

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTNMOCD
Hobbs
HOBBS OCDFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMLC061869

NOV 21 2019

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Otherb. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resyr.
Other _____

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
DEVON ENERGY PRODUCTION COMPANYContact: JENNIFER HARMS
jennifer.harms@dvn.com8. Lease Name and Well No.
MARWARI 28-16 FED COM 236H3. Address 333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 731023a. Phone No. (include area code)
Ph: 405-552-65609. API Well No.
30-025-45205

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

Sec 21 T25S R32E Mer

At surface NWNE 175FNL 1950FEL 32.108197 N Lat, 103.677793 W Lon

Sec 28 T25S R32E Mer

At top prod interval reported below NENE 367FNL 657FEL 32.107688 N Lat, 103.673617 W Lon

Sec 33 T25S R32E Mer

At total depth SESE 24FSL 641FEL 32.079723 N Lat, 103.673558 W Lon

10. Field and Pool, or Exploratory
WC-025 G-06 S253235G; BS11. Sec., T., R., M., or Block and Survey
or Area Sec 21 T25S R32E Mer12. County or Parish
LEA13. State
NM14. Date Spudded
12/01/201815. Date T.D. Reached
12/23/201816. Date Completed
☐ D & A ☐ Ready to Prod.
05/26/201917. Elevations (DF, KB, RT, GL)*
3389 GL18. Total Depth: MD
TVD 20843
1049119. Plug Back T.D.: MD
TVD 2078820. Depth Bridge Plug Set: MD
TVD21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GAMMA RAY, CBL22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5		963		935		0	
12.250	9.875 J-55	40.0		4412					
12.250	9.875 P110EC	40.0		5298		1040		0	
8.750	5.500 P110RY	17.0		10927					
8.500	5.500 P110RY	17.0		20833		2660		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) BONE SPRING	10656	20674	10656 TO 20674	0.360	1173	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10747 TO 20637	14848274 PROP# 271000 BBLS FLUID

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
05/26/2019	05/30/2019	24	→	2365.0	8211.0	3799.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→	2365	8211	3799	3471	POW	ACCEPTED FOR RECORD

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						NOV 13 2019
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						BUREAU OF LAND MANAGEMENT ROSWELL FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #470282 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

Reclamation due: 11/26/2019

K2

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
RUSTLER	1050			RUSTLER	1050
SALADO	1330			SALADO	1330
DELAWARE	4530			DELAWARE	4530
BONE SPRING	8540			BONE SPRING	8540

32. Additional remarks (include plugging procedure):

As drilled C-102 AND DIRECTIONAL SURVEY ARE ATTACHED. LOGS HAVE BEEN SENT BY FED EX. 4/9/2019-4/19/2019: MIRU WL & PT. TIH & ran CBL, TOC @ CALCULATED SURF'. TIH w/pump through frac plug and guns. Perf Bone Spring, 10656-20674, total 1173 holes. Frac'd 10656-20674', in 52 stages. Frac totals 275021 gals fluid & 15223589 PROP. ND frac, MIRU PU, NU BOP, DO plugs & CO to float collar: 20788 MD'. CHC, FWB, ND BOP. Tubing has not been set.

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7 Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #470282 Verified by the BLM Well Information System.
For DEVON ENERGY PRODUCTION COMPAN, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/13/2019 ()

Name (please print) JENNIFER HARMS

Title REGULATORY COMPLIANCE ANALYST

Signature (Electronic Submission)

Date 06/24/2019

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL **

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 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

¹ API Number 30-025-45205	² Pool Code 97903	³ Pool Name WC-025 G-08 S253235G; BONE SPRING
⁴ Property Code 322444	⁵ Property Name MARWARI 28-16 FED COM	
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁶ Well Number 236H
		⁹ Elevation 3389.3

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	21	25 S	32 E		175	NORTH	1950	EAST	LEA

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	33	25 S	32 E		24	SOUTH	641	EAST	LEA

¹⁰ Dedicated Acres 320	¹¹ Joint or Infill	¹² Consolidation Code	¹³ Order No.
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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.

NW CORNER SEC. 28 LAT. = 32.1085688°N LONG. = 103.6886834°W NMSP EAST (FT) N = 403829.87 E = 740937.30 W/4 CORNER SEC. 28 LAT. = 32.1013805°N LONG. = 103.6886378°W NMSP EAST (FT) N = 401215.68 E = 740867.06 SW CORNER SEC. 28 LAT. = 32.0941331°N LONG. = 103.6886262°W NMSP EAST (FT) N = 398579.22 E = 740866.41 W/4 CORNER SEC. 33 LAT. = 32.0858867°N LONG. = 103.6886534°W NMSP EAST (FT) N = 395935.76 E = 740993.81 SW CORNER SEC. 33 LAT. = 32.0798245°N LONG. = 103.6886768°W NMSP EAST (FT) N = 393301.15 E = 741002.30	N88°51'38"E 2661.92 FT N89°21'15"E 2660.68 FT W/4 CORNER SEC. 28 LAT. = 32.1085688°N LONG. = 103.6886834°W NMSP EAST (FT) N = 403829.87 E = 740937.30 AS-DRILLED KOP 47' FNL, 698' PEL LAT. = 32.1085688°N LONG. = 103.6737468°W NMSP EAST (FT) N = 403857.46 E = 745562.15 MARWARI 28-16 STATE PED COM 236H ELEV. = 3389.3 LAT. = 32.1081974°N (NAD83) LONG. = 103.6777937°W NMSP EAST (FT) N = 403715.83 E = 744309.91 SEC. 28 S/4 CORNER SEC. 28 LAT. = 32.0941449°N LONG. = 103.6800514°W NMSP EAST (FT) N = 398599.50 E = 740641.83 NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83) LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE VERTICAL DATUM NAVD83. SEC. 33 AS-DRILLED LAST TAKE POINT 189' FNL, 645' PEL LAT. = 32.0501881°N LONG. = 103.6735707°W NMSP EAST (FT) N = 393534.44 E = 745679.83 AS-DRILLED BOTTOM OF HOLE LAT. = 32.0797239°N LONG. = 103.6735585°W NMSP EAST (FT) N = 393365.51 E = 745684.83 S/4 CORNER SEC. 33 LAT. = 32.0798430°N LONG. = 103.6800793°W NMSP EAST (FT) N = 393323.87 E = 743665.13 LTP BHL S89°30'40"W 2663.51 FT S89°29'31"W 2661.05 FT	NE CORNER SEC. 28 LAT. = 32.1087061°N LONG. = 103.6714983°W NMSP EAST (FT) N = 403912.78 E = 746258.05 AS-DRILLED FIRST TAKE POINT 387' FNL, 657' PEL LAT. = 32.1078887°N LONG. = 103.6736170°W NMSP EAST (FT) N = 403538.65 E = 745604.28 SE CORNER SEC. 28 LAT. = 32.0941915°N LONG. = 103.6714657°W NMSP EAST (FT) N = 398632.65 E = 746300.54 E/4 CORNER SEC. 33 LAT. = 32.0869362°N LONG. = 103.6714764°W NMSP EAST (FT) N = 395993.26 E = 746313.42 SE CORNER SEC. 33 LAT. = 32.0796633°N LONG. = 103.6714898°W NMSP EAST (FT) N = 393347.47 E = 746325.50	" 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 organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Jenny Harms</i> 6-24-2019 Signature Date Jenny Harms Printed Name Jenny.harms@dvn.com E-mail Address " 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 and correct to the best of my belief. FILIPON F. JARAMILLO JUNE 12, 2019 Date of Survey 12797 Certificate Number FILIPON F. JARAMILLO, PLS 12797 SURVEY NO. 5899E
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Intent ☐ As Drilled ☒

API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION CO., L.P.	MARWARI 28-16 STATE FED COM	236H

Kick Off Point (KOP)

UL A	Section 28	Township 25S	Range 32E	Lot	Feet 47	From N/S NORTH	Feet 696	From E/W EAST	County LEA
Latitude 32.1085658					Longitude 103.6737468			NAD 83	

First Take Point (FTP)

UL A	Section 28	Township 25S	Range 32E	Lot	Feet 367	From N/S NORTH	Feet 657	From E/W EAST	County LEA
Latitude 32.1076887					Longitude 103.6736170			NAD 83	

Last Take Point (LTP)

UL P	Section 33	Township 25S	Range 32E	Lot	Feet 193	From N/S SOUTH	Feet 645	From E/W EAST	County LEA
Latitude 32.00801881					Longitude 103.6735707			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☒

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



December 26, 2018

Devon Energy Production Company, LP
Well: Marwari 28-16 State Fed Com 236H
County/Parish: Lea County, NM

LEAM MWD: (OH) from 0' MD – 20,784' MD
Projection; 20,843' MD

This Borehole Survey taken between 12/04/18 and 12/23/18 had been conducted and calculated according to the highest professional standards and complies with all known State and Federal requirements.

Reviewed and Approved:

Date: December 26, 2018



Survey Certification Form

State of New Mexico

Lea County

I, Randy W. Rakowitz, certify that; I am employed by LEAM Drilling Services, that I did on the day(s) of 12/04/2018 through 12/23/2018, conduct or supervise the taking of MWD Survey from a depth of 0' MD to 20,843' MD; that the data is true, correct, complete and within the limitations of the tools as set forth by LEAM Drilling Services, that I am authorized and qualified to make this report; that this survey was conducted at the request of Devon Energy Production Company, LP for the Marwari 28-16 State Fed Com 236H in Lea County, New Mexico; and that I reviewed this report and find that it conforms to the principals and procedures as set forth by LEAM Drilling Services.

A handwritten signature in black ink, appearing to read 'Randy W. Rakowitz', is written over a horizontal line.

Randy W. Rakowitz
MWD Operations Coordinator

Devon Energy



Azimuths to Grid North
True North: -0.35°
Magnetic North: 6.37°

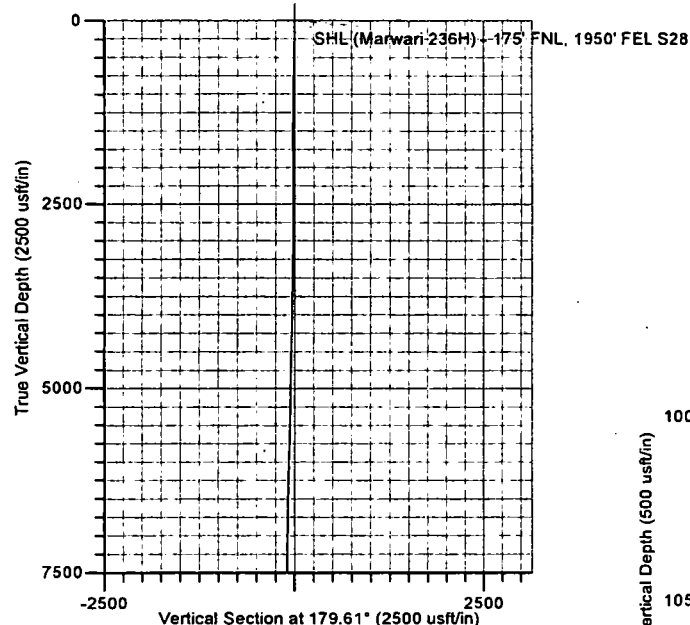
Magnetic Field
Strength: 47847.3nT
Dip Angle: 59.75°
Date: 10/31/2018
Model: HDGM

PROJECT DETAILS: Lea County, NM (NAD-83)

