

FloSurvey - Real Time Survey Tool

1200 Cypress Creek Road
Cedar Park, TX 78613
Phone: (512)340-5000
Fax: (512)340-5441

HOBBS OCD
JUN 24 2015

February 6, 2015

RECEIVED

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

30-025-42353

CLIENT: Matador Production Company
WELL: Ranger State 33-20S-35E #122H
FIELD: S33-T20S-R35E
RIG: Patterson 297
COUNTY: Lea
API NO: 30-025-42353

We hereby certify that the enclosed field survey data performed on the referenced well by National Oilwell Varco, contained in this report represents to the best of our knowledge, a true and accurate survey of the surveyed section of the well at the time the survey was run.

Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Jose Olivas Field Service Technician	Ranger State 33-20S-35E #122H Original Hole	2129.00 Ft to 5852.00 Ft	January 29, 2015 to February 3, 2015	FloSurvey

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Mark Xenakis
Field Service Manager

CC: Matador Production Company Attn: Aaron Byrd Attn:
Enclosures: [2] One Lincoln Centre 5400 LBJ Freeway
County of Lea Dallas, TX 75240
State of New Mexico

JUN 29 2015

FloSurvey - Real Time Survey Tool

1200 Cypress Creek Road

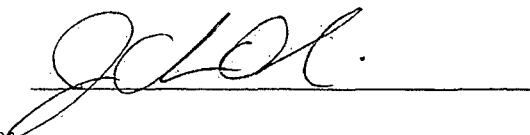
Cedar Park, TX 78613

Phone: (512) 340-5000

Fax: (512) 340-5441

I, Jose Olivas certify that; I am employed by National Oilwell Varco, L.P.; that the surveys taken on the day(s) of January 29, 2015 through February 03, 2015, from a depth of 2129 feet to a depth of 5852 feet; are to the best of my knowledge, the data is true, correct, complete and within the limitations of the tool as set forth by National Oilwell Varco, L.P.; that I am authorized and qualified to make this report; that this survey was conducted at the request of Matador Production Company for the Ranger State 33-20S-35E #122H Well (Original Hole) API No. 30-025-42353 in Lea County, New Mexico; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by National Oilwell Varco, L.P.

Signature



Jose Olivas

Field Service Technician

HOBBS OCD

JUN 24 2015

RECEIVED

30-025-42353

**Matador Production Company
Lea County
Ranger State 33-20S-35E RN #122H
FloSurvey Surveys: 2129`MD - 5852`MD**

National Oilwell Varco Survey Report

09 February 2015

UWI No. 30-025-42353

Surface Coordinates: 559769.00 N, 767152.00 E (32° 32' 09.3323" N, 103° 27' 59.2994" W)
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Foot

Surface Coordinates relative to Map Coordinates: 559769.00 N, 767152.00 E (Grid)
Surface Coordinates relative to Map Coordinates: 559769.00 N, 767152.00 E (Grid)

Kelly Bushing Elevation: 3731.00ft above Mean Sea Level
Kelly Bushing Elevation: 3731.00ft above Mean Sea Level

Kelly Bushing Elevation: 28.00ft above Ground Level
Ground Level: 3703.00ft

Survey Ref: svy292
Date of Survey: 06 February 2015

Matador Production Company

Survey Report for Lea County, Ranger State 33-20S-35E RN #122H, FloSurvey Surveys: 2129`MD - 5852`MD

Survey Depth (ft)	Incl. (°)	(Grid) Azim. (°)	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
1967.00	2.00	192.80	1962.31	39.24 N	17.16 E	-36.86	
2129.00	1.72	160.04	2124.23	34.20 N	17.37 E	-31.83	0.668
2409.00	1.32	39.52	2404.18	32.74 N	20.86 E	-29.95	0.945
2594.00	1.34	310.69	2589.15	35.79 N	20.57 E	-33.02	1.006
2781.00	1.06	240.97	2776.11	36.38 N	17.40 E	-33.99	0.744
2968.00	1.18	190.13	2963.08	33.64 N	15.55 E	-31.50	0.517
3154.00	1.13	122.84	3149.05	30.76 N	16.75 E	-28.49	0.688
3342.00	1.52	62.07	3337.01	30.93 N	20.51 E	-28.20	0.735
3535.00	1.73	10.90	3529.94	34.99 N	23.33 E	-31.88	0.734
3722.00	1.68	320.19	3716.87	39.86 N	22.11 E	-36.87	0.781
3910.00	1.31	271.21	3904.81	42.03 N	18.19 E	-39.50	0.683
4097.00	1.03	232.94	4091.78	41.06 N	14.71 E	-38.96	0.434
4282.00	0.72	193.29	4276.76	38.93 N	13.12 E	-37.04	0.357
4467.00	0.73	148.72	4461.74	36.79 N	13.47 E	-34.87	0.297
4654.00	0.63	111.66	4648.73	35.39 N	15.04 E	-33.29	0.237
4940.00	0.74	12.12	4934.72	36.61 N	16.89 E	-34.28	0.367
5127.00	0.53	336.14	5121.71	38.59 N	16.79 E	-36.25	0.235
5314.00	0.46	310.32	5308.70	39.86 N	15.87 E	-37.63	0.124
5497.00	0.46	258.76	5491.70	40.20 N	14.59 E	-38.12	0.219
5618.00	0.54	220.21	5612.69	39.67 N	13.74 E	-37.69	0.280
5852.00	0.89	206.35	5846.67	37.19 N	12.23 E	-35.43	0.166

All data is in Feet (US Survey) unless otherwise stated. Directions and coordinates are relative to Grid North.

