From:	Map.	Easting:	582,320.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 14' 5.13204 N
		Longitude:	104° 4' 1.56093 W
		Grid Convergence:	0.14 °

Well	#202H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32° 14' 5.13204 N
		Longitude:	104° 4' 1.56093 W
		Ground Level:	2,993.00 usft

Wellbore	Wellbore #1 Job #1411820		
Magnetics:	Model Name	Sample Date	Declination
	BGGM2014	12/5/2014	7.56
			Dip Angle
			60.02
			Field Strength
			48,174

Design	Surveys (Patterson 203)		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			264.72

Survey Program	Date	12/27/2014		
From	To	Survey (Wellbore)	Tool Name	Description
100.00	8,700.00	MS Gyro Surveys (Wellbore #1 Job #1411	NS-GYRO-MS	North sensing gyrocompassing m/s
8,775.00	14,150.00	Phoenix MWD Surveys (Wellbore #1 Job #	PHX+MWD+BGGM	PHX+MWD+BGGM v3:standard declination

Survey										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
8,700.00	2.52	223.29	8,678.09	-209.99	43.31	-23.80	0.00	0.00	0.00	
Tie-In to MS Gyro										
8,775.00	2.80	187.40	8,753.02	-213.01	41.94	-22.16	2.21	0.37	-47.85	
First Phoenix MWD Survey										
8,807.00	3.80	219.60	8,784.96	-214.60	41.17	-21.24	6.46	3.13	100.63	
8,839.00	7.00	232.90	8,816.82	-216.60	38.93	-18.84	10.67	10.00	41.56	
8,870.00	8.40	250.40	8,847.54	-218.49	35.29	-15.04	8.76	4.52	56.45	
8,902.00	12.70	259.00	8,879.00	-219.95	29.64	-9.27	14.27	13.44	26.88	
8,933.00	16.40	263.10	8,909.00	-221.13	21.94	-1.50	12.38	11.94	13.23	



Survey Report

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Project:	Eddy County, New Mexico (NAD27)	TVD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
Site:	Guitar 10-24S-28E RB	MD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
Well:	#202H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411820	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 203)	Database:	Compass 5000 GCR

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)	
8,965.00	18.10	264.20	8,939.56	-222.17	12.51	7.98	5.41	5.31	3.44	
8,997.00	17.40	262.30	8,970.04	-223.32	2.83	17.74	2.84	-2.19	-5.94	
9,028.00	18.20	269.90	8,999.55	-223.95	-6.61	27.19	7.92	2.58	24.52	
9,060.00	21.40	268.50	9,029.66	-224.11	-17.45	37.99	10.11	10.00	-4.38	
9,091.00	24.20	271.10	9,058.23	-224.13	-29.45	49.96	9.60	9.03	8.39	
9,123.00	28.00	274.20	9,086.97	-223.46	-43.51	63.89	12.61	11.88	9.69	
9,155.00	30.90	274.30	9,114.83	-222.29	-59.20	79.40	9.06	9.06	0.31	
9,186.00	32.90	274.90	9,141.15	-220.97	-75.53	95.54	6.53	6.45	1.94	
9,217.00	35.10	272.40	9,166.85	-219.88	-92.82	112.66	8.41	7.10	-8.06	
9,249.00	37.90	271.20	9,192.57	-219.29	-111.84	131.55	9.03	8.75	-3.75	
9,280.00	39.60	270.70	9,216.74	-218.97	-131.24	150.84	5.58	5.48	-1.61	
9,312.00	40.00	270.60	9,241.33	-218.74	-151.73	171.21	1.27	1.25	-0.31	
9,344.00	41.40	269.80	9,265.59	-218.67	-172.59	191.98	4.67	4.38	-2.50	
9,375.00	42.30	267.00	9,288.68	-219.25	-193.26	212.62	6.69	2.90	-9.03	
9,407.00	44.60	265.40	9,311.91	-220.71	-215.22	234.62	7.97	7.19	-5.00	
9,439.00	46.80	263.50	9,334.26	-222.94	-238.01	257.51	8.08	6.88	-5.94	
9,471.00	49.00	262.40	9,355.71	-225.85	-261.57	281.24	7.33	6.88	-3.44	
9,502.00	50.10	262.20	9,375.83	-229.01	-284.95	304.81	3.58	3.55	-0.65	
9,534.00	51.90	261.90	9,395.96	-232.45	-309.58	329.65	5.67	5.63	-0.94	
9,566.00	55.30	261.20	9,414.95	-236.24	-335.05	355.37	10.77	10.63	-2.19	
9,598.00	58.50	261.10	9,432.42	-240.37	-361.53	382.12	10.00	10.00	-0.31	
9,629.00	61.40	261.40	9,447.95	-244.45	-388.05	408.90	9.39	9.35	0.97	
9,661.00	64.40	262.30	9,462.52	-248.48	-416.25	437.35	9.70	9.38	2.81	
9,692.00	68.10	263.10	9,475.00	-252.08	-444.39	465.70	12.17	11.94	2.58	
9,746.00	69.70	264.10	9,494.44	-257.70	-494.45	516.07	3.43	2.96	1.85	
9,778.00	72.50	265.00	9,504.81	-260.57	-524.58	546.34	9.15	8.75	2.81	
9,809.00	72.70	264.20	9,514.08	-263.35	-554.03	575.92	2.55	0.65	-2.58	
9,841.00	72.80	263.90	9,523.57	-266.52	-584.43	606.48	0.95	0.31	-0.94	
9,870.00	72.60	263.20	9,532.19	-269.63	-611.94	634.16	2.41	-0.69	-2.41	
9,902.00	72.20	261.50	9,541.87	-273.69	-642.17	664.63	5.22	-1.25	-5.31	
9,933.00	73.30	261.50	9,551.06	-278.07	-671.45	694.19	3.55	3.55	0.00	
9,962.00	74.10	259.80	9,559.20	-282.59	-698.91	721.95	6.27	2.76	-5.86	
9,994.00	75.20	260.30	9,567.67	-287.92	-729.31	752.71	3.75	3.44	1.56	
10,026.00	81.30	260.80	9,574.19	-293.06	-760.20	783.94	19.12	19.06	1.56	
10,057.00	88.60	260.90	9,576.91	-297.97	-790.66	814.73	23.55	23.55	0.32	
10,089.00	93.60	261.70	9,576.30	-302.81	-822.28	846.66	15.82	15.63	2.50	
10,125.00	93.50	262.40	9,574.07	-307.78	-857.87	882.55	1.96	-0.28	1.94	
10,219.00	93.70	262.50	9,568.17	-320.10	-950.87	976.29	0.24	0.21	0.11	
10,313.00	93.70	262.50	9,562.10	-332.35	-1,043.87	1,070.02	0.00	0.00	0.00	
10,403.00	93.00	263.40	9,556.84	-343.37	-1,133.03	1,159.82	1.27	-0.78	1.00	
10,497.00	92.00	265.70	9,552.74	-352.29	-1,226.51	1,253.73	2.67	-1.06	2.45	
10,591.00	89.70	267.70	9,551.35	-357.70	-1,320.34	1,347.65	3.24	-2.45	2.13	
10,685.00	90.80	268.60	9,550.94	-360.74	-1,414.28	1,441.48	1.51	1.17	0.96	