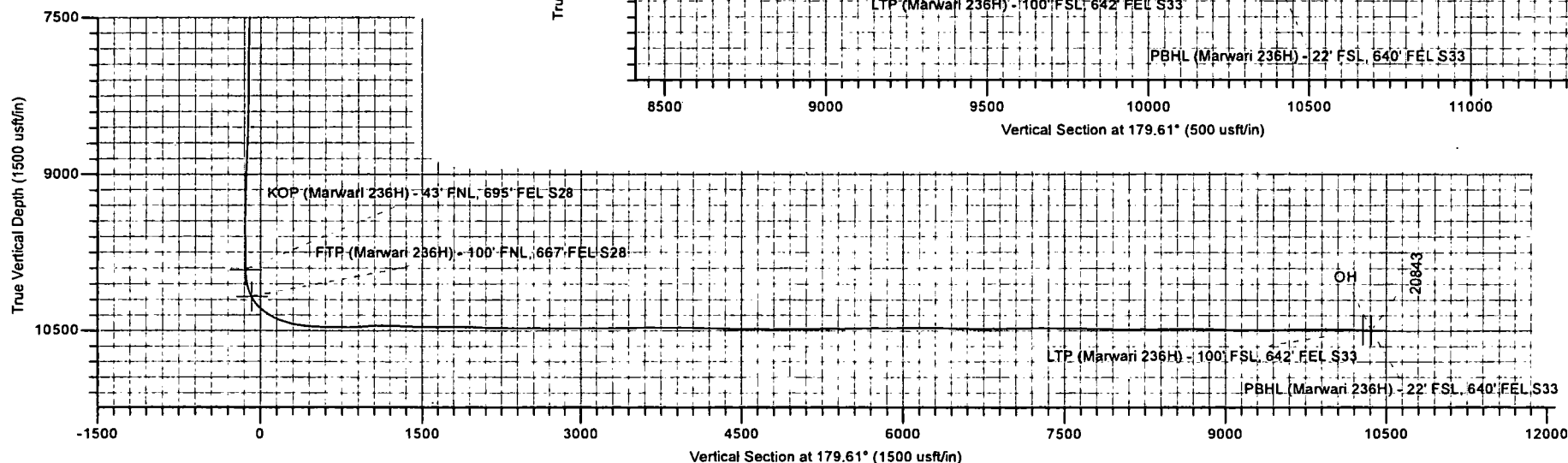
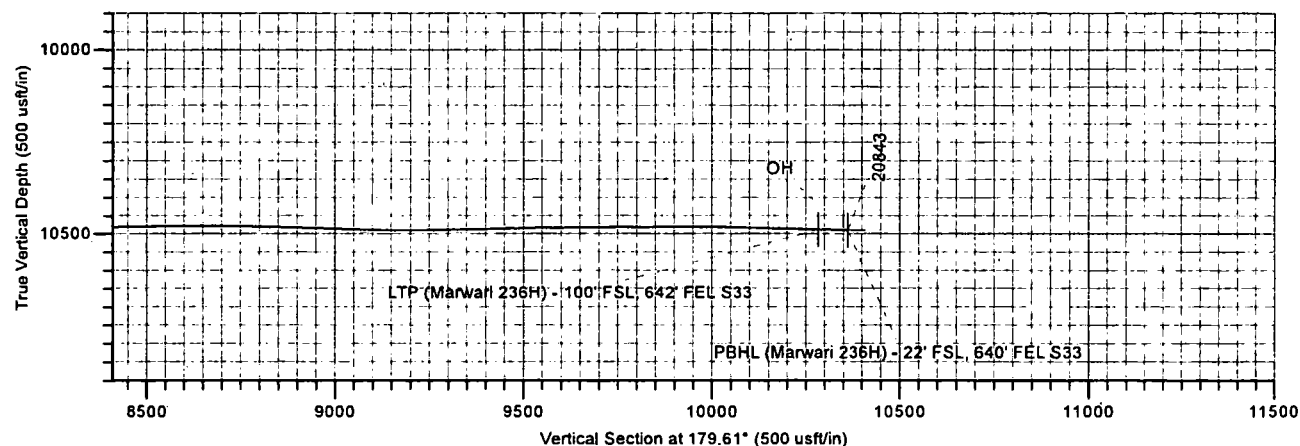
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
Datum: 3389.3' GE + 32' KB @ 3421.30usft



Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP	10169.76	89.45	1282.88	403805.27	745592.79	32° 6' 30.3185 N	103° 40' 25.1359 W
KOP	9915.94	144.74	1248.75	403860.56	745558.66	32° 6' 30.8677 N	103° 40' 25.5287 W
LTP	10489.61	-10274.06	1372.60	393441.76	745682.51	32° 4' 47.7598 N	103° 40' 24.8300 W
PBHL	10491.95	-10352.45	1375.15	393363.37	745685.06	32° 4' 46.9839 N	103° 40' 24.8059 W
SHL	0.00	0.00	0.00	403715.82	744309.91	32° 6' 29.5108 N	103° 40' 40.0573 W



LEAM DRILLING SERVICES
2010 East Davis, Conroe, Texas 77301
Phone: 936/756-7618, Fax: 936/756-7595

Design: OH (Marwari 28-16 State Fed Com 236H/OH)
Marwari/Van Doo Dah
Created By: Dustin Ault
Date: 13:48, January 08 2019
Approved: _____
Date: _____

Devon Energy

Project: Lea County, NM (NAD-83)
 Site: Marwari/Van Doo Dah
 Well: Marwari 28-16 State Fed Com 236H
 Wellbore: OH
 Design: OH

PROJECT DETAILS: Lea County, NM (NAD-83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level



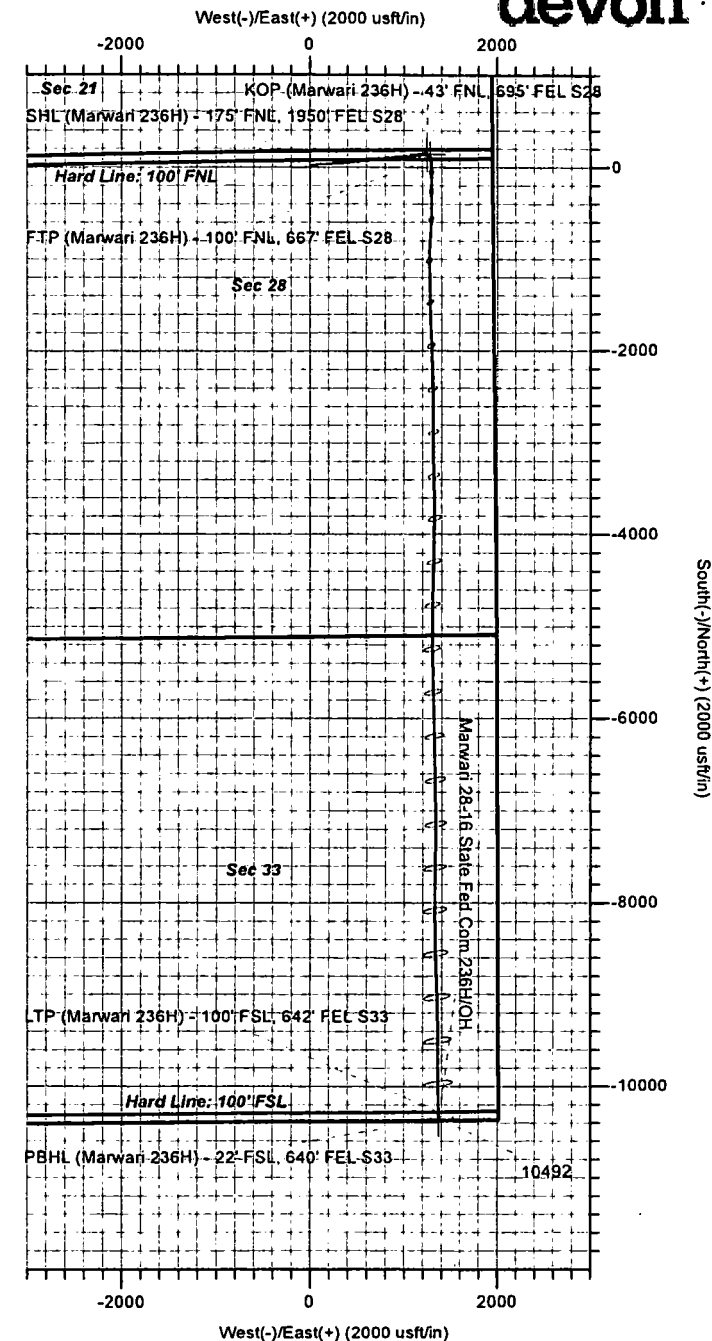
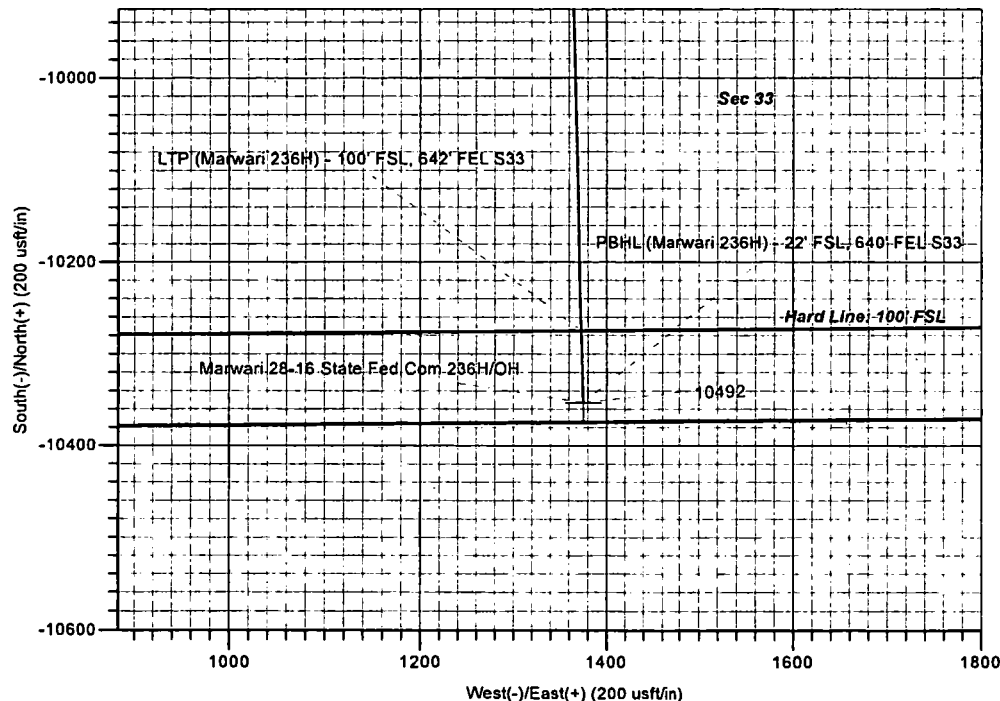
Azimuths to Grid North
 True North: -0.35°
 Magnetic North: 6.37°

Magnetic Field
 Strength: 47847.3snT
 Dip Angle: 59.75°
 Date: 10/31/2018
 Model: HDGM

devon

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP	10169.76	89.45	1282.88	403805.27	745592.79	32° 6' 30.3185 N	103° 40' 25.1359 W
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PBHL	10491.95	-10352.45	1375.15	393363.37	745685.06	32° 4' 46.9839 N	103° 40' 24.8059 W
SHL	0.00	0.00	0.00	403715.82	744309.91	32° 6' 29.5108 N	103° 40' 40.0573 W



LEAM DRILLING SYSTEMS LLC
 2010 East Davis, Conroe, Texas 77301
 Phone: 936/756-7618, Fax: 936/756-7595

Design: OH (Marwari 28-16 State Fed Com 236H/OH)
 Marwari/Van Doo Dah
 Created By: Dustin Ault
 Date: 13:51, January 08 2019
 Approved: _____
 Date: _____

LEAM Drilling Services

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 28-16 State Fed Com 236H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3389.3' GE + 32' KB @ 3421.30usft
Site:	Marwari/Van Doo Dah	MD Reference:	3389.3' GE + 32' KB @ 3421.30usft
Well:	Marwari 28-16 State Fed Com 236H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Marwari/Van Doo Dah				
Site Position:		Northing:	404,089.34 usft	Latitude:	32° 6' 33.3204 N
From:	Map	Easting:	742,415.36 usft	Longitude:	103° 41' 2.0577 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.35 °

