



PHOENIX
TECHNOLOGY SERVICES

October 29, 2015

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

Dear District 2 - Artesia

Re: Matador Resources
Janie Conner 13-24S-28E RB #224H
Eddy County, New Mexico
API #30-015-43037
Job No. 1514028

NM OIL CONSERVATION
ARTESIA DISTRICT
NOV 09 2015

RECEIVED

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	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Chris Roe	224H	9,869	15,422	09/05/15	09/27/15	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,
Claudia Carreon

Claudia Carreon
Operations Administrator

Certified mail receipt number: 7015 0640 0000 9907 5173

Provide survey surface to 9869'

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1514028

ENERGY COMPANY

Matador Resources

WELL NAME Janie Conner 13-24S-28E RB 224H

COUNTY & STATE Eddy County, New Mexico

API WELL NUMBER

30-015-43037

PROPOSED DIRECTION

90.33°

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
9,811.72 ft	9,796.44 ft	1.54°	189.60°	19.17 ft	132.05 ft	Gyro

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
5-Sep-15	9,869.00 ft	2.2°	173.1°

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
27-Sep-15	15,422.00 ft	97.9°	92.5°

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
27-Sep-15	15,490.00 ft	97.9°	92.5°

Chris Roe

PRINT YOUR NAME ABOVE

Chris Roe

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	7.28
DECLINATION OR GRID	GRID

9/27/2015

TODAY'S DATE

MWD SUPERVISOR 1

Chris Roe

DIRECTIONAL DRILLER 1

Dustin Barnett

MWD SUPERVISOR 2

Greg Duchow

DIRECTIONAL DRILLER 2

Kevin Ho

12329 Cutten Rd., Houston, Texas 777066 (713)337-0600 (Voice), (713)337-0599 (Fax)



NM OIL CONSERVATION
ARTESIA DISTRICT

NOV 09 2015

RECEIVED

Matador Resources

Eddy County, NM (NAD27 NME)

Janie Conner 13-24S-28E RB

224H

OH / Job 1514028

Survey: Phoenix MWD Surveys

Standard Survey Report

29 October, 2015





Phoenix Technology Services LP

Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well 224H
Project:	Eddy County, NM (NAD27 NME)	TVD Reference:	RKB @ 3005.50usft (Patterson 297)
Site:	Janie Conner 13-24S-28E RB	MD Reference:	RKB @ 3005.50usft (Patterson 297)
Well:	224H	North Reference:	Grid
Wellbore:	OH / Job 1514028	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Project	Eddy County, NM (NAD27 NME)		
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		Janie Conner 13-24S-28E RB			
Site Position:		Northing:	440,790.00 usft	Latitude:	32° 12' 41.50948 N
From:	Map	Easting:	587,754.00 usft	Longitude:	104° 2' 58.55371 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:	440,820.00 usft	Latitude:	32° 12' 41.80639 N
	+E/-W	0.00 usft	Easting:	587,753.00 usft	Longitude:	104° 2' 58.56443 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	2,978.00 usft

Wellbore	OH / Job 1514028				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	8/13/2015	7.43	60.07	48,307

Design	Surveys (Patterson 297)				
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	90.33	

Survey Program	Date	10/29/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
75.24	9,811.72	VES Gyro Survey (OH / Job 1514028)	NS-GYRO-MS	North sensing gyrocompassing m/s	
9,869.00	15,490.00	Phoenix MWD Surveys (OH / Job 1514028)	PHX+MWD+HDGM	PHX+OWSG MWD + HDGM	

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)	
9,811.72	1.54	189.60	9,796.44	19.17	132.05	131.94	0.00	0.00	0.00	
Tie-in to VES Gyros										
9,869.00	2.20	173.10	9,853.69	17.32	132.05	131.95	1.48	1.15	-28.81	
First Phoenix Survey										
9,890.00	2.30	170.80	9,874.67	16.50	132.17	132.07	0.64	0.48	-10.95	
9,922.00	2.50	171.50	9,906.64	15.18	132.38	132.29	0.63	0.63	2.19	
9,953.00	3.00	163.10	9,937.61	13.73	132.71	132.63	2.07	1.61	-27.10	
9,984.00	4.80	139.50	9,968.53	11.97	133.79	133.72	7.66	5.81	-76.13	
10,015.00	7.60	127.30	9,999.35	9.74	136.26	136.20	9.93	9.03	-39.35	