Vertical depths are relative to Ranger State 33-20S-35E RN #122H. Northings and Eastings are relative to Ranger State 33-20S-35E RN #122H.

The dogleg severity is in Degrees per 100 feet (US Survey).

Vertical Section is from Ranger State 33-20S-35E RN #122H calculated along an azimuth of 173.00° (Grid).

Based upon minimum curvature calculations, at a measured depth of 5852.00ft, the bottom hole displacement is 39.15ft, in the direction of 18.20° (Grid).

The along-hole displacement is 170.53ft. The total accumulated dogleg is 45.676°. The measured tortuosity is 0.806°/100ft. The directional difficulty index is 3.4.

Survey Tool Program for Ranger State 33-20S-35E RN #122H, FloSurvey Surveys: 2129`MD -

Measured Depth (ft)	From Vertical Depth (ft)	Measured Depth (ft)	To Vertical Depth (ft)	Survey Tool Description
0.00	0.00	1967.00	1962.31	ISCWSA MWD
1967.00	1962.31	5852.00	5846.67	FloSurvey TiltOnlyMEM

Matador Production Company

Survey Report for Lea County, Ranger State 33-20S-35E RN #122H, FloSurvey Surveys: 2129`MD - 5852`MD

REFERENCE DATA

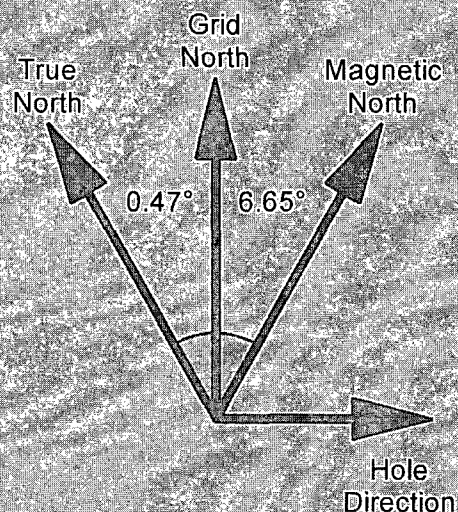
Ellipsoid	Clarke - 1866	Unit System	Feet (Us Survey)
Coord. System	NAD27 New Mexico State Planes, Eastern Zone, US Foc	North Ref.	Grid North
Mag. Model	IGRF2010	Vertical Ref.	Mean Sea Level
Calc. Date	29 Jan, 2015		

LOCATION DATA

RKB Elevation	3731.00ft above MSL	Total Field	48448.9 nT
Map North	559769.00 N	Magnetic Dip	60.40°
Map East	767152.00 E	Declination	7.11°
Latitude	32° 32' 09.3323" N	Convergence	0.47°
Longitude	103° 27' 59.2994" W		

NORTH REFERENCE DATA

Magnetic Model	IGRF2010
Calculation Date	Thursday, January 29, 2015
Declination	7.11°
Inclination/Dip	60.40°
Horizontal Component	23929.9 nT
Northerly Component	23746.8 nT
Easterly Component	2962.3 nT
Vertical Component	42126.8 nT
Total Field Strength	48448.9 nT
Grid North is 0.47 degrees East of True North (Grid Convergence)	
Magnetic North is 7.11 degrees East of True North (Magnetic Declination)	
Magnetic North is 6.65 degrees East of Grid North (Magnetic Convergence)	
To convert a True Direction to a Grid Direction, Subtract 0.47 degrees.	
To convert a Magnetic Direction to a True Direction, Add 7.11 degrees.	
To convert a Magnetic Direction to a Grid Direction, Add 6.65 degrees.	



Disclaimer Notice

National Oilwell Varco makes no warranty of any kind with respect to the subject matter included herein or the completeness or accuracy of this document.

National Oilwell Varco are not responsible for any actions (or lack thereof) taken as a result of relying on or in any way using information contained in this document and in no event shall be liable for any damages resulting from reliance on or use of this information.



March 16, 2015

Matador Production Company
Attention: Regulatory Department
One Lincoln Centre
5400 LBJ Freeway, Suite 1500
Dallas, Texas 75240

Re: Matador Resources
Ranger State 22-20S-35E RN #122H WB2 Surface
Lea County, New Mexico
API #30-025-42353
Job No. 1512714

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced Well with the Texas Railroad Commission via certification online. A copy of the filing is attached for your records.

Name of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Michael Branson	122H	200	1,967	01/24/15	01/26/15	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Bobbi Jo Jorgensen

Bobbi Jo Jorgensen
Operations Administrator

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER

1512714

OPERATOR

Matador Resources Co

WELL NAME

Ranger State 33-20S-35E RN #122H WB2 Surface

CTY & STATE

Lea County, NM

API WELL NUMBER

30-025-42353

PROPOSED DIRECTION

173.04

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
0 ft	0 ft	0	0	.00 ft	.00 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
24-Jan-15	200 ft	0.8	183.4

SURVEY INSTRUMENT

TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
26-Jan-15	1,967 ft	2.0	192.8

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-Jan-15	2,025 ft	93.7	171.1

Michael Branson

PRINT YOUR NAME ABOVE

Michael Branson

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	6.82
DECLINATION OR GRID	GRID

2/20/2015

TODAY'S DATE

MWD SUPERVISOR 1

Michael Branson

DIRECTIONAL DRILLER 1

Brent Shipley

MWD SUPERVISOR 2

Brent Barton

DIRECTIONAL DRILLER 2

Dustin Barnett

12329 Cutten Road

Houston, Texas 77066

(713)3370609 (Voice), (713)337-0599 (Fax)