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #202H
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Site:	Guitar 10-24S-28E RB	MD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
Well:	#202H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411820	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 203)	Database:	Compass 5000 GCR

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)	
10,779.00	89.40	270.60	9,550.77	-361.39	-1,508.27	1,535.13	2.60	-1.49	2.13	
10,874.00	88.80	271.50	9,552.26	-359.65	-1,603.24	1,629.54	1.14	-0.63	0.95	
10,968.00	88.10	271.60	9,554.81	-357.11	-1,697.17	1,722.84	0.75	-0.74	0.11	
11,062.00	88.40	272.30	9,557.68	-353.91	-1,791.08	1,816.04	0.81	0.32	0.74	
11,156.00	88.80	273.10	9,559.97	-349.49	-1,884.94	1,909.11	0.95	0.43	0.85	
11,250.00	90.20	271.00	9,560.79	-346.12	-1,978.87	2,002.33	2.68	1.49	-2.23	
11,346.00	90.60	270.90	9,560.12	-344.53	-2,074.86	2,097.76	0.43	0.42	-0.10	
11,440.00	92.50	270.00	9,557.58	-343.79	-2,168.81	2,191.25	2.24	2.02	-0.96	
11,535.00	91.40	270.20	9,554.35	-343.63	-2,263.76	2,285.77	1.18	-1.16	0.21	
11,629.00	92.50	268.90	9,551.15	-344.37	-2,357.70	2,379.38	1.81	1.17	-1.38	
11,723.00	91.00	268.30	9,548.28	-346.66	-2,451.62	2,473.12	1.72	-1.60	-0.64	
11,817.00	93.70	267.40	9,544.43	-350.18	-2,545.47	2,566.89	3.03	2.87	-0.96	
11,912.00	93.80	267.30	9,538.21	-354.57	-2,640.16	2,661.59	0.15	0.11	-0.11	
12,007.00	93.30	267.80	9,532.33	-358.62	-2,734.89	2,756.29	0.74	-0.53	0.53	
12,101.00	93.10	269.10	9,527.08	-361.16	-2,828.71	2,849.94	1.40	-0.21	1.38	
12,195.00	90.80	269.60	9,523.88	-362.22	-2,922.64	2,943.57	2.50	-2.45	0.53	
12,289.00	90.40	269.40	9,522.90	-363.04	-3,016.63	3,037.24	0.48	-0.43	-0.21	
12,383.00	88.00	268.60	9,524.21	-364.68	-3,110.60	3,130.96	2.69	-2.55	-0.85	
12,477.00	90.00	267.80	9,525.85	-367.64	-3,204.53	3,224.77	2.29	2.13	-0.85	
12,571.00	91.00	267.80	9,525.03	-371.24	-3,298.46	3,318.63	1.06	1.06	0.00	
12,666.00	94.90	269.50	9,520.14	-373.48	-3,393.29	3,413.26	4.48	4.11	1.79	
12,760.00	93.40	269.40	9,513.34	-374.38	-3,487.03	3,506.69	1.60	-1.60	-0.11	
12,854.00	91.30	269.10	9,509.49	-375.61	-3,580.94	3,600.31	2.26	-2.23	-0.32	
12,949.00	90.70	269.20	9,507.83	-377.02	-3,675.92	3,695.01	0.64	-0.63	0.11	
13,043.00	90.30	268.20	9,507.01	-379.15	-3,769.89	3,788.78	1.15	-0.43	-1.06	
13,137.00	91.00	268.60	9,505.94	-381.78	-3,863.84	3,882.58	0.86	0.74	0.43	
13,232.00	90.80	269.30	9,504.45	-383.52	-3,958.81	3,977.31	0.77	-0.21	0.74	
13,326.00	90.50	269.10	9,503.38	-384.83	-4,052.80	4,071.02	0.38	-0.32	-0.21	
13,420.00	90.30	268.80	9,502.73	-386.55	-4,146.78	4,164.76	0.38	-0.21	-0.32	
13,514.00	91.50	267.90	9,501.25	-389.26	-4,240.73	4,258.55	1.60	1.28	-0.96	
13,609.00	92.50	266.90	9,497.94	-393.56	-4,335.57	4,353.39	1.49	1.05	-1.05	
13,703.00	93.10	267.00	9,493.34	-398.56	-4,429.32	4,447.21	0.65	0.64	0.11	
13,797.00	93.30	267.10	9,488.10	-403.39	-4,523.05	4,540.98	0.24	0.21	0.11	
13,892.00	92.40	267.50	9,483.37	-407.86	-4,617.83	4,635.77	1.04	-0.95	0.42	
13,986.00	92.40	268.10	9,479.44	-411.47	-4,711.68	4,729.55	0.64	0.00	0.64	
14,080.00	91.40	268.50	9,476.32	-414.25	-4,805.58	4,823.31	1.15	-1.06	0.43	
Final Phoenix MWD Survey										
14,150.00	90.50	268.50	9,475.16	-416.08	-4,875.55	4,893.15	1.29	-1.29	0.00	
Projection to TD										



