



PHOENIX
TECHNOLOGY SERVICES

NM OIL CONSERVATION
ARTESIA DISTRICT

APR 03 2015

RECEIVED

March 12, 2015

Oil Conservation Division
State of New Mexico
811 S. First St.
Artesia, New Mexico 88210

3001542873

Dear District 2 - Artesia

Re: Matador Resources
Tiger 14-24S-28E-RB #224H WB1
Eddy County, New Mexico
API #30-015-42873
Job No. 1512691

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	
Michael Branson	224H	9,814	12,529	01/18/15	02/02/15	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

Certified mail receipt number: 7014 2120 0004 3423 7231

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1512691

OPERATOR

Matador Resources

WELL NAME

Tiger 14-24S-28E-RB #224H WB1

COUNTY & STATE

Eddy County, NM

API WELL NUMBER

30-015-42873

PROPOSED DIRECTION

269.13

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
9,680.0 ft	9,656.96 ft	1.93	145.58	-217.20 ft	188.22 ft	Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
18-Jan-15	9,814.00 ft	1.40	173.60

SURVEY INSTRUMENT

TYPE

Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
2-Feb-15	12,529.00 ft	87.70	269.70

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

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
2-Feb-15	12,584.00 ft	89.00	271.00

Michael Branson

PRINT YOUR NAME ABOVE

Michael Branson

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	7.39
DECLINATION OR GRID	GRID

2/2/2015

TODAY'S DATE

MWD SUPERVISOR 1

Michael Branson

DIRECTIONAL DRILLER 1

Van Johnson

MWD SUPERVISOR 2

Shelby Johnson

DIRECTIONAL DRILLER 2

Jon Dunlop

12329 Cutten Rd., Houston, Texas 777066

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



Matador Resources

Eddy County, New Mexico (NAD27)

Tiger 14-24S-28E RB

#224H

Wellbore #1 Job #1512691

Survey: Phoenix MWD Surveys

Standard Survey Report

12 March, 2015





Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #224H
Project:	Eddy County, New Mexico (NAD27)	TVD Reference:	RKB @ 3002.00usft (Patterson 203)
Site:	Tiger 14-24S-28E RB	MD Reference:	RKB @ 3002.00usft (Patterson 203)
Well:	#224H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1512691	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	Tiger 14-24S-28E RB			
Site Position:		Northing:	440,880.00 usft	Latitude: 32° 12' 42.40019 N
From:	Map	Easting:	587,752.00 usft	Longitude: 104° 2' 58.57422 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.15 °

Well	#224H			
Well Position	+N/-S	0.00 usft	Northing:	440,880.00 usft
	+E/-W	0.00 usft	Easting:	587,752.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 2,977.00 usft

Wellbore	Wellbore #1 Job #1512691				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	1/18/2015	7.54	59.99	48,147

Design	Surveys (Patterson 203)			
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	270.79

Survey Program	Date 3/12/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
135.50	9,680.00	VES Gyro Survey (Wellbore #1 Job #1512	NS-GYRO-MS	North sensing gyrocompassing m/s
9,814.00	12,584.00	Phoenix MWD Surveys (Wellbore #1 Job #	PHX+MWD+BGGM	PHX+MWD+BGGM v3:standard declination

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)	
9,680.00	1.93	146.58	9,656.96	-217.20	188.22	-191.20	0.00	0.00	0.00	
Tie-in to VES Gyros										
9,814.00	1.40	173.60	9,790.91	-220.71	189.65	-192.67	0.70	-0.40	20.16	
First Phoenix MWD Survey WB#1										
9,846.00	1.40	295.90	9,822.90	-220.93	189.34	-192.37	7.66	0.00	382.19	
9,877.00	5.30	298.00	9,853.84	-220.09	187.73	-190.75	12.58	12.58	6.77	
9,908.00	8.60	300.90	9,884.61	-218.23	184.48	-187.47	10.70	10.65	9.35	
9,939.00	11.70	295.10	9,915.12	-215.70	179.64	-182.60	10.52	10.00	-18.71	
9,971.00	14.90	292.40	9,946.26	-212.76	172.90	-175.81	10.18	10.00	-8.44	