HOBBS OCD

JUN 24 2015

RECEIVED

30-025-42353

Matador Resources

Lea County, NM (NAD 27)

Ranger State 33-20S-35E RN

#122H

Wellbore #2 Job#1512714

Survey: Phoenix MWD Surveys

Standard Survey Report

16 March, 2015





Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Project	Lea County, NM (NAD 27)		
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	Ranger State 33-20S-35E RN		
Site Position:		Northing:	559,769.00 usft
From:	Map	Easting:	767,152.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 32' 9.33233 N
		Longitude:	103° 27' 59.29937 W
		Grid Convergence:	0.47 °

Well	#122H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,728.00 usft
		Latitude:	32° 32' 9.33233 N
		Longitude:	103° 27' 59.29937 W
		Ground Level:	3,703.00 usft

Wellbore	Wellbore #2 Job#1512714				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	1/20/2015	7.29	60.40	48,408

Design	Surveys (Patterson 297)			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth:
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.53

Survey Program	Date 3/16/2015				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
200.00	1,967.00	Phoenix MWD Surveys (Wellbore #2 Job#	PHX+MWD+BGGM	PHX+MWD+BGGM v3:standard declination	
2,129.00	5,874.00	Gyro Surveys (Wellbore #2 Job#1512714)	NS-GYRO-MS	North sensing gyrocompassing m/s	
5,949.00	15,488.00	Phoenix MWD Surveys 2 (Wellbore #2 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.80	183.40	199.99	-1.39	-0.08	1.39	0.40	0.40	0.00
First Phoenix MWD Survey									
400.00	1.70	187.60	399.94	-5.73	-0.56	5.72	0.45	0.45	2.10
600.00	1.00	165.70	599.89	-10.36	-0.52	10.36	0.43	-0.35	-10.95
789.00	1.80	44.60	788.86	-9.84	1.97	9.86	1.31	0.42	-64.07
802.00	2.20	33.20	801.85	-9.49	2.25	9.51	4.33	3.08	-87.69
883.00	5.80	5.60	882.64	-4.11	3.50	4.14	4.92	4.44	-34.07
976.00	7.70	1.30	975.00	6.79	4.10	-6.76	2.11	2.04	-4.62



Survey Report



Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	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)
1,070.00	8.60	359.50	1,068.05	20.12	4.19	-20.08	1.00	0.96	-1.91
1,164.00	7.70	0.50	1,161.10	33.44	4.18	-33.41	0.97	-0.96	1.06
1,257.00	5.80	5.70	1,253.45	44.35	4.70	-44.31	2.14	-2.04	5.59
1,351.00	4.40	26.00	1,347.08	52.32	6.75	-52.26	2.41	-1.49	21.60
1,444.00	2.90	50.50	1,439.89	57.02	10.13	-56.94	2.29	-1.61	26.34
1,538.00	2.10	108.20	1,533.82	57.99	13.60	-57.88	2.67	-0.85	61.38
1,632.00	3.10	145.90	1,627.73	55.35	16.67	-55.21	2.05	1.06	40.11
1,726.00	3.30	176.10	1,721.59	50.55	18.27	-50.40	1.78	0.21	32.13
1,820.00	2.80	185.60	1,815.45	45.56	18.23	-45.41	0.75	-0.53	10.11
1,913.00	2.50	191.50	1,908.35	41.32	17.61	-41.17	0.44	-0.32	6.34
1,967.00	2.00	192.80	1,962.31	39.24	17.16	-39.10	0.93	-0.93	2.41
Final Phoenix MWD Survey Prior to Gyros									
2,025.00	2.00	192.80	2,020.28	37.27	16.72	-37.13	0.00	0.00	0.00
Projection to Bit - KOP #122H - BHL #122H									