Phoenix Technology Services LP

Survey Report



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Site:	Janie Conner 13-24S-28E RB	MD Reference:	RKB @ 3005.50usft (Patterson 297)
Well:	224H	North Reference:	Grid
Wellbore:	OH / Job 1514028	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	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)
10,046.00	10.20	114.90	10,029.98	7.34	140.38	140.34	10.38	8.39	-40.00
10,078.00	12.90	106.10	10,061.33	5.16	146.39	146.36	10.05	8.44	-27.50
10,109.00	15.80	101.10	10,091.36	3.39	153.86	153.83	10.16	9.35	-16.13
10,140.00	18.00	97.30	10,121.02	1.97	162.75	162.74	7.94	7.10	-12.26
10,171.00	19.20	94.50	10,150.40	0.96	172.58	172.57	4.82	3.87	-9.03
10,203.00	20.80	94.60	10,180.47	0.09	183.49	183.49	5.00	5.00	0.31
10,234.00	22.30	98.00	10,209.30	-1.17	194.80	194.81	6.29	4.84	10.97
10,265.00	24.00	99.70	10,237.81	-3.05	206.84	206.86	5.89	5.48	5.48
10,296.00	27.70	97.40	10,265.70	-5.04	220.21	220.23	12.36	11.94	-7.42
10,327.00	30.60	97.30	10,292.77	-6.97	235.18	235.22	9.36	9.35	-0.32
10,358.00	34.20	97.80	10,318.94	-9.16	251.65	251.69	11.64	11.61	1.61
10,390.00	37.90	96.80	10,344.81	-11.54	270.32	270.38	11.71	11.56	-3.13
10,421.00	41.80	96.70	10,368.60	-13.88	290.05	290.12	12.58	12.58	-0.32
10,452.00	45.00	97.50	10,391.13	-16.51	311.18	311.27	10.47	10.32	2.58
10,483.00	48.30	98.90	10,412.40	-19.74	333.48	333.59	11.14	10.65	4.52
10,514.00	51.80	99.80	10,432.31	-23.60	356.93	357.06	11.51	11.29	2.90
10,546.00	55.30	99.50	10,451.32	-27.91	382.30	382.46	10.86	10.84	-0.94
10,577.00	59.00	99.60	10,468.13	-32.23	407.98	408.16	11.94	11.94	0.32
10,608.00	62.30	98.80	10,483.32	-36.55	434.65	434.85	10.88	10.65	-2.58
10,639.00	66.00	98.30	10,496.83	-40.70	462.23	462.46	12.02	11.94	-1.61
10,670.00	70.20	97.80	10,508.39	-44.72	490.70	490.95	13.63	13.55	-1.61
10,768.00	78.90	97.30	10,534.48	-57.11	584.26	584.57	8.89	8.88	-0.51
10,770.00	79.07	97.16	10,534.86	-57.36	586.20	586.52	10.92	8.36	-7.15
FPP HL Crossing: 10770' MD									
10,799.00	81.50	95.10	10,539.75	-60.41	614.62	614.96	10.92	8.39	-7.09
10,831.00	82.70	94.20	10,544.15	-62.98	646.21	646.56	4.67	3.75	-2.81
10,863.00	89.10	93.60	10,546.44	-65.15	678.04	678.40	20.09	20.00	-1.88
10,917.00	87.40	93.20	10,548.09	-68.35	731.92	732.30	3.23	-3.15	-0.74
11,012.00	88.40	93.80	10,551.57	-74.14	826.67	827.09	1.23	1.05	0.63
11,106.00	92.10	96.80	10,551.16	-82.82	920.24	920.71	5.07	3.94	3.19
11,201.00	86.50	91.70	10,552.32	-89.86	1,014.91	1,015.41	7.97	-5.89	-5.37
11,296.00	85.40	90.00	10,559.03	-91.27	1,109.65	1,110.16	2.13	-1.16	-1.79
11,390.00	84.10	90.50	10,567.63	-91.68	1,203.26	1,203.76	1.48	-1.38	0.53
11,484.00	88.40	90.40	10,573.78	-92.41	1,297.03	1,297.54	4.58	4.57	-0.11
11,579.00	93.00	92.00	10,572.62	-94.40	1,391.97	1,392.49	5.13	4.84	1.68
11,673.00	89.10	91.70	10,570.89	-97.43	1,485.89	1,486.43	4.16	-4.15	-0.32
11,768.00	92.30	92.30	10,569.73	-100.75	1,580.81	1,581.37	3.43	3.37	0.63
11,862.00	89.00	92.90	10,568.67	-105.01	1,674.70	1,675.27	3.57	-3.51	0.64
11,957.00	88.80	94.40	10,570.49	-111.06	1,769.48	1,770.09	1.59	-0.21	1.58
12,051.00	87.60	98.20	10,573.44	-121.36	1,862.85	1,863.52	4.24	-1.28	4.04
12,122.00	88.00	101.90	10,576.17	-133.74	1,932.70	1,933.44	5.24	0.56	5.21
12,217.00	87.70	89.60	10,579.75	-143.24	2,026.97	2,027.76	12.94	-0.32	-12.95
12,332.00	88.40	90.20	10,583.66	-143.04	2,141.90	2,142.69	0.80	0.61	0.52
12,426.00	88.60	81.90	10,586.13	-136.57	2,235.57	2,236.32	8.83	0.21	-8.83