Well	Marwari 28-16 State Fed Com 236H					
Well Position	+N/-S	0.00 usft	Northing:	403,715.82 usft	Latitude:	32° 6' 29.5108 N
	+E/-W	0.00 usft	Easting:	744,309.91 usft	Longitude:	103° 40' 40.0573 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,389.30 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/31/2018	6.72	59.75	47,847

Design	OH				
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	179.61	

Survey Program	Date 1/9/2019				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
141.00	20,784.00	Survey #1 (OH)	LEAM MWD+HDGM	MWD+HDGM	
20,843.00	20,843.00	Survey #2 (OH)	Project	Projection	

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
141.00	0.70	21.15	141.00	0.80	0.31	-0.80	0.50	0.50	0.00
242.00	0.97	23.61	241.99	2.16	0.88	-2.16	0.27	0.27	2.44
334.00	1.32	29.76	333.97	3.80	1.71	-3.78	0.40	0.38	6.68
426.00	1.41	30.99	425.94	5.69	2.82	-5.67	0.10	0.10	1.34
517.00	1.49	38.02	516.91	7.58	4.13	-7.55	0.21	0.09	7.73
608.00	1.58	41.71	607.88	9.45	5.69	-9.41	0.15	0.10	4.05
699.00	1.49	48.04	698.85	11.17	7.41	-11.12	0.21	-0.10	6.96
789.00	1.67	52.26	788.81	12.76	9.31	-12.70	0.24	0.20	4.69
879.00	1.49	47.69	878.78	14.35	11.22	-14.27	0.24	-0.20	-5.08

LEAM Drilling Services

Survey Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Site: Marwari/Van Doo Dah
 Well: Marwari 28-16 State Fed Com 236H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
 TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Multi User Db

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)
902.00	1.41	49.97	901.77	14.73	11.65	-14.65	0.43	-0.35	9.91
1,063.00	1.14	57.53	1,062.73	16.87	14.52	-16.77	0.20	-0.17	4.70
1,155.00	1.06	62.10	1,154.71	17.76	16.05	-17.65	0.13	-0.09	4.97
1,247.00	0.88	52.43	1,246.70	18.58	17.36	-18.47	0.26	-0.20	-10.51
1,338.00	0.70	45.05	1,337.69	19.40	18.30	-19.28	0.23	-0.20	-8.11
1,429.00	0.62	60.70	1,428.69	20.04	19.13	-19.91	0.22	-0.09	17.20
1,519.00	0.44	56.65	1,518.68	20.47	19.84	-20.33	0.20	-0.20	-4.50
1,612.00	0.53	73.53	1,611.68	20.78	20.55	-20.64	0.18	0.10	18.15
1,704.00	0.44	51.03	1,703.68	21.13	21.23	-20.98	0.23	-0.10	-24.46
1,798.00	0.44	89.88	1,797.67	21.35	21.88	-21.21	0.31	0.00	41.33
1,893.00	0.44	75.99	1,892.67	21.44	22.59	-21.29	0.11	0.00	-14.62
1,987.00	0.44	118.53	1,986.67	21.36	23.26	-21.20	0.34	0.00	45.26
2,082.00	0.44	121.87	2,081.67	20.99	23.89	-20.83	0.03	0.00	3.52
2,176.00	0.62	144.02	2,175.66	20.39	24.50	-20.22	0.29	0.19	23.56
2,272.00	0.53	148.59	2,271.66	19.59	25.03	-19.42	0.11	-0.09	4.76
2,366.00	0.44	123.98	2,365.65	19.02	25.56	-18.84	0.24	-0.10	-26.18
2,461.00	0.44	116.24	2,460.65	18.65	26.19	-18.47	0.06	0.00	-8.15
2,556.00	0.88	105.70	2,555.64	18.29	27.22	-18.11	0.48	0.46	-11.09
2,651.00	1.06	109.04	2,650.63	17.81	28.75	-17.61	0.20	0.19	3.52
2,745.00	1.32	104.64	2,744.61	17.25	30.62	-17.04	0.29	0.28	-4.68
2,840.00	1.67	102.53	2,839.58	16.68	33.03	-16.45	0.37	0.37	-2.22
2,935.00	2.37	83.90	2,934.52	16.58	36.34	-16.34	1.00	0.74	-19.61
3,030.00	3.87	71.95	3,029.38	17.79	41.34	-17.50	1.71	1.58	-12.58
3,126.00	4.84	73.53	3,125.10	19.94	48.30	-19.61	1.02	1.01	1.65
3,221.00	5.63	77.04	3,219.70	22.12	56.69	-21.73	0.90	0.83	3.69
3,315.00	6.42	78.63	3,313.18	24.19	66.33	-23.74	0.86	0.84	1.69
3,410.00	6.95	80.38	3,407.54	26.20	77.21	-25.67	0.60	0.56	1.84
3,504.00	8.09	80.03	3,500.73	28.29	89.33	-27.68	1.21	1.21	-0.37
3,599.00	8.79	84.08	3,594.70	30.20	103.13	-29.50	0.97	0.74	4.26
3,694.00	8.97	88.47	3,688.56	31.15	117.76	-30.34	0.74	0.19	4.62
3,788.00	9.41	89.00	3,781.35	31.48	132.76	-30.57	0.48	0.47	0.56
3,883.00	10.11	87.06	3,874.98	32.04	148.86	-31.02	0.81	0.74	-2.04
3,977.00	11.70	84.95	3,967.28	33.30	166.59	-32.17	1.74	1.69	-2.24
4,071.00	12.84	83.20	4,059.13	35.38	186.46	-34.11	1.28	1.21	-1.86
4,166.00	12.05	81.44	4,151.90	38.10	206.74	-36.69	0.92	-0.83	-1.85
4,261.00	11.17	84.08	4,244.95	40.53	225.70	-38.99	1.08	-0.93	2.78
4,355.00	11.43	88.47	4,337.13	41.72	244.07	-40.05	0.96	0.28	4.67
4,449.00	11.78	88.82	4,429.21	42.16	262.98	-40.37	0.38	0.37	0.37
4,544.00	11.70	87.42	4,522.22	42.79	282.29	-40.87	0.31	-0.08	-1.47
4,638.00	10.46	85.66	4,614.47	43.87	300.32	-41.82	1.37	-1.32	-1.87
4,733.00	10.90	84.95	4,707.82	45.31	317.87	-43.15	0.48	0.46	-0.75
4,829.00	12.05	84.60	4,801.90	47.05	336.89	-44.76	1.20	1.20	-0.36
4,923.00	12.05	84.95	4,893.83	48.84	356.43	-46.41	0.08	0.00	0.37

LEAM Drilling Services

Survey Report

Company: Devon Energy
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 Site: Marwari/Van Doo Dah
 Well: Marwari 28-16 State Fed Com 236H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
 TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 MTD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Multi User Db

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)
5,018.00	11.61	85.48	4,986.81	50.47	375.84	-47.91	0.48	-0.46	0.56
5,111.00	11.78	84.95	5,077.88	52.04	394.62	-49.35	0.22	0.18	-0.57
5,207.00	12.22	83.37	5,171.78	54.08	414.48	-51.25	0.57	0.46	-1.65
5,246.00	12.22	83.55	5,209.90	55.02	422.68	-52.14	0.10	0.00	0.46
5,397.00	12.40	83.90	5,357.43	58.54	454.68	-55.44	0.13	0.12	0.23
5,492.00	11.70	82.84	5,450.34	60.82	474.38	-57.59	0.77	-0.74	-1.12
5,587.00	12.31	84.43	5,543.26	63.00	494.01	-59.64	0.73	0.64	1.67
5,682.00	12.13	84.43	5,636.11	64.95	514.03	-61.45	0.19	-0.19	0.00
5,778.00	12.49	83.02	5,729.90	67.20	534.37	-63.56	0.49	0.38	-1.47
5,873.00	12.40	81.97	5,822.67	69.87	554.67	-66.09	0.26	-0.09	-1.11
5,968.00	13.01	81.79	5,915.34	72.82	575.35	-68.90	0.64	0.64	-0.19
6,064.00	13.45	81.61	6,008.79	75.99	597.09	-71.93	0.46	0.46	-0.19
6,158.00	13.89	81.26	6,100.13	79.30	619.06	-75.09	0.48	0.47	-0.37
6,253.00	13.89	80.91	6,192.35	82.84	641.59	-78.47	0.09	0.00	-0.37
6,348.00	13.81	85.48	6,284.59	85.53	664.15	-81.01	1.15	-0.08	4.81
6,443.00	13.81	85.83	6,376.85	87.25	686.76	-82.57	0.09	0.00	0.37
6,538.00	13.54	86.01	6,469.15	88.85	709.17	-84.02	0.29	-0.28	0.19
6,633.00	13.54	86.54	6,561.51	90.29	731.36	-85.31	0.13	0.00	0.56
6,728.00	12.75	86.18	6,654.02	91.66	752.92	-86.54	0.84	-0.83	-0.38
6,822.00	13.01	85.66	6,745.66	93.15	773.82	-87.88	0.30	0.28	-0.55
6,916.00	11.34	86.54	6,837.54	94.51	793.60	-89.11	1.79	-1.78	0.94
7,011.00	10.82	85.48	6,930.77	95.78	811.81	-90.25	0.59	-0.55	-1.12
7,106.00	10.99	85.13	7,024.05	97.25	829.72	-91.60	0.19	0.18	-0.37
7,201.00	10.38	86.18	7,117.41	98.59	847.28	-92.82	0.67	-0.64	1.11
7,295.00	10.55	83.90	7,209.84	100.07	864.29	-94.18	0.48	0.18	-2.43
7,389.00	12.05	83.90	7,302.02	102.03	882.60	-96.02	1.60	1.60	0.00
7,484.00	11.96	85.83	7,394.94	103.79	902.28	-97.65	0.43	-0.09	2.03
7,578.00	11.61	86.18	7,486.96	105.13	921.43	-98.86	0.38	-0.37	0.37
7,672.00	10.29	83.72	7,579.25	106.68	939.22	-100.29	1.49	-1.40	-2.62
7,767.00	10.82	82.84	7,672.64	108.72	956.50	-102.21	0.58	0.56	-0.93
7,862.00	10.48	83.02	7,766.00	110.88	973.92	-104.25	0.36	-0.36	0.19
7,957.00	10.46	85.83	7,859.42	112.56	991.10	-105.81	0.54	-0.02	2.96
8,052.00	11.43	86.71	7,952.69	113.73	1,009.10	-106.86	1.04	1.02	0.93
8,146.00	10.99	87.42	8,044.90	114.66	1,027.35	-107.67	0.49	-0.47	0.76
8,240.00	10.46	89.17	8,137.26	115.19	1,044.83	-108.08	0.66	-0.56	1.86
8,334.00	10.46	85.83	8,229.69	115.94	1,061.87	-108.71	0.64	0.00	-3.55
8,429.00	9.67	84.08	8,323.23	117.39	1,078.41	-110.04	0.89	-0.83	-1.84
8,523.00	9.50	80.21	8,415.92	119.52	1,093.91	-112.07	0.71	-0.18	-4.12
8,617.00	8.71	79.68	8,508.73	122.11	1,108.55	-114.56	0.85	-0.84	-0.56
8,712.00	9.41	77.40	8,602.55	125.10	1,123.21	-117.45	0.83	0.74	-2.40
8,806.00	10.29	75.81	8,695.16	128.83	1,138.85	-121.08	0.98	0.94	-1.69
8,901.00	8.97	76.34	8,788.82	132.66	1,154.27	-124.80	1.39	-1.39	0.56
8,995.00	7.65	77.57	8,881.83	135.74	1,167.50	-127.79	1.42	-1.40	1.31