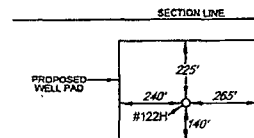
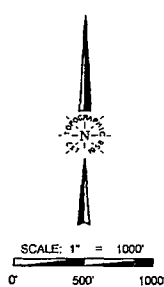
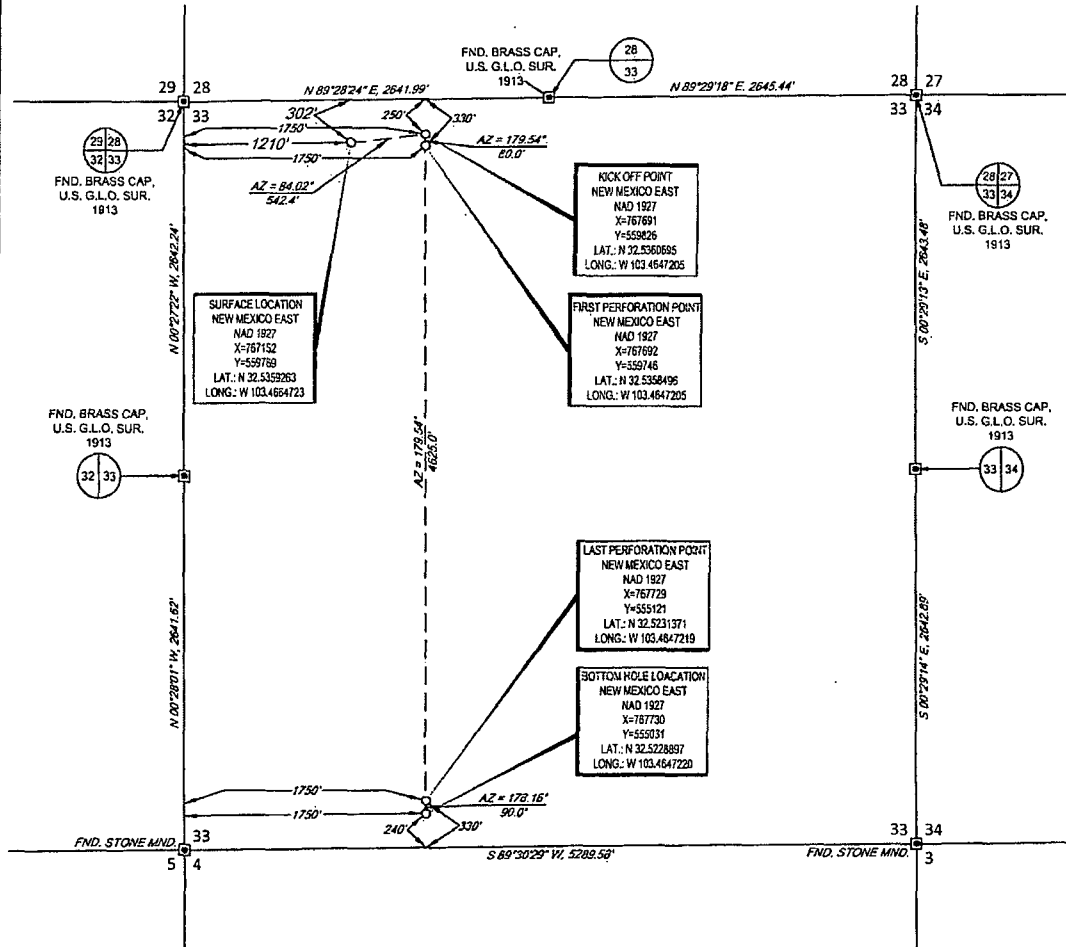
Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
200.00	199.99	-1.39	-0.08	First Phoenix MWD Survey
1,967.00	1,962.31	39.24	17.16	Final Phoenix MWD Survey Prior to Gyros
2,025.00	2,020.28	37.27	16.72	Projection to Bit

Checked By:	_____	Approved By:	_____	Date:	_____
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SECTION 33, TOWNSHIP 20-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO

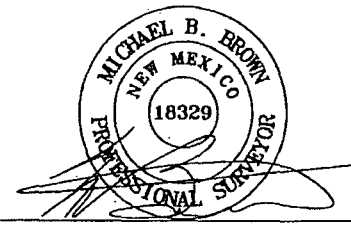


LEASE NAME & WELL NO.: RANGER STATE 33-20S-35E RN #122H

SECTION 33 TWP 20-S RGE 35-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 302' FNL & 1210' FWL

DISTANCE & DIRECTION
FROM INT. OF NM-18 N & NM-128, GO NORTH ON NM-18 N ±16.3 MILES, THENCE LEFT (NORTH) ON NM-207 N ±6.6 MILES, THENCE LEFT (WEST) ON NM-176 WAVE, O. ±6.4 MILES, THENCE LEFT (WEST) TO STAY ON NM-176 W. ±10.2 MILES, THENCE RIGHT (NORTH) SIMS RD. ± 2.1 MILES, CONTINUE ON E-35 ±2.9 MILES TO A POINT ±1050 FEET NORTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, 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.



Michael Blake Brown, P.S. No. 18329
DECEMBER 22, 2014

TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
1400 EVERMAN PARKWAY, Ste. 107 - FT. WORTH, TEXAS 76140
TELEPHONE: (817) 744-7512 - FAX (817) 744-7548
2903 NORTH BIG SPRING - MIDLAND, TEXAS 79702
TELEPHONE: (432) 682-1653 OR (800) 767-1653 - FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



March 16, 2015

Matador Production Company
Attention: Regulatory Department
One Lincoln Centre
5400 LBJ Freeway, Suite 1500
Dallas, Texas 75240

Re: Matador Resources
Ranger State 22-20S-35E RN #122H WB2 Production
Lea County, New Mexico
API #30-025-42353
Job No. 1512714

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced Well with the Texas Railroad Commission via certification online. A copy of the filing is attached for your records.

Name of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Michael Branson	122H	5,949	15,431	02/09/15	02/19/15	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Bobbi Jo Jorgensen

Bobbi Jo Jorgensen
Operations Administrator

Phoenix Technology Services
SURVEY DATA CERTIFICATION



PHOENIX JOB NUMBER 1512714

OPERATOR Matador Resources Co

WELL NAME Ranger State 33-20S-35E RN #122H WB2 Production CTY & STATE Lea County, NM

API WELL NUMBER 30-025-42353

PROPOSED DIRECTION 173.04

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
5,874	5868.76	0.8	206	38.37 ft	13.13 ft	Gyro

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
9-Feb-15	5,949 ft	1.1	212.2

SURVEY INSTRUMENT
TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
19-Feb-15	15,431 ft	93.7	171.1

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
19-Feb-15	15,488 ft	93.7	171.1

Michael Branson

PRINT YOUR NAME ABOVE

Michael Branson

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.82
DECLINATION OR GRID	GRID

2/20/2015

TODAY'S DATE

MWD SUPERVISOR 1

Michael Branson

DIRECTIONAL DRILLER 1

Brent Shipley

MWD SUPERVISOR 2

Brent Barton

DIRECTIONAL DRILLER 2

Dustin Barnett



Matador Resources

Lea County, NM (NAD 27)