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #202H
Project:	Eddy County, New Mexico (NAD27)	TVD Reference:	KB: 25' @ 3018.00usft (Patterson 203)
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Well:	#202H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1411820	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 203)	Database:	Compass 5000 GCR

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
8,700.00	8,678.09	-209.99	43.31	Tie-In to MS Gyro
8,775.00	8,753.02	-213.01	41.94	First Phoenix MWD Survey
14,080.00	9,476.32	-414.25	-4,805.58	Final Phoenix MWD Survey
14,150.00	9,475.16	-416.08	-4,875.55	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone: (575) 353-6161 Fax: (575) 391-0720
 District II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1233 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

FORM C-102
 Revised August 1, 2011
 Submit one copy to appropriate
 District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name	
		75750		Culebra Bluff, Wolfcamp, South. (Gas)	
Property Code		Property Name			Well Number
		GUITAR 10-24S-28E RB			#202H
OCRID No.		Operator Name			Elevation
228937		MATADOR PRODUCTION COMPANY			2993'
10 Surface Location					
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the North/South line
H	10	24-S	28-E	-	1733'
				Feet from the East/West line	County
				204'	EDDY
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the North/South line
E	10	24-S	28-E	-	2305'
				Feet from the East/West line	County
				240'	EDDY
Dedicated Acres		Joint or Infill		Consolidation Code	
320.00				R-13667	

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.

BOTTOM HOLE LOCATION
 NEW MEXICO EAST
 NAD 1983
 X=5772403
 Y=445729
 LAT: N 32.233460
 LONG: W 104.082480

SURFACE LOCATION
 NEW MEXICO EAST
 NAD 1983
 X=582220
 Y=448226
 LAT: N 32.2347558
 LONG: W 104.0871061

LAST PERFORATION POINT
 NEW MEXICO EAST
 NAD 1983
 X=577542
 Y=445729
 LAT: N 32.2334156
 LONG: W 104.0825070

FIRST PERFORATION POINT
 NEW MEXICO EAST
 NAD 1983
 X=582095
 Y=448736
 LAT: N 32.2333952
 LONG: W 104.0873090

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this representation makes no warranty, express or implied, material interest in the land including the proposed bottom hole location or has a right to drill the well at this location pursuant to a contract with an owner of such a mineral or leasing interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *Chas O* Date: 9/18/14
 Printed Name: Clayton Sperich
 E-mail Address: csperich@matadorresources.com

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

Date of Survey: 09/15/2014
 Signature and Seal: *[Signature]*
 Certificate Number: 18329

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NM OIL CONSERVATION
 ARTESIA DISTRICT
 MAR 9 2015

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