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9,089.00	6.95	75.11	8,975.07	138.55	1,179.11	-130.52	0.82	-0.74	-2.62
9,183.00	7.65	74.93	9,068.31	141.63	1,190.65	-133.53	0.75	0.74	-0.19
9,278.00	5.28	67.20	9,162.70	144.97	1,200.78	-136.80	2.65	-2.49	-8.14
9,372.00	4.92	75.46	9,256.33	147.66	1,208.67	-139.43	0.87	-0.38	8.79
9,466.00	4.48	71.07	9,350.01	149.86	1,216.05	-141.58	0.60	-0.47	-4.67
9,559.00	3.87	80.38	9,442.77	151.57	1,222.58	-143.24	0.98	-0.66	10.01
9,654.00	4.66	99.02	9,537.51	151.50	1,229.55	-143.12	1.67	0.83	19.62
9,749.00	2.99	111.50	9,632.29	149.98	1,235.67	-141.57	1.95	-1.76	13.14
9,844.00	2.81	114.31	9,727.17	148.12	1,240.10	-139.67	0.24	-0.19	2.96
9,938.00	2.81	115.01	9,821.06	146.19	1,244.28	-137.72	0.04	0.00	0.74
10,033.00	2.90	101.30	9,915.94	144.74	1,248.75	-136.24	0.72	0.09	-14.43
10,128.00	9.15	137.69	10,010.40	138.67	1,256.20	-130.12	7.40	6.58	38.31
10,175.00	14.86	147.53	10,056.35	130.82	1,261.96	-122.23	12.86	12.15	20.94
10,222.00	20.66	151.75	10,101.10	118.42	1,269.12	-109.78	12.63	12.34	8.98
10,269.00	26.20	153.86	10,144.20	101.79	1,277.63	-93.09	11.92	11.79	4.49
10,317.00	31.39	163.00	10,186.28	80.30	1,285.96	-71.54	14.15	10.81	19.04
10,364.00	36.32	171.09	10,225.31	54.81	1,291.70	-46.02	14.19	10.49	17.21
10,410.00	41.77	177.90	10,261.04	26.01	1,294.37	-17.20	15.06	11.85	14.80
10,457.00	47.92	180.40	10,294.35	-7.11	1,294.83	15.93	13.61	13.09	5.32
10,505.00	54.43	180.05	10,324.43	-44.49	1,294.69	53.30	13.57	13.56	-0.73
10,552.00	58.74	180.05	10,350.31	-83.71	1,294.65	92.52	9.17	9.17	0.00
10,599.00	63.93	179.88	10,372.85	-124.94	1,294.68	133.74	11.05	11.04	-0.36
10,646.00	67.80	180.05	10,392.06	-167.82	1,294.70	176.63	8.24	8.23	0.36
10,693.00	72.11	180.58	10,408.17	-211.96	1,294.46	220.77	9.23	9.17	1.13
10,740.00	74.78	180.58	10,421.56	-257.01	1,294.00	265.81	5.68	5.68	0.00
10,789.00	78.17	180.40	10,433.01	-304.64	1,293.59	313.44	6.93	6.92	-0.37
10,836.00	81.00	179.30	10,441.51	-350.86	1,293.72	359.66	6.45	6.02	-2.34
10,883.00	84.68	178.65	10,447.37	-397.48	1,294.55	406.28	7.95	7.83	-1.38
10,955.00	86.70	180.58	10,452.78	-469.26	1,295.03	478.07	3.87	2.81	2.68
11,046.00	86.97	181.99	10,457.80	-560.10	1,293.00	568.89	1.58	0.30	1.55
11,138.00	88.90	182.86	10,461.12	-651.95	1,289.11	660.71	2.30	2.10	0.95
11,229.00	89.16	183.39	10,462.66	-742.80	1,284.15	751.53	0.65	0.29	0.58
11,319.00	92.07	183.92	10,461.69	-832.60	1,278.41	841.29	3.29	3.23	0.59
11,410.00	94.94	181.99	10,456.13	-923.30	1,273.73	931.95	3.80	3.15	-2.12
11,500.00	93.12	179.35	10,449.80	-1,013.06	1,272.68	1,021.70	3.56	-2.02	-2.93
11,593.00	91.54	178.65	10,446.02	-1,105.96	1,274.30	1,114.61	1.86	-1.70	-0.75
11,684.00	88.20	178.47	10,446.23	-1,196.92	1,276.59	1,205.58	3.68	-3.67	-0.20
11,776.00	88.11	178.65	10,449.19	-1,288.85	1,278.90	1,297.52	0.22	-0.10	0.20
11,867.00	86.88	178.29	10,453.17	-1,379.72	1,281.32	1,388.41	1.41	-1.35	-0.40
11,957.00	88.11	179.35	10,457.10	-1,469.62	1,283.18	1,478.32	1.80	1.37	1.18
12,050.00	88.11	179.00	10,460.17	-1,562.56	1,284.51	1,571.26	0.38	0.00	-0.38
12,142.00	90.22	178.29	10,461.51	-1,654.52	1,286.69	1,663.24	2.42	2.29	-0.77
12,237.00	90.84	178.65	10,460.63	-1,749.48	1,289.23	1,758.21	0.75	0.65	0.38
12,331.00	88.81	177.77	10,460.92	-1,843.42	1,292.16	1,852.18	2.35	-2.16	-0.94

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12,426.00	88.46	177.77	10,463.18	-1,938.33	1,295.86	1,947.10	0.37	-0.37	0.00
12,520.00	87.32	177.42	10,466.64	-2,032.18	1,299.80	2,040.98	1.27	-1.21	-0.37
12,615.00	89.69	178.12	10,469.12	-2,127.07	1,303.49	2,135.89	2.60	2.49	0.74
12,710.00	89.34	178.47	10,469.92	-2,222.02	1,306.32	2,230.86	0.52	-0.37	0.37
12,804.00	88.99	179.00	10,471.29	-2,315.99	1,308.39	2,324.84	0.68	-0.37	0.56
12,899.00	89.78	178.82	10,472.31	-2,410.96	1,310.20	2,419.83	0.85	0.83	-0.19
12,993.00	88.99	178.65	10,473.32	-2,504.93	1,312.28	2,513.81	0.86	-0.84	-0.18
13,088.00	89.78	179.35	10,474.34	-2,599.91	1,313.93	2,608.80	1.11	0.83	0.74
13,181.00	89.52	179.35	10,474.91	-2,692.90	1,314.99	2,701.79	0.28	-0.28	0.00
13,277.00	89.43	179.00	10,475.79	-2,788.89	1,316.37	2,797.79	0.38	-0.09	-0.36
13,372.00	90.40	179.70	10,475.93	-2,883.88	1,317.45	2,892.78	1.26	1.02	0.74
13,467.00	90.40	179.70	10,475.27	-2,978.88	1,317.95	2,987.78	0.00	0.00	0.00
13,562.00	90.57	179.70	10,474.46	-3,073.87	1,318.44	3,082.78	0.18	0.18	0.00
13,657.00	90.13	179.52	10,473.88	-3,168.87	1,319.09	3,177.78	0.50	-0.46	-0.19
13,752.00	90.57	179.35	10,473.30	-3,263.86	1,320.03	3,272.77	0.50	0.46	-0.18
13,847.00	91.10	179.17	10,471.92	-3,358.85	1,321.25	3,367.76	0.59	0.56	-0.19
13,941.00	90.48	179.17	10,470.62	-3,452.83	1,322.62	3,461.75	0.66	-0.66	0.00
14,036.00	89.34	178.33	10,470.77	-3,547.80	1,324.69	3,556.74	1.49	-1.20	-0.88
14,130.00	90.13	178.15	10,471.21	-3,641.75	1,327.58	3,650.71	0.86	0.84	-0.19
14,223.00	91.10	179.38	10,470.21	-3,734.72	1,329.58	3,743.69	1.68	1.04	1.32
14,315.00	89.87	180.96	10,469.43	-3,826.72	1,329.31	3,835.68	2.18	-1.34	1.72
14,407.00	89.43	180.96	10,469.99	-3,918.70	1,327.77	3,927.65	0.48	-0.48	0.00
14,501.00	89.25	180.96	10,471.07	-4,012.68	1,326.19	4,021.62	0.19	-0.19	0.00
14,596.00	89.78	180.96	10,471.88	-4,107.67	1,324.60	4,116.59	0.56	0.56	0.00
14,690.00	88.81	181.51	10,473.04	-4,201.63	1,322.57	4,210.54	1.19	-1.03	0.59
14,784.00	87.41	180.63	10,476.14	-4,295.56	1,320.82	4,304.45	1.76	-1.49	-0.94
14,878.00	88.90	181.51	10,479.16	-4,389.50	1,319.06	4,398.37	1.84	1.59	0.94
14,973.00	89.87	181.51	10,480.18	-4,484.46	1,316.56	4,493.31	1.02	1.02	0.00
15,067.00	89.34	181.86	10,480.83	-4,578.41	1,313.80	4,587.25	0.68	-0.56	0.37
15,162.00	89.25	182.04	10,482.00	-4,673.35	1,310.56	4,682.16	0.21	-0.09	0.19
15,257.00	89.52	181.16	10,483.02	-4,768.31	1,307.91	4,777.10	0.97	0.28	-0.93
15,352.00	90.92	180.28	10,482.65	-4,863.29	1,306.72	4,872.08	1.74	1.47	-0.93
15,447.00	90.75	180.46	10,481.27	-4,958.28	1,306.11	4,967.06	0.26	-0.18	0.19
15,542.00	91.54	180.63	10,479.37	-5,053.26	1,305.20	5,062.03	0.85	0.83	0.18
15,637.00	90.04	180.28	10,478.06	-5,148.24	1,304.45	5,157.00	1.62	-1.58	-0.37
15,732.00	90.04	180.28	10,477.99	-5,243.24	1,303.98	5,252.00	0.00	0.00	0.00
15,827.00	90.66	179.05	10,477.41	-5,338.24	1,304.54	5,346.99	1.45	0.65	-1.29
15,922.00	90.31	178.70	10,476.61	-5,433.22	1,306.40	5,441.98	0.52	-0.37	-0.37
16,017.00	90.48	178.52	10,475.96	-5,528.18	1,308.71	5,536.96	0.26	0.18	-0.19
16,112.00	90.40	178.70	10,475.23	-5,623.15	1,311.01	5,631.95	0.21	-0.08	0.19
16,207.00	89.52	178.52	10,475.29	-5,718.13	1,313.32	5,726.93	0.95	-0.93	-0.19
16,302.00	91.54	178.53	10,474.41	-5,813.08	1,315.76	5,821.91	2.13	2.13	0.01
16,397.00	91.10	178.18	10,472.22	-5,908.02	1,318.49	5,916.86	0.59	-0.46	-0.37

LEAM Drilling Services

Survey Report

Company: Devon Energy
 Project: Lea County, NM (NAD-83)
 Site: Marwari/Van Doo Dah
 Well: Marwari 28-16 State Fed Com 236H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
 TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Multi User Db