Ranger State 33-20S-35E RN

#122H

Wellbore #2 Job#1512714

Survey: Phoenix MWD Surveys 2

Standard Survey Report

23 February, 2015



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

Project	Lea County, NM (NAD 27)		
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	Ranger State 33-20S-35E RN		
Site Position:		Northing:	559,769.00 usft
From:	Map	Easting:	767,152.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 32' 9.33233 N
		Longitude:	103° 27' 59.29937 W
		Grid Convergence:	0.47 °

Well	#122H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	3,703.00 usft
			Ground Level:

Wellbore	Wellbore #2 Job#1512714				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	1/20/2015	7.29	60.40	48,408

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	179.53

Survey Program	Date 2/23/2015				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
200.00	1,967.00	Phoenix MWD Surveys (Wellbore #2 Job#	PHX+MWD+BGGM	PHX+MWD+BGGM v3:standard declination	
2,129.00	5,874.00	Gyro Surveys (Wellbore #2 Job#1512714)	NS-GYRO-MS	North sensing gyrocompassing m/s	
5,949.00	15,488.00	Phoenix MWD Surveys 2 (Wellbore #2 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)	
5,874.00	0.80	206.00	5,868.76	38.37	13.13	-38.26	0.00	0.00	0.00	
Tie In to Gyro Surveys										
5,949.00	1.10	212.20	5,943.75	37.29	12.52	-37.18	0.42	0.40	8.27	
First Phoenix MWD Survey #2										
6,043.00	1.90	110.40	6,037.73	35.98	13.50	-35.87	2.53	0.85	-108.30	
6,137.00	4.30	75.60	6,131.59	36.31	18.37	-36.16	3.13	2.55	-37.02	
6,231.00	4.50	73.20	6,225.31	38.25	25.31	-38.05	0.29	0.21	-2.55	
6,324.00	5.70	67.60	6,317.94	41.07	33.08	-40.80	1.40	1.29	-6.02	



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	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)
6,418.00	7.70	67.30	6,411.30	45.28	43.20	-44.92	2.13	2.13	-0.32
6,511.00	7.60	66.50	6,503.47	50.13	54.59	-49.69	0.16	-0.11	-0.86
6,605.00	9.00	61.50	6,596.48	56.12	66.75	-55.57	1.67	1.49	-5.32
6,699.00	11.00	63.70	6,689.05	63.60	81.26	-62.94	2.17	2.13	2.34
6,792.00	12.60	66.20	6,780.08	71.63	98.49	-70.82	1.81	1.72	2.69
6,886.00	12.50	67.20	6,871.84	79.71	117.25	-78.74	0.25	-0.11	1.06
6,979.00	13.60	71.50	6,962.44	87.08	136.90	-85.95	1.58	1.18	4.62
7,073.00	13.80	73.20	7,053.76	93.83	158.11	-92.53	0.48	0.21	1.81
7,166.00	13.50	72.90	7,144.14	100.22	179.11	-98.75	0.33	-0.32	-0.32
7,260.00	12.80	73.30	7,235.67	106.44	199.57	-104.80	0.75	-0.74	0.43
7,354.00	12.30	77.30	7,327.43	111.64	219.31	-109.83	1.07	-0.53	4.26
7,447.00	13.30	68.70	7,418.12	117.70	238.94	-115.74	2.31	1.08	-9.25
7,541.00	13.20	68.50	7,509.62	125.56	259.00	-123.43	0.12	-0.11	-0.21
7,634.00	12.20	69.20	7,600.34	132.94	278.07	-130.66	1.09	-1.08	0.75
7,728.00	13.40	64.80	7,692.01	141.11	297.21	-138.67	1.64	1.28	-4.68
7,821.00	13.10	64.30	7,782.53	150.27	316.46	-147.67	0.35	-0.32	-0.54
7,915.00	12.50	66.10	7,874.20	159.01	335.36	-156.25	0.77	-0.64	1.91
8,008.00	12.00	67.20	7,965.08	166.83	353.47	-163.93	0.59	-0.54	1.18
8,102.00	11.50	69.50	8,057.11	173.90	371.26	-170.85	0.73	-0.53	2.45
8,196.00	12.30	67.20	8,149.09	181.06	389.26	-177.86	0.99	0.85	-2.45
8,290.00	12.50	65.10	8,240.90	189.23	407.72	-185.87	0.52	0.21	-2.23
8,383.00	12.20	64.60	8,331.74	197.68	425.73	-194.18	0.34	-0.32	-0.54
8,477.00	11.00	64.40	8,423.82	205.81	442.79	-202.17	1.28	-1.28	-0.21
8,570.00	8.50	57.50	8,515.47	213.34	456.59	-209.59	2.96	-2.69	-7.42
8,664.00	6.40	58.30	8,608.68	219.83	466.90	-215.99	2.24	-2.23	0.85
8,757.00	5.00	41.70	8,701.22	225.58	474.01	-221.68	2.31	-1.51	-17.85
8,851.00	3.60	7.90	8,794.97	231.56	477.14	-227.64	3.02	-1.49	-35.96
8,945.00	4.50	27.60	8,888.74	237.75	479.26	-233.81	1.75	0.96	20.96
9,038.00	7.00	41.90	8,981.27	245.21	484.73	-241.22	3.08	2.69	15.38
9,132.00	7.10	65.60	9,074.57	251.87	493.85	-247.81	3.07	0.11	25.21
9,202.00	6.50	87.70	9,144.09	253.82	501.75	-249.69	3.81	-0.86	31.57
9,295.00	6.90	106.40	9,236.47	252.45	512.37	-248.24	2.37	0.43	20.11
9,389.00	8.00	126.50	9,329.69	246.96	523.05	-242.66	2.99	1.17	21.38
9,486.00	7.90	145.10	9,425.77	237.48	532.29	-233.11	2.64	-0.10	19.18
9,579.00	3.00	169.10	9,518.33	229.84	536.41	-225.44	5.70	-5.27	25.81
9,673.00	2.10	223.80	9,612.25	226.18	535.68	-221.78	2.63	-0.96	58.19
9,766.00	0.20	87.70	9,705.23	224.96	534.66	-220.57	2.42	-2.04	-146.34
9,860.00	0.20	155.70	9,799.23	224.82	534.90	-220.42	0.24	0.00	72.34
9,953.00	0.60	142.70	9,892.23	224.28	535.26	-219.88	0.44	0.43	-13.98
10,047.00	0.30	198.00	9,986.23	223.66	535.48	-219.26	0.53	-0.32	58.83
10,141.00	2.60	198.20	10,080.19	221.40	534.74	-217.00	2.45	2.45	0.21
10,172.00	5.70	185.40	10,111.11	219.20	534.37	-214.81	10.38	10.00	-41.29
10,203.00	8.10	189.10	10,141.88	215.51	533.88	-211.12	7.87	7.74	11.94
10,235.00	10.90	187.60	10,173.44	210.28	533.13	-205.90	8.78	8.75	-4.69



