

March 11, 2015

Merit Energy Company

Attention: Regulatory Department

13727 Noel Rd., Suite 1200

Dallas, TX 75240

Re: Merit Energy Edna Jones 31-1 Finney County, KS API #15-055-22380 Job No. 1512824

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the survey certification, surveys, and lease plat for the above referenced well with the State of Kansas Oil Conservation Division – District 1 via certified mail. A copy of the filing is attached for your records.

Name of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of
		From	То	Start	End	Survey
Jeremiah Underwood	31-1	1,717	4,533	01/24/15	01/27/15	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	1512824	ENER	GY COMPANY	Y Merit Energy	
WELL NAME	Edna Jones 3	1-1		COUNTY & S	ГАТЕ	Finney Co., Kansas
API WELL NU	MBER	15-055-2238	0.		PROPOSED D	IRECTION 0.00
TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
.00 ft	.00 ft	0.00	0.00	.00 ft	.00 ft	Surface
						·
FIRST	FIRST				SURVEY IN	STRUMENT
SURVEY	SURVEY				Т	YPE
DATE	DEPTH	INCLIN	AZIMUTH		Phoeni	x MWD
24-Jan-15	1,717.00 ft	0.60	256.30			
LAST	LAST				TO THE BEST	OF MY KNOWLEDGE I
SURVEY	SURVEY				CERTIFY THIS	S SURVEY DATA TO BE
DATE	DEPTH	INCLIN	AZIMUTH		TRUE AND CO	ORRECT.
27-jan-15	4,533.00 ft	0.70	260.30			
PROJECTED	PROJECTED				Je	eremiah Underwood
TD SURVEY	TD SURVEY				PRINT YOUR	NAME ABOVE
DATE	DEPTH	INCLIN	AZIMUTH			
27-jan-15	4,602.00 ft	0.70	260.30		Jer	emiah Underwood
December Commission and Market Hamiltonian Commission and Commissi					SIGN YOUR NA	AME ABOVE
MAGNETIC DE	ECLINATION O	R TOTAL GRID				
TOTAL CORRI			7.72			27-Jan-15
DECLINATION			GRID		TODAY'S DAT	
					· <del></del>	
MWD SUPERV	ISOR 1	Jeremiah Und	erwood	DIRECTIONA	L DRILLER 1	N/A

12329 Cutten Rd.,

Dean Young

MWD SUPERVISOR 2

Houston, Texas 777066

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

N/A

DIRECTIONAL DRILLER 2



## **Merit Energy**

Haskell County, Kansas (NAD27) Edna Jones 31-1

Wellbore #1 Job #1512824

**Survey: Phoenix MWD Surveys** 

# **Standard Survey Report**

29 January, 2015





#### Survey Report



Company: Project:

Merit Energy

Haskell County, Kansas (NAD27)

Site:

Edna Jones

Well:

31-1

Wellbore:

Wellbore #1 Job #1512824

Design:

Surveys (Saxon 146)

**Local Co-ordinate Reference:** 

TVD Reference:

MD Reference: North Reference:

Well 31-1 RKB @ 2959.73usft (Saxon 146)

RKB @ 2959.73usft (Saxon 146)

Minimum Curvature

Survey Calculation Method: Database:

Compass 5000 GCR

Project

Haskell County, Kansas (NAD27)

Map System: Geo Datum: Map Zone:

US State Plane 1927 (Exact solution)

NAD 1927 (NADCON CONUS)

Kansas South 1502

System Datum:

Mean Sea Level

Site

From:

Edna Jones

Site Position:

Мар

Northing: Easting:

433,304.68 usft 1,281,005.38 usft

Latitude:

Longitude:

37° 49' 49.17256 N 100° 59' 23.12568 W

**Position Uncertainty:** 

Slot Radius:

13-3/16 "

**Grid Convergence:** 

-1.53 °

Well

Wellbore

31-1

Well Position

0.00 usft +N/-S +E/-W 0.00 usft

Northing: Easting:

433,304.68 usft 1,281,005.38 usft

Longitude:

37° 49' 49.17256 N 100° 59' 23.12568 W

**Position Uncertainty** 

0.00 usft

0.00 usft

Wellhead Elevation:

0.00 usft

**Ground Level:** 

Latitude:

2,944.73 usft

Wellbore #1 Job #1512824

Magnetics

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

360.00

(nT)

IGRF2015

1/22/2015

0.00

6.19

65.38

51,670

Design

Surveys (Saxon 146)

**Audit Notes:** 

Version:

1.0

Phase:

**ACTUAL** 

Tie On Depth:

0.00

0.00

Vertical Section:

Depth From (TVD)

(usft)

+N/-S (usft)

0.00

+E/-W (usft) Direction

(°)

**Survey Program** 

Date

(usft)

To (usft)

Survey (Wellbore)