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)
16,491.00	91.28	177.82	10,470.27	-6,001.94	1,321.77	6,010.80	0.43	0.19	-0.38
16,587.00	89.96	178.35	10,469.23	-6,097.88	1,324.98	6,106.76	1.48	-1.38	0.55
16,682.00	89.96	178.18	10,469.30	-6,192.84	1,327.85	6,201.73	0.18	0.00	-0.18
16,777.00	89.25	179.23	10,469.96	-6,287.81	1,330.00	6,296.72	1.33	-0.75	1.11
16,872.00	88.20	178.88	10,472.07	-6,382.77	1,331.57	6,391.69	1.17	-1.11	-0.37
16,967.00	88.81	178.88	10,474.55	-6,477.72	1,333.42	6,486.65	0.64	0.64	0.00
17,062.00	88.81	178.88	10,476.52	-6,572.68	1,335.28	6,581.62	0.00	0.00	0.00
17,157.00	88.55	178.70	10,478.71	-6,667.63	1,337.28	6,676.58	0.33	-0.27	-0.19
17,252.00	89.78	179.05	10,480.09	-6,762.60	1,339.15	6,771.56	1.35	1.29	0.37
17,347.00	90.57	180.46	10,479.80	-6,857.60	1,339.56	6,866.56	1.70	0.83	1.48
17,442.00	90.48	180.11	10,478.93	-6,952.59	1,339.08	6,961.55	0.38	-0.09	-0.37
17,537.00	90.66	180.11	10,477.99	-7,047.59	1,338.90	7,056.54	0.19	0.19	0.00
17,631.00	90.31	180.11	10,477.19	-7,141.59	1,338.72	7,150.53	0.37	-0.37	0.00
17,726.00	91.63	180.64	10,475.58	-7,236.57	1,338.10	7,245.51	1.50	1.39	0.56
17,821.00	88.99	180.11	10,475.07	-7,331.56	1,337.48	7,340.49	2.83	-2.78	-0.56
17,916.00	89.43	180.64	10,476.38	-7,426.54	1,336.85	7,435.47	0.73	0.46	0.56
18,010.00	89.16	180.46	10,477.54	-7,520.53	1,335.95	7,529.45	0.35	-0.29	-0.19
18,104.00	89.96	180.64	10,478.26	-7,614.52	1,335.05	7,623.44	0.87	0.85	0.19
18,199.00	88.90	180.29	10,479.20	-7,709.51	1,334.28	7,718.42	1.18	-1.12	-0.37
18,285.00	88.90	180.76	10,480.85	-7,795.50	1,333.49	7,804.39	0.55	0.00	0.55
18,380.00	88.64	180.58	10,482.89	-7,890.47	1,332.38	7,899.35	0.33	-0.27	-0.19
18,474.00	89.52	180.23	10,484.40	-7,984.45	1,331.72	7,993.33	1.01	0.94	-0.37
18,569.00	90.57	179.88	10,484.33	-8,079.45	1,331.63	8,088.33	1.17	1.11	-0.37
18,664.00	90.40	179.35	10,483.52	-8,174.44	1,332.26	8,183.32	0.59	-0.18	-0.56
18,758.00	89.16	178.82	10,483.88	-8,268.43	1,333.76	8,277.32	1.43	-1.32	-0.56
18,853.00	91.19	179.17	10,483.59	-8,363.41	1,335.43	8,372.30	2.17	2.14	0.37
18,947.00	90.92	178.82	10,481.86	-8,457.38	1,337.08	8,466.28	0.47	-0.29	-0.37
19,041.00	90.48	178.82	10,480.72	-8,551.35	1,339.01	8,560.27	0.47	-0.47	0.00
19,135.00	90.13	178.47	10,480.22	-8,645.32	1,341.24	8,654.25	0.53	-0.37	-0.37
19,230.00	89.52	178.47	10,480.51	-8,740.29	1,343.77	8,749.23	0.64	-0.64	0.00
19,325.00	88.99	178.12	10,481.74	-8,835.24	1,346.60	8,844.20	0.67	-0.56	-0.37
19,419.00	88.02	177.24	10,484.19	-8,929.13	1,350.40	8,938.11	1.39	-1.03	-0.94
19,513.00	86.70	178.12	10,488.52	-9,022.95	1,354.21	9,031.96	1.69	-1.40	0.94
19,606.00	89.25	177.94	10,491.81	-9,115.83	1,357.40	9,124.85	2.75	2.74	-0.19
19,701.00	91.01	179.52	10,491.59	-9,210.80	1,359.51	9,219.84	2.49	1.85	1.66
19,796.00	90.66	179.52	10,490.21	-9,305.78	1,360.30	9,314.83	0.37	-0.37	0.00
19,890.00	91.36	180.05	10,488.55	-9,399.77	1,360.65	9,408.81	0.93	0.74	0.56
19,985.00	91.01	179.88	10,486.59	-9,494.75	1,360.71	9,503.79	0.41	-0.37	-0.18
20,080.00	90.92	179.70	10,484.99	-9,589.73	1,361.06	9,598.77	0.21	-0.09	-0.19
20,174.00	90.92	179.52	10,483.48	-9,683.72	1,361.70	9,692.76	0.19	0.00	-0.19
20,269.00	90.22	179.35	10,482.53	-9,778.71	1,362.64	9,787.76	0.76	-0.74	-0.18
20,361.00	89.78	179.00	10,482.53	-9,870.70	1,363.96	9,879.75	0.61	-0.48	-0.38
20,456.00	89.25	178.65	10,483.34	-9,965.67	1,365.91	9,974.74	0.67	-0.56	-0.37

LEAM Drilling Services

Survey Report

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

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)
20,550.00	89.25	179.00	10,484.57	-10,059.65	1,367.84	10,068.72	0.37	0.00	0.37
20,644.00	88.64	178.82	10,486.30	-10,153.61	1,369.62	10,162.70	0.68	-0.65	-0.19
20,738.00	88.29	178.47	10,488.82	-10,247.55	1,371.85	10,256.65	0.53	-0.37	-0.37
20,784.00	88.29	178.12	10,490.19	-10,293.51	1,373.21	10,302.62	0.76	0.00	-0.76
20,843.00	88.29	178.12	10,491.95	-10,352.45	1,375.15	10,361.57	0.00	0.00	0.00
Projection									

Devon Energy

Lea County, NM (NAD-83)

Marwari/Van Doo Dah

Marwari 28-16 State Fed Com 236H

OH

Design: OH

Survey Report - Geographic

08 January, 2019

LEAM Drilling Services

Survey Report - Geographic

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,158.00	13.89	81.26	6,100.13	79.30	619.06	403,795.12	744,928.97	32° 6' 30.2582 N	103° 40' 32.8544 W
6,253.00	13.89	80.91	6,192.35	82.84	641.59	403,798.66	744,951.50	32° 6' 30.2918 N	103° 40' 32.5922 W
6,348.00	13.81	85.48	6,284.59	85.53	664.15	403,801.35	744,974.06	32° 6' 30.3171 N	103° 40' 32.3297 W
6,443.00	13.81	85.83	6,376.85	87.25	686.76	403,803.07	744,996.67	32° 6' 30.3327 N	103° 40' 32.0667 W
6,538.00	13.54	86.01	6,469.15	88.85	709.17	403,804.67	745,019.07	32° 6' 30.3472 N	103° 40' 31.8061 W
6,633.00	13.54	86.54	6,561.51	90.29	731.36	403,806.11	745,041.27	32° 6' 30.3602 N	103° 40' 31.5479 W
6,728.00	12.75	86.18	6,654.02	91.66	752.92	403,807.48	745,062.83	32° 6' 30.3724 N	103° 40' 31.2972 W
6,822.00	13.01	85.66	6,745.66	93.15	773.82	403,808.98	745,083.73	32° 6' 30.3859 N	103° 40' 31.0541 W
6,916.00	11.34	86.54	6,837.54	94.51	793.60	403,810.33	745,103.50	32° 6' 30.3982 N	103° 40' 30.8240 W
7,011.00	10.82	85.48	6,930.77	95.78	811.81	403,811.60	745,121.72	32° 6' 30.4096 N	103° 40' 30.6122 W
7,106.00	10.99	85.13	7,024.05	97.25	829.72	403,813.07	745,139.63	32° 6' 30.4231 N	103° 40' 30.4039 W
7,201.00	10.38	86.18	7,117.41	98.59	847.28	403,814.41	745,157.19	32° 6' 30.4353 N	103° 40' 30.1996 W
7,295.00	10.55	83.90	7,209.84	100.07	864.29	403,815.89	745,174.20	32° 6' 30.4489 N	103° 40' 30.0018 W
7,389.00	12.05	83.90	7,302.02	102.03	882.60	403,817.85	745,192.51	32° 6' 30.4671 N	103° 40' 29.7887 W
7,484.00	11.96	85.83	7,394.94	103.79	902.28	403,819.62	745,212.19	32° 6' 30.4835 N	103° 40' 29.5598 W
7,578.00	11.61	86.18	7,486.96	105.13	921.43	403,820.95	745,231.34	32° 6' 30.4955 N	103° 40' 29.3370 W
7,672.00	10.29	83.72	7,579.25	106.68	939.22	403,822.50	745,249.12	32° 6' 30.5098 N	103° 40' 29.1302 W
7,767.00	10.82	82.84	7,672.64	108.72	956.50	403,824.54	745,266.41	32° 6' 30.5289 N	103° 40' 28.9291 W
7,862.00	10.48	83.02	7,766.00	110.88	973.92	403,826.70	745,283.83	32° 6' 30.5493 N	103° 40' 28.7264 W
7,957.00	10.46	85.83	7,859.42	112.56	991.10	403,828.38	745,301.01	32° 6' 30.5648 N	103° 40' 28.5266 W
8,052.00	11.43	86.71	7,952.69	113.73	1,009.10	403,829.55	745,319.00	32° 6' 30.5753 N	103° 40' 28.3172 W
8,146.00	10.99	87.42	8,044.90	114.66	1,027.35	403,830.49	745,337.25	32° 6' 30.5835 N	103° 40' 28.1050 W
8,240.00	10.46	89.17	8,137.26	115.19	1,044.83	403,831.01	745,354.74	32° 6' 30.5876 N	103° 40' 27.9017 W
8,334.00	10.46	85.83	8,229.69	115.94	1,061.87	403,831.76	745,371.78	32° 6' 30.5939 N	103° 40' 27.7035 W
8,429.00	9.67	84.08	8,323.23	117.39	1,078.41	403,833.21	745,388.32	32° 6' 30.6073 N	103° 40' 27.5111 W
8,523.00	9.50	80.21	8,415.92	119.52	1,093.91	403,835.34	745,403.81	32° 6' 30.6275 N	103° 40' 27.3308 W
8,617.00	8.71	79.68	8,508.73	122.11	1,108.55	403,837.94	745,418.46	32° 6' 30.6522 N	103° 40' 27.1603 W
8,712.00	9.41	77.40	8,602.55	125.10	1,123.21	403,840.92	745,433.12	32° 6' 30.6809 N	103° 40' 26.9897 W
8,806.00	10.29	75.81	8,695.16	128.83	1,138.85	403,844.65	745,448.76	32° 6' 30.7169 N	103° 40' 26.8076 W
8,901.00	8.97	76.34	8,788.82	132.66	1,154.27	403,848.48	745,464.18	32° 6' 30.7538 N	103° 40' 26.6280 W
8,995.00	7.65	77.57	8,881.83	135.74	1,167.50	403,851.56	745,477.41	32° 6' 30.7835 N	103° 40' 26.4740 W
9,089.00	6.95	75.11	8,975.07	138.55	1,179.11	403,854.37	745,489.02	32° 6' 30.8106 N	103° 40' 26.3388 W
9,183.00	7.65	74.93	9,068.31	141.63	1,190.65	403,857.46	745,500.55	32° 6' 30.8404 N	103° 40' 26.2045 W
9,278.00	5.28	67.20	9,162.70	144.97	1,200.78	403,860.79	745,510.69	32° 6' 30.8729 N	103° 40' 26.0864 W
9,372.00	4.92	75.46	9,256.33	147.66	1,208.67	403,863.48	745,518.58	32° 6' 30.8990 N	103° 40' 25.9945 W
9,466.00	4.48	71.07	9,350.01	149.86	1,216.05	403,865.68	745,525.96	32° 6' 30.9203 N	103° 40' 25.9086 W
9,559.00	3.87	80.38	9,442.77	151.57	1,222.58	403,867.39	745,532.49	32° 6' 30.9368 N	103° 40' 25.8325 W
9,654.00	4.66	99.02	9,537.51	151.50	1,229.55	403,867.32	745,539.46	32° 6' 30.9357 N	103° 40' 25.7515 W
9,749.00	2.99	111.50	9,632.29	149.98	1,235.67	403,865.81	745,545.58	32° 6' 30.9203 N	103° 40' 25.6805 W
9,844.00	2.81	114.31	9,727.17	148.12	1,240.10	403,863.94	745,550.00	32° 6' 30.9016 N	103° 40' 25.6291 W
9,938.00	2.81	115.01	9,821.06	146.19	1,244.28	403,862.02	745,554.19	32° 6' 30.8823 N	103° 40' 25.5806 W
10,033.00	2.90	101.30	9,915.94	144.74	1,248.75	403,860.56	745,558.66	32° 6' 30.8677 N	103° 40' 25.5287 W
KOP (Marwari 236H) - 43' FNL, 695' FEL S28									
10,106.48	7.62	134.74	9,989.10	140.94	1,254.04	403,856.77	745,563.94	32° 6' 30.8298 N	103° 40' 25.4676 W
KOP (Marwari 236H) - 50' FNL, 660' FEL of S28									
10,128.00	9.15	137.69	10,010.40	138.67	1,256.20	403,854.50	745,566.11	32° 6' 30.8072 N	103° 40' 25.4425 W
10,175.00	14.86	147.53	10,056.35	130.82	1,261.96	403,846.64	745,571.86	32° 6' 30.7291 N	103° 40' 25.3762 W
10,222.00	20.66	151.75	10,101.10	118.42	1,269.12	403,834.24	745,579.03	32° 6' 30.6060 N	103° 40' 25.2937 W
10,269.00	26.20	153.86	10,144.20	101.79	1,277.63	403,817.61	745,587.53	32° 6' 30.4409 N	103° 40' 25.1961 W
10,297.87	29.25	159.71	10,169.76	89.45	1,282.88	403,805.27	745,592.79	32° 6' 30.3184 N	103° 40' 25.1359 W
FTP (Marwari 236H) - 100' FNL, 667' FEL S28									
10,317.00	31.39	163.00	10,186.28	80.30	1,285.96	403,796.12	745,595.87	32° 6' 30.2277 N	103° 40' 25.1007 W
10,323.41	32.03	164.23	10,191.72	77.07	1,286.91	403,792.89	745,596.82	32° 6' 30.1957 N	103° 40' 25.0899 W
FTP (Marwari 236H) - 100' FNL, 660' FEL of S28									