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	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)
10,266.00	13.60	182.70	10,203.73	203.73	532.57	-199.36	9.33	8.71	-15.81
10,297.00	15.80	178.80	10,233.72	195.87	532.48	-191.50	7.78	7.10	-12.58
10,328.00	17.80	177.20	10,263.39	186.92	532.80	-182.54	6.62	6.45	-5.16
10,369.00	21.20	176.30	10,302.03	173.26	533.59	-168.87	8.32	8.29	-2.20
10,400.00	24.00	176.40	10,330.65	161.37	534.35	-156.98	9.03	9.03	0.32
10,432.00	27.60	175.50	10,359.46	147.48	535.34	-143.08	11.32	11.25	-2.81
10,463.00	31.40	175.90	10,386.43	132.26	536.48	-127.86	12.27	12.26	1.29
10,494.00	33.90	176.60	10,412.53	115.57	537.57	-111.16	8.16	8.06	2.26
10,525.00	35.70	177.40	10,437.99	97.91	538.49	-93.49	5.99	5.81	2.58
10,556.00	37.90	178.90	10,462.81	79.35	539.08	-74.92	7.67	7.10	4.84
10,588.00	40.70	179.00	10,487.57	59.09	539.46	-54.66	8.75	8.75	0.31
10,619.00	41.20	178.30	10,510.98	38.77	539.93	-34.34	2.19	1.61	-2.26
10,650.00	41.60	178.40	10,534.24	18.28	540.52	-13.85	1.31	1.29	0.32
10,681.00	43.50	177.50	10,557.07	-2.67	541.28	7.11	6.44	6.13	-2.90
10,712.00	45.70	177.40	10,579.14	-24.41	542.25	28.86	7.10	7.10	-0.32
10,744.00	48.30	178.50	10,600.97	-47.80	543.08	52.25	8.50	8.13	3.44
10,775.00	50.10	179.80	10,621.22	-71.26	543.42	75.71	6.62	5.81	4.19
10,806.00	53.00	181.00	10,640.50	-95.53	543.25	99.99	9.83	9.35	3.87
10,837.00	55.30	181.30	10,658.65	-120.65	542.74	125.10	7.46	7.42	0.97
10,869.00	56.80	181.00	10,676.52	-147.19	542.21	151.63	4.75	4.69	-0.94
10,900.00	58.50	179.60	10,693.11	-173.38	542.08	177.82	6.68	5.48	-4.52
10,931.00	60.50	180.50	10,708.84	-200.09	542.05	204.53	6.92	6.45	2.90
10,962.00	63.00	179.90	10,723.51	-227.39	541.96	231.83	8.24	8.06	-1.94
10,993.00	66.30	178.80	10,736.79	-255.40	542.28	259.84	11.12	10.65	-3.55
11,025.00	68.80	177.40	10,749.01	-284.96	543.26	289.40	8.80	7.81	-4.38
11,056.00	71.70	176.30	10,759.48	-314.08	544.87	318.54	9.93	9.35	-3.55
11,087.00	75.30	176.70	10,768.28	-343.75	546.68	348.22	11.68	11.61	1.29
11,118.00	77.60	178.20	10,775.55	-373.85	548.02	378.33	8.78	7.42	4.84
11,149.00	81.40	179.50	10,781.19	-404.32	548.63	408.81	12.93	12.26	4.19
11,185.00	86.80	179.60	10,784.89	-440.11	548.91	444.60	15.00	15.00	0.28
11,216.00	88.20	179.40	10,786.25	-471.08	549.18	475.57	4.56	4.52	-0.65
11,247.00	88.60	179.40	10,787.11	-502.07	549.51	506.56	1.29	1.29	0.00
11,341.00	90.10	179.40	10,788.18	-596.06	550.49	600.55	1.60	1.60	0.00
11,434.00	91.00	179.50	10,787.28	-689.05	551.38	693.55	0.97	0.97	0.11
11,528.00	91.90	179.20	10,784.91	-783.01	552.45	787.51	1.01	0.96	-0.32
11,622.00	92.60	178.90	10,781.22	-876.92	554.01	881.44	0.81	0.74	-0.32
11,715.00	91.40	180.80	10,777.97	-969.86	554.25	974.37	2.42	-1.29	2.04
11,809.00	87.70	181.60	10,778.71	-1,063.82	552.28	1,068.31	4.03	-3.94	0.85
11,903.00	87.80	181.70	10,782.40	-1,157.71	549.58	1,162.18	0.15	0.11	0.11
11,996.00	89.10	181.70	10,784.91	-1,250.63	546.82	1,255.07	1.40	1.40	0.00
12,090.00	90.10	181.60	10,785.57	-1,344.59	544.11	1,349.01	1.07	1.06	-0.11
12,183.00	90.90	181.50	10,784.76	-1,437.55	541.60	1,441.94	0.87	0.86	-0.11
12,277.00	92.10	181.30	10,782.30	-1,531.49	539.30	1,535.86	1.29	1.28	-0.21