Survey Report



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Site:	Tiger 14-24S-28E RB	MD Reference:	RKB @ 3002.00usft (Patterson 203)
Well:	#224H	North Reference:	Grid
Wellbore:	Wellbore #1 Job #1512691	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)
10,002.00	18.20	288.50	9,975.97	-209.70	164.62	-167.49	11.23	10.65	-12.58
10,034.00	21.10	285.00	10,006.11	-206.62	154.31	-157.15	9.78	9.06	-10.94
10,065.00	23.40	284.60	10,034.80	-203.63	142.97	-145.76	7.44	7.42	-1.29
10,097.00	25.00	287.10	10,063.98	-200.04	130.35	-133.10	5.94	5.00	7.81
10,128.00	27.20	286.40	10,091.82	-196.11	117.29	-119.99	7.17	7.10	-2.26
10,159.00	29.20	285.40	10,119.14	-192.10	103.20	-105.84	6.63	6.45	-3.23
10,190.00	31.90	285.70	10,145.83	-187.88	88.03	-90.61	8.72	8.71	0.97
10,221.00	34.30	286.10	10,171.80	-183.24	71.75	-74.27	7.77	7.74	1.29
10,253.00	36.20	283.40	10,197.93	-178.55	53.89	-56.34	7.68	5.94	-8.44
10,284.00	37.50	279.30	10,222.74	-174.90	35.67	-38.08	8.97	4.19	-13.23
10,316.00	40.00	275.30	10,247.70	-172.37	15.81	-18.18	11.05	7.81	-12.50
10,347.00	42.10	276.30	10,271.08	-170.31	-4.44	2.09	7.10	6.77	3.23
10,378.00	45.10	275.60	10,293.53	-168.10	-25.70	23.38	9.80	9.68	-2.26
10,410.00	47.40	276.30	10,315.65	-165.70	-48.69	46.40	7.36	7.19	2.19
10,441.00	48.20	273.70	10,336.48	-163.70	-71.57	69.30	6.73	2.58	-8.39
10,472.00	51.50	269.20	10,356.47	-163.13	-95.24	92.98	15.37	10.65	-14.52
10,504.00	53.80	269.20	10,375.88	-163.48	-120.67	118.41	7.19	7.19	0.00
10,535.00	55.70	269.90	10,393.77	-163.68	-145.99	143.72	6.40	6.13	2.26
10,566.00	57.00	271.00	10,410.95	-163.48	-171.79	169.52	5.13	4.19	3.55
10,598.00	59.30	271.90	10,427.84	-162.79	-198.96	196.70	7.57	7.19	2.81
10,629.00	62.00	272.20	10,443.03	-161.82	-225.96	223.71	8.75	8.71	0.97
10,661.00	64.80	272.20	10,457.36	-160.72	-254.55	252.31	8.75	8.75	0.00
10,706.00	69.00	275.90	10,475.01	-157.78	-295.82	293.62	12.01	9.33	8.22
10,738.00	74.50	276.10	10,485.03	-154.60	-326.03	323.87	17.20	17.19	0.63
10,769.00	81.80	276.40	10,491.39	-151.30	-356.17	354.05	23.57	23.55	0.97
10,800.00	85.70	276.40	10,494.77	-147.86	-386.79	384.71	12.58	12.58	0.00
10,832.00	86.60	276.70	10,496.92	-144.22	-418.51	416.48	2.96	2.81	0.94
10,863.00	87.50	276.90	10,498.51	-140.56	-449.25	447.27	2.97	2.90	0.65
10,895.00	90.00	276.50	10,499.21	-136.82	-481.02	479.09	7.91	7.81	-1.25
10,927.00	89.80	276.30	10,499.26	-133.26	-512.82	510.94	0.88	-0.63	-0.63
11,021.00	90.20	277.40	10,499.26	-122.05	-606.15	604.41	1.25	0.43	1.17
11,115.00	91.70	275.90	10,497.71	-111.16	-699.50	697.90	2.26	1.60	-1.60
11,209.00	89.80	273.40	10,496.48	-103.54	-793.17	791.67	3.34	-2.02	-2.66
11,303.00	88.80	271.20	10,497.62	-99.77	-887.08	885.62	2.57	-1.06	-2.34
11,397.00	90.10	269.40	10,498.53	-99.28	-981.07	979.61	2.36	1.38	-1.91
11,491.00	89.30	267.60	10,499.02	-101.74	-1,075.03	1,073.52	2.10	-0.85	-1.91
11,585.00	93.60	268.90	10,496.64	-104.61	-1,168.93	1,167.38	4.78	4.57	1.38
11,680.00	91.70	268.10	10,492.25	-107.10	-1,263.79	1,262.20	2.17	-2.00	-0.84
11,774.00	89.50	266.10	10,491.26	-111.85	-1,357.66	1,355.99	3.16	-2.34	-2.13
11,869.00	92.50	268.60	10,489.61	-116.24	-1,452.52	1,450.78	4.11	3.16	2.63
11,963.00	95.70	271.80	10,482.88	-115.92	-1,546.26	1,544.51	4.81	3.40	3.40
12,058.00	93.40	272.50	10,475.35	-112.37	-1,640.88	1,639.18	2.53	-2.42	0.74
12,152.00	90.60	271.20	10,472.07	-109.34	-1,734.77	1,733.09	3.28	-2.98	-1.38



Survey Report



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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)	
12,246.00	91.40	269.70	10,470.43	-108.60	-1,828.75	1,827.07	1.81	0.85	-1.60	
12,340.00	83.30	268.90	10,474.77	-109.74	-1,922.56	1,920.86	8.66	-8.62	-0.85	
12,434.00	85.90	266.40	10,483.62	-113.58	-2,016.05	2,014.29	3.83	2.77	-2.66	
12,529.00	87.70	269.70	10,488.92	-116.81	-2,110.83	2,109.02	3.95	1.89	3.47	
Final Phoenix MWD Survey WB#1										
12,584.00	89.00	271.00	10,490.50	-116.47	-2,165.80	2,163.99	3.34	2.36	2.36	
Projection to TD WB#1										

Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,680.00	9,656.96	-217.20	188.22	Tie-in to VES Gyros	
9,814.00	9,790.91	-220.71	189.65	First Phoenix MWD Survey WB#1	
12,529.00	10,488.92	-116.81	-2,110.83	Final Phoenix MWD Survey WB#1	
12,584.00	10,490.50	-116.47	-2,165.80	Projection to TD WB#1	

Checked By: _____ Approved By: _____ Date: _____