LEAM Drilling Services

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 28-16 State Fed Com 236H
Project:	Lea County, NM (NAD-83)	TVD Reference:	3389.3' GE + 32' KB @ 3421.30usft
Site:	Marwari/Van Doo Dah	MD Reference:	3389.3' GE + 32' KB @ 3421.30usft
Well:	Marwari 28-16 State Fed Com 236H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Multi User Db

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Marwari/Van Doo Dah				
Site Position:		Northing:	404,089.34 usft	Latitude:	32° 6' 33.3204 N
From:	Map	Easting:	742,415.36 usft	Longitude:	103° 41' 2.0577 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.35 °

Well	Marwari 28-16 State Fed Com 236H					
Well Position	+N/-S	0.00 usft	Northing:	403,715.82 usft	Latitude:	32° 6' 29.5108 N
	+E/-W	0.00 usft	Easting:	744,309.91 usft	Longitude:	103° 40' 40.0573 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,389.30 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/31/2018	6.72	59.75	47,847

Design	OH				
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	179.61	

Survey Program	Date	1/8/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
141.00	20,784.00	Survey #1 (OH)	LEAM MWD+HDGM	MWD+HDGM	
20,843.00	20,843.00	Survey #2 (OH)	Project	Projection	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	403,715.82	744,309.91	32° 6' 29.5108 N	103° 40' 40.0573 W
SHL (Marwari 236H) - 175' FNL, 1950' FEL S28									
141.00	0.70	21.15	141.00	0.80	0.31	403,716.62	744,310.22	32° 6' 29.5187 N	103° 40' 40.0537 W
242.00	0.97	23.61	241.99	2.16	0.88	403,717.98	744,310.78	32° 6' 29.5321 N	103° 40' 40.0470 W
334.00	1.32	29.76	333.97	3.80	1.71	403,719.62	744,311.62	32° 6' 29.5482 N	103° 40' 40.0371 W
426.00	1.41	30.99	425.94	5.69	2.82	403,721.51	744,312.73	32° 6' 29.5669 N	103° 40' 40.0241 W
517.00	1.49	38.02	516.91	7.58	4.13	403,723.40	744,314.03	32° 6' 29.5855 N	103° 40' 40.0088 W
608.00	1.58	41.71	607.88	9.45	5.69	403,725.27	744,315.60	32° 6' 29.6039 N	103° 40' 39.9905 W
699.00	1.49	48.04	698.85	11.17	7.41	403,727.00	744,317.31	32° 6' 29.6209 N	103° 40' 39.9704 W
789.00	1.67	52.26	788.81	12.76	9.31	403,728.58	744,319.22	32° 6' 29.6365 N	103° 40' 39.9482 W
879.00	1.49	47.69	878.78	14.35	11.22	403,730.17	744,321.12	32° 6' 29.6521 N	103° 40' 39.9259 W

LEAM Drilling Services

Survey Report - Geographic

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
902.00	1.41	49.97	901.77	14.73	11.65	403,730.55	744,321.56	32° 6' 29.6558 N	103° 40' 39.9208 W
1,063.00	1.14	57.53	1,062.73	16.87	14.52	403,732.69	744,324.43	32° 6' 29.6768 N	103° 40' 39.8873 W
1,155.00	1.06	62.10	1,154.71	17.76	16.05	403,733.58	744,325.95	32° 6' 29.6855 N	103° 40' 39.8695 W
1,247.00	0.88	52.43	1,246.70	18.58	17.36	403,734.41	744,327.26	32° 6' 29.6936 N	103° 40' 39.8542 W
1,338.00	0.70	45.05	1,337.69	19.40	18.30	403,735.23	744,328.21	32° 6' 29.7017 N	103° 40' 39.8431 W
1,429.00	0.62	60.70	1,428.69	20.04	19.13	403,735.86	744,329.03	32° 6' 29.7079 N	103° 40' 39.8335 W
1,519.00	0.44	56.65	1,518.68	20.47	19.84	403,736.29	744,329.75	32° 6' 29.7121 N	103° 40' 39.8252 W
1,612.00	0.53	73.53	1,611.68	20.78	20.55	403,736.61	744,330.46	32° 6' 29.7152 N	103° 40' 39.8169 W
1,704.00	0.44	51.03	1,703.68	21.13	21.23	403,736.95	744,331.14	32° 6' 29.7185 N	103° 40' 39.8090 W
1,798.00	0.44	89.88	1,797.67	21.35	21.88	403,737.18	744,331.78	32° 6' 29.7208 N	103° 40' 39.8015 W
1,893.00	0.44	75.99	1,892.67	21.44	22.59	403,737.27	744,332.50	32° 6' 29.7216 N	103° 40' 39.7931 W
1,987.00	0.44	118.53	1,986.67	21.36	23.26	403,737.18	744,333.17	32° 6' 29.7207 N	103° 40' 39.7854 W
2,082.00	0.44	121.87	2,081.67	20.99	23.89	403,736.81	744,333.80	32° 6' 29.7170 N	103° 40' 39.7781 W
2,176.00	0.62	144.02	2,175.66	20.39	24.50	403,736.21	744,334.40	32° 6' 29.7111 N	103° 40' 39.7711 W
2,272.00	0.53	148.59	2,271.66	19.59	25.03	403,735.41	744,334.94	32° 6' 29.7031 N	103° 40' 39.7649 W
2,366.00	0.44	123.98	2,365.65	19.02	25.56	403,734.84	744,335.47	32° 6' 29.6974 N	103° 40' 39.7588 W
2,461.00	0.44	116.24	2,460.65	18.65	26.19	403,734.47	744,336.10	32° 6' 29.6938 N	103° 40' 39.7515 W
2,556.00	0.88	105.70	2,555.64	18.29	27.22	403,734.12	744,337.13	32° 6' 29.6902 N	103° 40' 39.7396 W
2,651.00	1.06	109.04	2,650.63	17.81	28.75	403,733.63	744,338.66	32° 6' 29.6853 N	103° 40' 39.7218 W
2,745.00	1.32	104.64	2,744.61	17.25	30.62	403,733.07	744,340.53	32° 6' 29.6796 N	103° 40' 39.7001 W
2,840.00	1.67	102.53	2,839.58	16.68	33.03	403,732.50	744,342.94	32° 6' 29.6738 N	103° 40' 39.6721 W
2,935.00	2.37	83.90	2,934.52	16.58	36.34	403,732.41	744,346.24	32° 6' 29.6727 N	103° 40' 39.6337 W
3,030.00	3.87	71.95	3,029.38	17.79	41.34	403,733.61	744,351.24	32° 6' 29.6843 N	103° 40' 39.5755 W
3,126.00	4.84	73.53	3,125.10	19.94	48.30	403,735.76	744,358.21	32° 6' 29.7052 N	103° 40' 39.4944 W
3,221.00	5.63	77.04	3,219.70	22.12	56.69	403,737.94	744,366.59	32° 6' 29.7262 N	103° 40' 39.3967 W
3,315.00	6.42	78.63	3,313.18	24.19	66.33	403,740.01	744,376.24	32° 6' 29.7461 N	103° 40' 39.2844 W
3,410.00	6.95	80.38	3,407.54	26.20	77.21	403,742.02	744,387.11	32° 6' 29.7654 N	103° 40' 39.1579 W
3,504.00	8.09	80.03	3,500.73	28.29	89.33	403,744.11	744,399.23	32° 6' 29.7854 N	103° 40' 39.0168 W
3,599.00	8.79	84.08	3,594.70	30.20	103.13	403,746.02	744,413.04	32° 6' 29.8034 N	103° 40' 38.8562 W
3,694.00	8.97	88.47	3,688.56	31.15	117.76	403,746.97	744,427.66	32° 6' 29.8119 N	103° 40' 38.6861 W
3,788.00	9.41	89.00	3,781.35	31.48	132.76	403,747.30	744,442.67	32° 6' 29.8142 N	103° 40' 38.5116 W
3,883.00	10.11	87.06	3,874.98	32.04	148.86	403,747.86	744,458.76	32° 6' 29.8188 N	103° 40' 38.3244 W
3,977.00	11.70	84.95	3,967.28	33.30	166.59	403,749.12	744,476.50	32° 6' 29.8303 N	103° 40' 38.1181 W
4,071.00	12.84	83.20	4,059.13	35.38	186.46	403,751.20	744,496.36	32° 6' 29.8496 N	103° 40' 37.8870 W
4,166.00	12.05	81.44	4,151.90	38.10	206.74	403,753.92	744,516.65	32° 6' 29.8754 N	103° 40' 37.6510 W
4,261.00	11.17	84.08	4,244.95	40.53	225.70	403,756.35	744,535.61	32° 6' 29.8982 N	103° 40' 37.4304 W
4,355.00	11.43	88.47	4,337.13	41.72	244.07	403,757.54	744,553.98	32° 6' 29.9089 N	103° 40' 37.2167 W
4,449.00	11.78	88.82	4,429.21	42.16	262.98	403,757.98	744,572.88	32° 6' 29.9121 N	103° 40' 36.9969 W
4,544.00	11.70	87.42	4,522.22	42.79	282.29	403,758.62	744,592.20	32° 6' 29.9172 N	103° 40' 36.7723 W
4,638.00	10.46	85.66	4,614.47	43.87	300.32	403,759.69	744,610.23	32° 6' 29.9268 N	103° 40' 36.5626 W
4,733.00	10.90	84.95	4,707.82	45.31	317.87	403,761.13	744,627.78	32° 6' 29.9400 N	103° 40' 36.3585 W
4,829.00	12.05	84.60	4,801.90	47.05	336.89	403,762.88	744,646.79	32° 6' 29.9561 N	103° 40' 36.1373 W
4,923.00	12.05	84.95	4,893.83	48.84	356.43	403,764.66	744,666.34	32° 6' 29.9726 N	103° 40' 35.9099 W
5,018.00	11.61	85.48	4,986.81	50.47	375.84	403,766.29	744,685.74	32° 6' 29.9875 N	103° 40' 35.6842 W
5,111.00	11.78	84.95	5,077.88	52.04	394.62	403,767.86	744,704.53	32° 6' 30.0020 N	103° 40' 35.4657 W
5,207.00	12.22	83.37	5,171.78	54.08	414.48	403,769.90	744,724.38	32° 6' 30.0209 N	103° 40' 35.2347 W
5,246.00	12.22	83.55	5,209.90	55.02	422.68	403,770.84	744,732.58	32° 6' 30.0297 N	103° 40' 35.1393 W
5,397.00	12.40	83.90	5,357.43	58.54	454.68	403,774.36	744,764.59	32° 6' 30.0626 N	103° 40' 34.7670 W
5,492.00	11.70	82.84	5,450.34	60.82	474.38	403,776.64	744,784.28	32° 6' 30.0840 N	103° 40' 34.5378 W
5,587.00	12.31	84.43	5,543.26	63.00	494.01	403,778.82	744,803.92	32° 6' 30.1044 N	103° 40' 34.3093 W
5,682.00	12.13	84.43	5,636.11	64.95	514.03	403,780.78	744,823.93	32° 6' 30.1226 N	103° 40' 34.0765 W
5,778.00	12.49	83.02	5,729.90	67.20	534.37	403,783.02	744,844.28	32° 6' 30.1435 N	103° 40' 33.8398 W
5,873.00	12.40	81.97	5,822.67	69.87	554.67	403,785.69	744,864.57	32° 6' 30.1687 N	103° 40' 33.6037 W
5,968.00	13.01	81.79	5,915.34	72.82	575.35	403,788.64	744,885.26	32° 6' 30.1967 N	103° 40' 33.3630 W
6,064.00	13.45	81.61	6,008.79	75.99	597.09	403,791.81	744,907.00	32° 6' 30.2268 N	103° 40' 33.1100 W