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	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)
12,371.00	90.00	180.50	10,780.58	-1,625.45	537.82	1,629.81	2.39	-2.23	-0.85
12,464.00	89.90	179.40	10,780.66	-1,718.45	537.91	1,722.81	1.19	-0.11	-1.18
12,558.00	90.80	178.80	10,780.08	-1,812.44	539.38	1,816.80	1.15	0.96	-0.64
12,651.00	91.90	178.60	10,777.89	-1,905.39	541.49	1,909.76	1.20	1.18	-0.22
12,745.00	90.60	179.00	10,775.84	-1,999.34	543.46	2,003.73	1.45	-1.38	0.43
12,839.00	90.90	179.10	10,774.61	-2,093.32	545.02	2,097.72	0.34	0.32	0.11
12,932.00	92.30	178.60	10,772.01	-2,186.26	546.88	2,190.68	1.60	1.51	-0.54
13,027.00	90.80	178.60	10,769.44	-2,281.20	549.20	2,285.63	1.58	-1.58	0.00
13,120.00	89.40	179.20	10,769.28	-2,374.18	550.99	2,378.62	1.64	-1.51	0.65
13,213.00	89.90	178.80	10,769.85	-2,467.16	552.61	2,471.61	0.69	0.54	-0.43
13,307.00	89.50	179.80	10,770.34	-2,561.15	553.76	2,565.61	1.15	-0.43	1.06
13,400.00	87.10	180.10	10,773.10	-2,654.10	553.84	2,658.56	2.60	-2.58	0.32
13,494.00	87.70	179.80	10,777.37	-2,748.01	553.92	2,752.46	0.71	0.64	-0.32
13,587.00	89.20	179.80	10,779.88	-2,840.97	554.25	2,845.42	1.61	1.61	0.00
13,681.00	88.00	180.20	10,782.18	-2,934.94	554.25	2,939.39	1.35	-1.28	0.43
13,775.00	87.10	180.40	10,786.20	-3,028.85	553.76	3,033.29	0.98	-0.96	0.21
13,868.00	86.70	180.00	10,791.22	-3,121.71	553.43	3,126.15	0.61	-0.43	-0.43
13,962.00	86.70	179.30	10,796.64	-3,215.56	554.01	3,219.99	0.74	0.00	-0.74
14,056.00	87.60	178.80	10,801.31	-3,309.42	555.56	3,313.87	1.09	0.96	-0.53
14,149.00	88.60	178.50	10,804.39	-3,402.35	557.75	3,406.81	1.12	1.08	-0.32
14,243.00	89.30	178.20	10,806.12	-3,496.29	560.46	3,500.77	0.81	0.74	-0.32
14,337.00	90.10	177.60	10,806.61	-3,590.23	563.90	3,594.73	1.06	0.85	-0.64
14,430.00	88.70	177.60	10,807.58	-3,683.14	567.80	3,687.67	1.51	-1.51	0.00
14,524.00	87.30	178.50	10,810.86	-3,777.02	570.99	3,781.58	1.77	-1.49	0.96
14,617.00	88.30	178.90	10,814.43	-3,869.93	573.10	3,874.50	1.16	1.08	0.43
14,711.00	90.80	179.40	10,815.17	-3,963.91	574.50	3,968.49	2.71	2.66	0.53
14,804.00	89.00	179.30	10,815.33	-4,056.90	575.55	4,061.48	1.94	-1.94	-0.11
14,898.00	88.00	180.40	10,817.79	-4,150.86	575.80	4,155.45	1.58	-1.06	1.17
14,991.00	88.20	178.80	10,820.88	-4,243.81	576.45	4,248.39	1.73	0.22	-1.72
15,085.00	89.40	176.90	10,822.85	-4,337.71	579.97	4,342.32	2.39	1.28	-2.02
15,179.00	89.70	174.90	10,823.58	-4,431.46	586.69	4,436.13	2.15	0.32	-2.13
15,273.00	90.20	172.50	10,823.67	-4,524.89	597.01	4,529.63	2.61	0.53	-2.55
15,367.00	92.00	171.70	10,821.86	-4,617.98	609.92	4,622.82	2.10	1.91	-0.85
15,431.00	93.70	171.10	10,818.68	-4,681.17	619.48	4,686.10	2.82	2.66	-0.94
Final Phoenix MWD Survey #2									
15,488.00	93.70	171.10	10,815.00	-4,737.37	628.28	4,742.37	0.00	0.00	0.00
Projection to Bit									