1/29/2015

**Tool Name** 

Description

1,717.00

4,602.00 Phoenix MWD Surveys (Wellbore #1 Job #

PHX+MWD+IGRF

PHX+MWD+IGRF v3:standard declination

Measured	A Paragraph of the second	Value de la companya	Vertical		and the second	Vertical	Dogleg	Build	Turn
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Section (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)
0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,717.00	0.60	256.30	1,716.97	-2.13	-8,73	-2.13	0.03	0.03	0.00
First Phoeni	x Survey								
1,890.00	0.20	101.30	1,889.97	-2.40	-9.32	-2.40	0.45	-0.23	-89.60
2,063,00	0.40	124.70	2,062.96	-2.81	-8.53	-2.81	0,13	0,12	13,53
2,236.00	0.20	167.50	2,235.96	-3.44	-7.96	-3,44	0.17	-0.12	24.74
2,409.00	0.10	265.80	2,408.96	-3.75	-8.05	-3.75	0.14	-0.06	56.82
2,582.00	0,30	357.50	2,581.96	-3.31	-8.22	-3.31	0.18	0.12	53,01
2,755.00	0.50	274.60	2,754.96	-2,80	-8.99	-2.80	0.32	0.12	-47.92
2,928.00	0.70	294.20	2,927.95	-2.30	-10.71	-2.30	0.16	0.12	11.33
3,101.00	0,30	288.50	3,100.94	-1.73	-12,10	-1.73	0.23	-0.23	-3.29



#### Survey Report



Company: Project:

Merit Energy

Haskell County, Kansas (NAD27)

Site:

Well:

Edna Jones 31-1

Wellbore: Design:

Wellbore #1 Job #1512824 Surveys (Saxon 146)

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well 31-1

RKB @ 2959.73usft (Saxon 146)

RKB @ 2959.73usft (Saxon 146)

Grid

Minimum Curvature Compass 5000 GCR

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)
3,273.00	0.30	300.40	3,272.94	-1.35	-12.92	-1.35	0.04	0.00	6.92
3,447.00	0.30	285.00	3,446.94	-1.01	-13.75	-1.01	0.05	0.00	-8.85
3,620.00	0.50	293.60	3,619.93	-0.59	-14.88	-0.59	0.12	0.12	4.97
3,792.00	0.50	279.60	3,791.93	-0.16	-16.31	-0.16	0.07	0.00	-8,14
3,965.00	0.70	276.00	3,964.92	0.08	-18.10	0.08	0.12	0.12	-2.08
4,138.00	0.80	264.00	4,137.90	0.06	-20,35	0.06	0,11	0.06	-6.94
4,311.00	0.90	257.50	4,310,88	-0.36	-22.88	-0.36	0.08	0.06	-3.76
4,484.00	0.80	256.70	4,483,86	-0.93	-25.38	-0.93	0.06	-0.06	-0.46
4,533.00	0.70	260.30	4,532.86	-1.06	-26.01	-1.06	0.23	-0.20	7.35
Final Phoeni	x Survey								
4,602.00	0.70	260,30	4,601.85	-1.20	-26.84	-1.20	0.00	0,00	0.00

Survey Annotations  Measured Depth (usft)	Vertical Depth (usft)	Local Coord +N/-S (usft)	inates +E/-W (usft)	Comment
1,717.00	1,716.97	-2.13	-8.73	First Phoenix Survey Final Phoenix Survey Projection to TD
4,533.00	4,532.86	-1.06	-26.01	
4,602.00	4,601.85	-1.20	-26.84	

O			
Checked By:	Approved By:	Data	
onconca by.		Date:	

For KCC Use ONLY API # 15 - 15-055-22380-00-00

#### IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

In all cases, please fully complete this side of the form. Include items 1 through 5 at the bottom of this page.

Operator: Merit Energy Company, LLC	Location of Well: County: Finney				
Lease: Edna Jones	feet from N / N S Line of Section				
Well Number: 31-1	931 feet from E / W Line of Section Sec. 31 Twp. 25 S. R. 33 E W				
Field: Unnamed					
Numbers of Association to be a small					
Number of Acres attributable to well:QTR/QTR/QTR of acreage: W2 - SE - SW - SW	── Is Section: 🔀 Regular or 🔲 Irregular				
QTR/QTR/QTR/QTR of acreage: W2 - SE - SW - SW	_				
	If Section is Irregular, locate well from nearest corner boundary.				
	Section corner used: NENWSESW				
	PLAT				
	est lease or unit boundary line. Show the predicted locations of				
	s required by the Kansas Surface Owner Notice Act (House Bill 2032).				
You may attach	a separate plat if desired.				
	LEGEND				
	: : O Well Location				
	Tank Battery Location				
	Pipeline Location				
	: : : Pipeline Location				
	Lease Road Location				
	Eease Road Location				
	:				
	EXAMPLE :				
31					
	·				
	1980' FSL				
31 ft. ———					
	SEWARD CO. 3390' FEL				
	• •				

### 330 ft. In plotting the proposed location of the well, *you must show*:

NOTE: In all cases locate the spot of the proposed drilling locaton.

1. The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.

- 2. The distance of the proposed drilling location from the south / north and east / west outside section lines.
- 3. The distance to the nearest lease or unit boundary line (in footage).
- If proposed location is located within a prorated or spaced field a certificate of acreage attribution plat must be attached: (C0-7 for oil wells; CG-8 for gas wells).
- 5. The predicted locations of lease roads, tank batteries, pipelines, and electrical lines.