LEAM Drilling Services

Survey Report - Geographic

Company: Devon Energy
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Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,364.00	36.32	171.09	10,225.31	54.81	1,291.70	403,770.63	745,601.61	32° 6' 29.9752 N	103° 40' 25.0358 W
10,410.00	41.77	177.90	10,261.04	26.01	1,294.37	403,741.83	745,604.28	32° 6' 29.6900 N	103° 40' 25.0068 W
10,457.00	47.92	180.40	10,294.35	-7.11	1,294.83	403,708.71	745,604.73	32° 6' 29.3622 N	103° 40' 25.0038 W
10,505.00	54.43	180.05	10,324.43	-44.49	1,294.69	403,671.33	745,604.59	32° 6' 28.9924 N	103° 40' 25.0082 W
10,552.00	58.74	180.05	10,350.31	-83.71	1,294.65	403,632.11	745,604.56	32° 6' 28.6042 N	103° 40' 25.0113 W
10,599.00	63.93	179.88	10,372.85	-124.94	1,294.68	403,590.89	745,604.58	32° 6' 28.1963 N	103° 40' 25.0140 W
10,646.00	67.80	180.05	10,392.06	-167.82	1,294.70	403,548.00	745,604.61	32° 6' 27.7719 N	103° 40' 25.0167 W
10,693.00	72.11	180.58	10,408.17	-211.96	1,294.46	403,503.86	745,604.36	32° 6' 27.3351 N	103° 40' 25.0227 W
10,740.00	74.78	180.58	10,421.56	-257.01	1,294.00	403,458.82	745,603.91	32° 6' 26.8894 N	103° 40' 25.0312 W
10,789.00	78.17	180.40	10,433.01	-304.64	1,293.59	403,411.18	745,603.50	32° 6' 26.4181 N	103° 40' 25.0393 W
10,836.00	81.00	179.30	10,441.51	-350.86	1,293.72	403,364.96	745,603.62	32° 6' 25.9607 N	103° 40' 25.0412 W
10,883.00	84.68	178.65	10,447.37	-397.48	1,294.55	403,318.35	745,604.46	32° 6' 25.4994 N	103° 40' 25.0348 W
10,955.00	86.70	180.58	10,452.78	-469.26	1,295.03	403,246.56	745,604.94	32° 6' 24.7889 N	103° 40' 25.0343 W
11,046.00	86.97	181.99	10,457.80	-560.10	1,293.00	403,155.72	745,602.90	32° 6' 23.8902 N	103° 40' 25.0645 W
11,138.00	88.90	182.86	10,461.12	-651.95	1,289.11	403,063.87	745,599.01	32° 6' 22.9815 N	103° 40' 25.1162 W
11,229.00	89.16	183.39	10,462.66	-742.80	1,284.15	402,973.02	745,594.05	32° 6' 22.0828 N	103° 40' 25.1804 W
11,319.00	92.07	183.92	10,461.69	-832.60	1,278.41	402,883.22	745,588.32	32° 6' 21.1945 N	103° 40' 25.2535 W
11,410.00	94.94	181.99	10,456.13	-923.30	1,273.73	402,792.52	745,583.63	32° 6' 20.2973 N	103° 40' 25.3144 W
11,500.00	93.12	179.35	10,449.80	-1,013.06	1,272.68	402,702.76	745,582.58	32° 6' 19.4091 N	103° 40' 25.3329 W
11,593.00	91.54	178.65	10,446.02	-1,105.96	1,274.30	402,609.86	745,584.21	32° 6' 18.4897 N	103° 40' 25.3207 W
11,684.00	88.20	178.47	10,446.23	-1,196.92	1,276.59	402,518.90	745,586.49	32° 6' 17.5894 N	103° 40' 25.3006 W
11,776.00	88.11	178.65	10,449.19	-1,288.85	1,278.90	402,426.98	745,588.80	32° 6' 16.6797 N	103° 40' 25.2802 W
11,867.00	86.88	178.29	10,453.17	-1,379.72	1,281.32	402,336.10	745,591.23	32° 6' 15.7802 N	103° 40' 25.2585 W
11,957.00	88.11	179.35	10,457.10	-1,469.62	1,283.18	402,246.20	745,593.08	32° 6' 14.8906 N	103° 40' 25.2434 W
12,050.00	88.11	179.00	10,460.17	-1,562.56	1,284.51	402,153.27	745,594.42	32° 6' 13.9708 N	103° 40' 25.2344 W
12,142.00	90.22	178.29	10,461.51	-1,654.52	1,286.69	402,061.31	745,596.60	32° 6' 13.0607 N	103° 40' 25.2157 W
12,237.00	90.84	178.65	10,460.63	-1,749.48	1,289.23	401,966.35	745,599.13	32° 6' 12.1208 N	103° 40' 25.1929 W
12,331.00	88.81	177.77	10,460.92	-1,843.42	1,292.16	401,872.40	745,602.07	32° 6' 11.1910 N	103° 40' 25.1655 W
12,426.00	88.46	177.77	10,463.18	-1,938.33	1,295.86	401,777.50	745,605.76	32° 6' 10.2516 N	103° 40' 25.1293 W
12,520.00	87.32	177.42	10,466.64	-2,032.18	1,299.80	401,683.64	745,609.71	32° 6' 9.3227 N	103° 40' 25.0901 W
12,615.00	89.69	178.12	10,469.12	-2,127.07	1,303.49	401,588.76	745,613.40	32° 6' 8.3835 N	103° 40' 25.0539 W
12,710.00	89.34	178.47	10,469.92	-2,222.02	1,306.32	401,493.80	745,616.23	32° 6' 7.4437 N	103° 40' 25.0278 W
12,804.00	88.99	179.00	10,471.29	-2,315.99	1,308.39	401,399.84	745,618.30	32° 6' 6.5137 N	103° 40' 25.0104 W
12,899.00	89.78	178.82	10,472.31	-2,410.96	1,310.20	401,304.86	745,620.11	32° 6' 5.5737 N	103° 40' 24.9961 W
12,993.00	88.99	178.65	10,473.32	-2,504.93	1,312.28	401,210.89	745,622.18	32° 6' 4.6437 N	103° 40' 24.9787 W
13,088.00	89.78	179.35	10,474.34	-2,599.91	1,313.93	401,115.91	745,623.84	32° 6' 3.7038 N	103° 40' 24.9662 W
13,181.00	89.52	179.35	10,474.91	-2,692.90	1,314.99	401,022.92	745,624.90	32° 6' 2.7835 N	103° 40' 24.9605 W
13,277.00	89.43	179.00	10,475.79	-2,788.89	1,316.37	400,926.93	745,626.28	32° 6' 1.8336 N	103° 40' 24.9513 W
13,372.00	90.40	179.70	10,475.93	-2,883.88	1,317.45	400,831.94	745,627.36	32° 6' 0.8935 N	103° 40' 24.9455 W
13,467.00	90.40	179.70	10,475.27	-2,978.88	1,317.95	400,736.94	745,627.85	32° 5' 59.9534 N	103° 40' 24.9465 W
13,562.00	90.57	179.70	10,474.46	-3,073.87	1,318.44	400,641.95	745,628.35	32° 5' 59.0133 N	103° 40' 24.9475 W
13,657.00	90.13	179.52	10,473.88	-3,168.87	1,319.09	400,546.95	745,629.00	32° 5' 58.0733 N	103° 40' 24.9467 W
13,752.00	90.57	179.35	10,473.30	-3,263.86	1,320.03	400,451.96	745,629.93	32° 5' 57.1332 N	103° 40' 24.9426 W
13,847.00	91.10	179.17	10,471.92	-3,358.85	1,321.25	400,356.98	745,631.16	32° 5' 56.1932 N	103° 40' 24.9351 W
13,941.00	90.48	179.17	10,470.62	-3,452.83	1,322.62	400,263.00	745,632.52	32° 5' 55.2631 N	103° 40' 24.9259 W
14,036.00	89.34	178.33	10,470.77	-3,547.80	1,324.69	400,168.02	745,634.60	32° 5' 54.3232 N	103° 40' 24.9086 W
14,130.00	90.13	178.15	10,471.21	-3,641.75	1,327.58	400,074.07	745,637.48	32° 5' 53.3933 N	103° 40' 24.8817 W
14,223.00	91.10	179.38	10,470.21	-3,734.72	1,329.58	399,981.10	745,639.49	32° 5' 52.4732 N	103° 40' 24.8650 W
14,315.00	89.87	180.96	10,469.43	-3,826.72	1,329.31	399,889.11	745,639.21	32° 5' 51.5629 N	103° 40' 24.8747 W
14,407.00	89.43	180.96	10,469.99	-3,918.70	1,327.77	399,797.12	745,637.67	32° 5' 50.6527 N	103° 40' 24.8992 W
14,501.00	89.25	180.96	10,471.07	-4,012.68	1,326.19	399,703.14	745,636.10	32° 5' 49.7228 N	103° 40' 24.9242 W
14,596.00	89.78	180.96	10,471.88	-4,107.67	1,324.60	399,608.16	745,634.51	32° 5' 48.7830 N	103° 40' 24.9495 W
14,690.00	88.81	181.51	10,473.04	-4,201.63	1,322.57	399,514.19	745,632.48	32° 5' 47.8532 N	103° 40' 24.9797 W
14,784.00	87.41	180.63	10,476.14	-4,295.56	1,320.82	399,420.26	745,630.73	32° 5' 46.9238 N	103° 40' 25.0068 W
14,878.00	88.90	181.51	10,479.16	-4,389.50	1,319.06	399,326.33	745,628.97	32° 5' 45.9944 N	103° 40' 25.0338 W