Survey Report

Company:	Matador Resources	Local Co-ordinate Reference:	Well #122H
Project:	Lea County, NM (NAD 27)	TVD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Site:	Ranger State 33-20S-35E RN	MD Reference:	GL3703+KB25 @ 3728.00usft (Patterson 297)
Well:	#122H	North Reference:	Grid
Wellbore:	Wellbore #2 Job#1512714	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Patterson 297)	Database:	Compass 5000 GCR

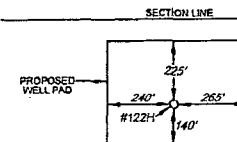
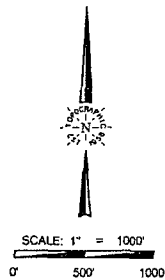
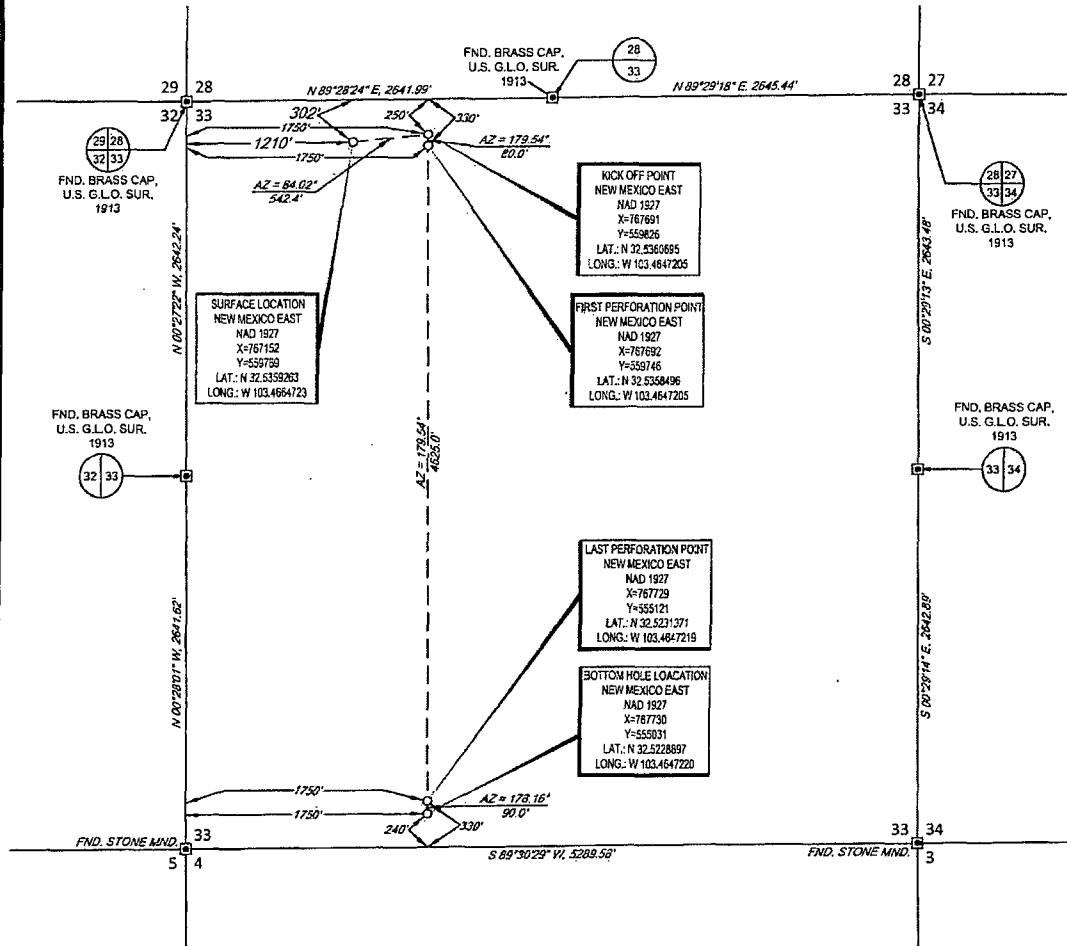
Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,874.00	5,868.76	38.37	13.13	Tie In to Gyro Surveys
5,949.00	5,943.75	37.29	12.52	First Phoenix MWD Survey #2
15,431.00	10,818.68	-4,681.17	619.48	Final Phoenix MWD Survey #2
15,488.00	10,815.00	-4,737.37	628.28	Projection to Bit

Checked By: _____	Approved By: _____	Date: _____
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SECTION 33, TOWNSHIP 20-S, RANGE 35-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: RANGER STATE 33-20S-35E RN #122H

SECTION 33 TWP 20-S RGE 35-E SURVEY N.M.P.M.
COUNTY LEA STATE NM
DESCRIPTION 302' FNL & 1210' FWL

DISTANCE & DIRECTION

FROM INT. OF NM-18 N & NM-128. GO NORTH ON NM-18 N ±16.3 MILES. THENCE LEFT (NORTH) ON NM-207 N ±6.6 MILES. THENCE LEFT (WEST) ON NM-176 WAVE. O. ±6.4 MILES. THENCE LEFT (WEST) TO STAY ON NM-176 W. ±10.2 MILES. THENCE RIGHT (NORTH) SIMS RD. ±2.1 MILES. CONTINUE ON E-35 ±2.9 MILES TO A POINT ±1050 FEET NORTH OF THE LOCATION.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1927, 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.



Michael Blake Brown, P.S. No. 18329
DECEMBER 22, 2014

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