Phoenix Technology Services LP Survey Report



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Site:	Janie Conner 13-24S-28E RB	MD Reference:	RKB @ 3005.50usft (Patterson 297)
Well:	224H	North Reference:	Grid
Wellbore:	OH / Job 1514028	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	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)
12,521.00	88.60	81.50	10,588.45	-122.86	2,329.54	2,330.21	0.42	0.00	-0.42
12,615.00	88.70	87.30	10,590.66	-113.69	2,423.03	2,423.64	6.17	0.11	6.17
12,710.00	86.00	85.40	10,595.06	-107.65	2,517.72	2,518.30	3.47	-2.84	-2.00
12,805.00	81.00	81.50	10,605.81	-96.91	2,611.45	2,611.96	6.66	-5.26	-4.11
12,899.00	79.80	82.10	10,621.49	-83.69	2,703.18	2,703.62	1.42	-1.28	0.64
12,994.00	83.40	77.90	10,635.37	-67.36	2,795.70	2,796.04	5.79	3.79	-4.42
13,088.00	89.60	77.90	10,641.11	-47.70	2,887.39	2,887.62	6.60	6.60	0.00
13,182.00	93.30	86.00	10,638.72	-34.55	2,980.34	2,980.49	9.47	3.94	8.62
13,276.00	92.00	89.50	10,634.38	-30.87	3,074.15	3,074.28	3.97	-1.38	3.72
13,371.00	89.30	90.00	10,633.30	-30.45	3,169.13	3,169.26	2.89	-2.84	0.53
13,465.00	88.80	89.80	10,634.86	-30.29	3,263.12	3,263.24	0.57	-0.53	-0.21
13,560.00	90.30	89.10	10,635.60	-29.38	3,358.11	3,358.22	1.74	1.58	-0.74
13,654.00	90.20	91.30	10,635.19	-29.70	3,452.10	3,452.22	2.34	-0.11	2.34
13,749.00	89.00	90.40	10,635.86	-31.11	3,547.09	3,547.21	1.58	-1.26	-0.95
13,843.00	89.60	91.30	10,637.00	-32.51	3,641.07	3,641.20	1.15	0.64	0.96
13,938.00	91.10	91.80	10,636.42	-35.08	3,736.03	3,736.17	1.66	1.58	0.53
14,035.00	92.20	91.20	10,633.63	-37.62	3,832.95	3,833.11	1.29	1.13	-0.62
14,130.00	86.50	86.80	10,634.71	-35.96	3,927.87	3,928.01	7.58	-6.00	-4.63
14,224.00	90.10	88.60	10,637.50	-32.19	4,021.73	4,021.85	4.28	3.83	1.91
14,319.00	86.50	87.60	10,640.32	-29.05	4,116.62	4,116.72	3.93	-3.79	-1.05
14,413.00	87.30	90.80	10,645.40	-27.74	4,210.46	4,210.55	3.50	0.85	3.40
14,508.00	91.90	94.60	10,646.06	-32.21	4,305.31	4,305.43	6.28	4.84	4.00
14,603.00	88.70	94.60	10,645.57	-39.83	4,399.99	4,400.15	3.37	-3.37	0.00
14,697.00	89.50	95.60	10,647.04	-48.18	4,493.61	4,493.81	1.36	0.85	1.06
14,791.00	88.70	96.30	10,648.52	-57.93	4,587.09	4,587.35	1.13	-0.85	0.74
14,886.00	86.60	96.40	10,652.41	-68.42	4,681.42	4,681.74	2.21	-2.21	0.11
14,980.00	94.60	98.80	10,651.43	-80.84	4,774.51	4,774.89	8.88	8.51	2.55
15,074.00	96.70	96.40	10,642.18	-93.22	4,867.22	4,867.67	3.38	2.23	-2.55
15,168.00	97.60	95.00	10,630.47	-102.48	4,960.02	4,960.53	1.76	0.96	-1.49
15,264.00	97.30	93.40	10,618.03	-109.45	5,054.95	5,055.50	1.68	-0.31	-1.67
15,358.00	96.70	93.50	10,606.57	-115.07	5,148.08	5,148.66	0.65	-0.64	0.11
15,405.00	97.58	92.77	10,600.73	-117.61	5,194.65	5,195.24	2.43	1.88	-1.56
LPP HL Crossing: 15405' MD									
15,422.00	97.90	92.50	10,598.44	-118.39	5,211.47	5,212.07	2.43	1.87	-1.57
Final Phoenix Survey									
15,490.00	97.90	92.50	10,589.09	-121.33	5,278.76	5,279.38	0.00	0.00	0.00
Projection to TD									



Phoenix Technology Services LP
Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well 224H
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Wellbore:	OH / Job 1514028	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,811.72	9,796.44	19.15	132.14	Tie-in to VES Gyros
9,869.00	9,853.69	17.30	132.14	First Phoenix Survey
10,770.00	10,534.86	-57.38	586.29	FPP HL Crossing: 10770' MD
15,405.00	10,600.31	-113.72	5,194.70	LPP HL Crossing: 15405' MD
15,422.00	10,598.02	-114.49	5,211.53	Final Phoenix Survey
15,490.00	10,588.67	-117.43	5,278.82	Projection to TD

Checked By: _____	Approved By: _____	Date: _____
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