LEAM Drilling Services

Survey Report - Geographic

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,973.00	89.87	181.51	10,480.18	-4,484.46	1,316.56	399,231.37	745,626.47	32° 5' 45.0549 N	103° 40' 25.0697 W
15,067.00	89.34	181.86	10,480.83	-4,578.41	1,313.80	399,137.41	745,623.70	32° 5' 44.1253 N	103° 40' 25.1085 W
15,162.00	89.25	182.04	10,482.00	-4,673.35	1,310.56	399,042.47	745,620.47	32° 5' 43.1860 N	103° 40' 25.1528 W
15,257.00	89.52	181.16	10,483.02	-4,768.31	1,307.91	398,947.52	745,617.82	32° 5' 42.2466 N	103° 40' 25.1904 W
15,352.00	90.92	180.28	10,482.65	-4,863.29	1,306.72	398,852.53	745,616.63	32° 5' 41.3067 N	103° 40' 25.2111 W
15,447.00	90.75	180.46	10,481.27	-4,958.28	1,306.11	398,757.54	745,616.01	32° 5' 40.3667 N	103° 40' 25.2249 W
15,542.00	91.54	180.63	10,479.37	-5,053.26	1,305.20	398,662.56	745,615.11	32° 5' 39.4269 N	103° 40' 25.2422 W
15,637.00	90.04	180.28	10,478.06	-5,148.24	1,304.45	398,567.58	745,614.35	32° 5' 38.4870 N	103° 40' 25.2577 W
15,732.00	90.04	180.28	10,477.99	-5,243.24	1,303.98	398,472.58	745,613.89	32° 5' 37.5470 N	103° 40' 25.2699 W
15,827.00	90.66	179.05	10,477.41	-5,338.24	1,304.54	398,377.58	745,614.45	32° 5' 36.6069 N	103° 40' 25.2702 W
15,922.00	90.31	178.70	10,476.61	-5,433.22	1,306.40	398,282.61	745,616.31	32° 5' 35.6670 N	103° 40' 25.2552 W
16,017.00	90.48	178.52	10,475.96	-5,528.18	1,308.71	398,187.64	745,618.61	32° 5' 34.7270 N	103° 40' 25.2352 W
16,112.00	90.40	178.70	10,475.23	-5,623.15	1,311.01	398,092.67	745,620.92	32° 5' 33.7871 N	103° 40' 25.2152 W
16,207.00	89.52	178.52	10,475.29	-5,718.13	1,313.32	397,997.70	745,623.22	32° 5' 32.8472 N	103° 40' 25.1951 W
16,302.00	91.54	178.53	10,474.41	-5,813.08	1,315.76	397,902.74	745,625.67	32° 5' 31.9074 N	103° 40' 25.1735 W
16,397.00	91.10	178.18	10,472.22	-5,908.02	1,318.49	397,807.80	745,628.40	32° 5' 30.9678 N	103° 40' 25.1485 W
16,491.00	91.28	177.82	10,470.27	-6,001.94	1,321.77	397,713.88	745,631.67	32° 5' 30.0381 N	103° 40' 25.1171 W
16,587.00	89.96	178.35	10,469.23	-6,097.88	1,324.98	397,617.94	745,634.88	32° 5' 29.0886 N	103° 40' 25.0866 W
16,682.00	89.96	178.18	10,469.30	-6,192.84	1,327.85	397,522.98	745,637.76	32° 5' 28.1487 N	103° 40' 25.0599 W
16,777.00	89.25	179.23	10,469.96	-6,287.81	1,330.00	397,428.01	745,639.91	32° 5' 27.2088 N	103° 40' 25.0417 W
16,872.00	88.20	178.88	10,472.07	-6,382.77	1,331.57	397,333.05	745,641.47	32° 5' 26.2690 N	103° 40' 25.0303 W
16,967.00	88.81	178.88	10,474.55	-6,477.72	1,333.42	397,238.10	745,643.33	32° 5' 25.3293 N	103° 40' 25.0154 W
17,062.00	88.81	178.88	10,476.52	-6,572.68	1,335.28	397,143.14	745,645.19	32° 5' 24.3895 N	103° 40' 25.0006 W
17,157.00	88.55	178.70	10,478.71	-6,667.63	1,337.28	397,048.19	745,647.19	32° 5' 23.4498 N	103° 40' 24.9841 W
17,252.00	89.78	179.05	10,480.09	-6,762.60	1,339.15	396,953.22	745,649.06	32° 5' 22.5099 N	103° 40' 24.9691 W
17,347.00	90.57	180.46	10,479.80	-6,857.60	1,339.56	396,858.22	745,649.46	32° 5' 21.5698 N	103° 40' 24.9712 W
17,442.00	90.48	180.11	10,478.93	-6,952.59	1,339.08	396,763.23	745,648.99	32° 5' 20.6298 N	103° 40' 24.9834 W
17,537.00	90.66	180.11	10,477.99	-7,047.59	1,338.90	396,668.23	745,648.81	32° 5' 19.6898 N	103° 40' 24.9923 W
17,631.00	90.31	180.11	10,477.19	-7,141.59	1,338.72	396,574.24	745,648.63	32° 5' 18.7596 N	103° 40' 25.0011 W
17,726.00	91.63	180.64	10,475.58	-7,236.57	1,338.10	396,479.25	745,648.00	32° 5' 17.8198 N	103° 40' 25.0150 W
17,821.00	88.99	180.11	10,475.07	-7,331.56	1,337.48	396,384.27	745,647.38	32° 5' 16.8798 N	103° 40' 25.0290 W
17,916.00	89.43	180.64	10,476.38	-7,426.54	1,336.85	396,289.28	745,646.76	32° 5' 15.9399 N	103° 40' 25.0430 W
18,010.00	89.16	180.46	10,477.54	-7,520.53	1,335.95	396,195.29	745,645.86	32° 5' 15.0099 N	103° 40' 25.0602 W
18,104.00	89.96	180.64	10,478.26	-7,614.52	1,335.05	396,101.30	745,644.96	32° 5' 14.0798 N	103° 40' 25.0773 W
18,199.00	88.90	180.29	10,479.20	-7,709.51	1,334.28	396,006.31	745,644.19	32° 5' 13.1399 N	103° 40' 25.0931 W
18,285.00	88.90	180.76	10,480.85	-7,795.50	1,333.49	395,920.33	745,643.40	32° 5' 12.2891 N	103° 40' 25.1083 W
18,380.00	88.64	180.58	10,482.89	-7,890.47	1,332.38	395,825.35	745,642.29	32° 5' 11.3494 N	103° 40' 25.1280 W
18,474.00	89.52	180.23	10,484.40	-7,984.45	1,331.72	395,731.37	745,641.62	32° 5' 10.4194 N	103° 40' 25.1424 W
18,569.00	90.57	179.88	10,484.33	-8,079.45	1,331.63	395,636.37	745,641.53	32° 5' 9.4793 N	103° 40' 25.1502 W
18,664.00	90.40	179.35	10,483.52	-8,174.44	1,332.26	395,541.38	745,642.17	32° 5' 8.5393 N	103° 40' 25.1495 W
18,758.00	89.16	178.82	10,483.88	-8,268.43	1,333.76	395,447.39	745,643.67	32° 5' 7.6091 N	103° 40' 25.1388 W
18,853.00	91.19	179.17	10,483.59	-8,363.41	1,335.43	395,352.41	745,645.34	32° 5' 6.6691 N	103° 40' 25.1262 W
18,947.00	90.92	178.82	10,481.86	-8,457.38	1,337.08	395,258.44	745,646.99	32° 5' 5.7391 N	103° 40' 25.1137 W
19,041.00	90.48	178.82	10,480.72	-8,551.35	1,339.01	395,164.47	745,648.92	32° 5' 4.8091 N	103° 40' 25.0979 W
19,135.00	90.13	178.47	10,480.22	-8,645.32	1,341.24	395,070.50	745,651.14	32° 5' 3.8791 N	103° 40' 25.0787 W
19,230.00	89.52	178.47	10,480.51	-8,740.29	1,343.77	394,975.53	745,653.68	32° 5' 2.9392 N	103° 40' 25.0560 W
19,325.00	88.99	178.12	10,481.74	-8,835.24	1,346.60	394,880.58	745,656.51	32° 5' 1.9994 N	103° 40' 25.0299 W
19,419.00	88.02	177.24	10,484.19	-8,929.13	1,350.40	394,786.70	745,660.31	32° 5' 1.0701 N	103° 40' 24.9923 W
19,513.00	86.70	178.12	10,488.52	-9,022.95	1,354.21	394,692.87	745,664.11	32° 5' 0.1415 N	103° 40' 24.9548 W
19,606.00	89.25	177.94	10,491.81	-9,115.83	1,357.40	394,600.00	745,667.31	32° 4' 59.2222 N	103° 40' 24.9243 W
19,701.00	91.01	179.52	10,491.59	-9,210.80	1,359.51	394,505.03	745,669.41	32° 4' 58.2823 N	103° 40' 24.9066 W
19,796.00	90.66	179.52	10,490.21	-9,305.78	1,360.30	394,410.04	745,670.21	32° 4' 57.3423 N	103° 40' 24.9041 W
19,890.00	91.36	180.05	10,488.55	-9,399.77	1,360.65	394,316.06	745,670.56	32° 4' 56.4122 N	103° 40' 24.9067 W
19,985.00	91.01	179.88	10,486.59	-9,494.75	1,360.71	394,221.08	745,670.62	32° 4' 55.4723 N	103° 40' 24.9127 W
20,080.00	90.92	179.70	10,484.99	-9,589.73	1,361.06	394,126.09	745,670.97	32° 4' 54.5324 N	103° 40' 24.9154 W

LEAM Drilling Services

Survey Report - Geographic

Company: Devon Energy
Project: Lea County, NM (NAD-83)
Site: Marwari/Van Doo Dah
Well: Marwari 28-16 State Fed Com 236H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well Marwari 28-16 State Fed Com 236H
TVD Reference: 3389.3' GE + 32' KB @ 3421.30usft
MD Reference: 3389.3' GE + 32' KB @ 3421.30usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Multi User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
20,174.00	90.92	179.52	10,483.48	-9,683.72	1,361.70	394,032.10	745,671.61	32° 4' 53.6023 N	103° 40' 24.9147 W
20,269.00	90.22	179.35	10,482.53	-9,778.71	1,362.64	393,937.11	745,672.54	32° 4' 52.6622 N	103° 40' 24.9106 W
20,361.00	89.78	179.00	10,482.53	-9,870.70	1,363.96	393,845.12	745,673.87	32° 4' 51.7518 N	103° 40' 24.9017 W
20,456.00	89.25	178.65	10,483.34	-9,965.67	1,365.91	393,750.15	745,675.82	32° 4' 50.8119 N	103° 40' 24.8858 W
20,550.00	89.25	179.00	10,484.57	-10,059.65	1,367.84	393,656.18	745,677.74	32° 4' 49.8818 N	103° 40' 24.8701 W
20,644.00	88.64	178.82	10,486.30	-10,153.61	1,369.62	393,562.21	745,679.53	32° 4' 48.9519 N	103° 40' 24.8560 W
20,738.00	88.29	178.47	10,488.82	-10,247.55	1,371.85	393,468.27	745,681.75	32° 4' 48.0222 N	103° 40' 24.8368 W
20,763.04	88.29	178.28	10,489.56	-10,272.57	1,372.56	393,443.25	745,682.46	32° 4' 47.7746 N	103° 40' 24.8304 W
LTP (Marwari 236H) - 100' FSL, 660' FEL S33									
20,764.53	88.29	178.27	10,489.61	-10,274.06	1,372.60	393,441.76	745,682.51	32° 4' 47.7598 N	103° 40' 24.8299 W
LTP (Marwari 236H) - 100' FSL, 642' FEL S33									
20,767.40	88.29	178.25	10,489.69	-10,276.92	1,372.69	393,438.90	745,682.60	32° 4' 47.7315 N	103° 40' 24.8291 W
LTP (Marwari 236H) - 100' FSL, 660' FEL of S33									
20,784.00	88.29	178.12	10,490.19	-10,293.51	1,373.21	393,422.31	745,683.12	32° 4' 47.5673 N	103° 40' 24.8242 W
20,842.91	88.29	178.12	10,491.95	-10,352.36	1,375.15	393,363.46	745,685.05	32° 4' 46.9848 N	103° 40' 24.8059 W
PBHL (Marwari 236H) - 20' FSL, 660' FEL S33									
20,843.00	88.29	178.12	10,491.95	-10,352.45	1,375.15	393,363.37	745,685.06	32° 4' 46.9839 N	103° 40' 24.8059 W
PBHL (Marwari 236H) - 22' FSL, 640' FEL S33 - PBHL (Marwari 236H) - 20' FSL, 660' FEL of S33									