

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

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

Form C-104
Revised August 1, 2011

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Devon Energy Production Company, L.P. 333 West Sheridan, Oklahoma City, OK 73102		² OGRID Number 6137
		³ Reason for Filing Code/ Effective Date NW / 11/4/20
⁴ API Number 30-025-46430	⁵ Pool Name WC-025 G-09 S243310P; UPPER WOLFCAMP	⁶ Pool Code 98135 KZ
⁷ Property Code 316705	⁸ Property Name Blue Krait 23-14 Fed	⁹ Well Number 31H

II. ¹⁰ Surface Location

UI or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24S	33E		245	South	980	West	Lea

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	14	24S	33E		101	North	1179	West	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 11/4/20	¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date	¹⁷ C-129 Expiration Date				

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
174238	Enterprise 201 Park Avenue, Ste 1600 Oklahoma City, OK 73102	Oil
371960	Lucid Energy Delaware, LLC 3100 McKinnon St., Ste. 800, Dallas, TX 75201	Gas

IV. Well Completion Data

²¹ Spud Date 1/17/20	²² Ready Date 11/4/20	²³ TD 22871	²⁴ PBDT 22810	²⁵ Perforations 12800 - 22753	²⁶ DHC, MC
²⁷ Hole Size	²⁸ Casing & Tubing Size	²⁹ Depth Set	³⁰ Sacks Cement		
17.5	13.375	1307	955 sx CIA; Circ 472 sx		
9.875	8.625	11907	790 sx CIA; Circ 0 sx		
7.875	5.5	22854	3025 sx CIH; Circ 506 sx		
	Tubing: 2.875	12,244'			

V. Well Test Data

³¹ Date New Oil 11/29/20	³² Gas Delivery Date 11/29/20	³³ Test Date 11/29/20	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure 1712 psi	³⁶ Csg. Pressure 3154 psi
³⁷ Choke Size	³⁸ Oil 2023 bbl	³⁹ Water 3246 bbl	⁴⁰ Gas 4004 mcf		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: <i>Rebecca Deal</i>			OIL CONSERVATION DIVISION		
Printed name: Rebecca Deal			Approved by: PM		
Title: Regulatory Analyst			Title: LM II		
E-mail Address: Rebecca.Deal@dvn.com			Approval Date: 4/5/2021		
Date: 12/3/2020			Request for NMOCD extension of time to file BLM -approved form 3160-4 within 10 days to NMOCD after BLM approval.		
Phone: 405-228-8429					

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 RD., 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, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-46430	Pool Code 98135	Pool Name WC-025 G-09 S243310P; UPPER WOLFCAMP
Property Code 316705	Property Name BLUE KRAIT 23-14 FED	Well Number 31H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3555.5'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24-S	33-E		245	SOUTH	980	WEST	LEA

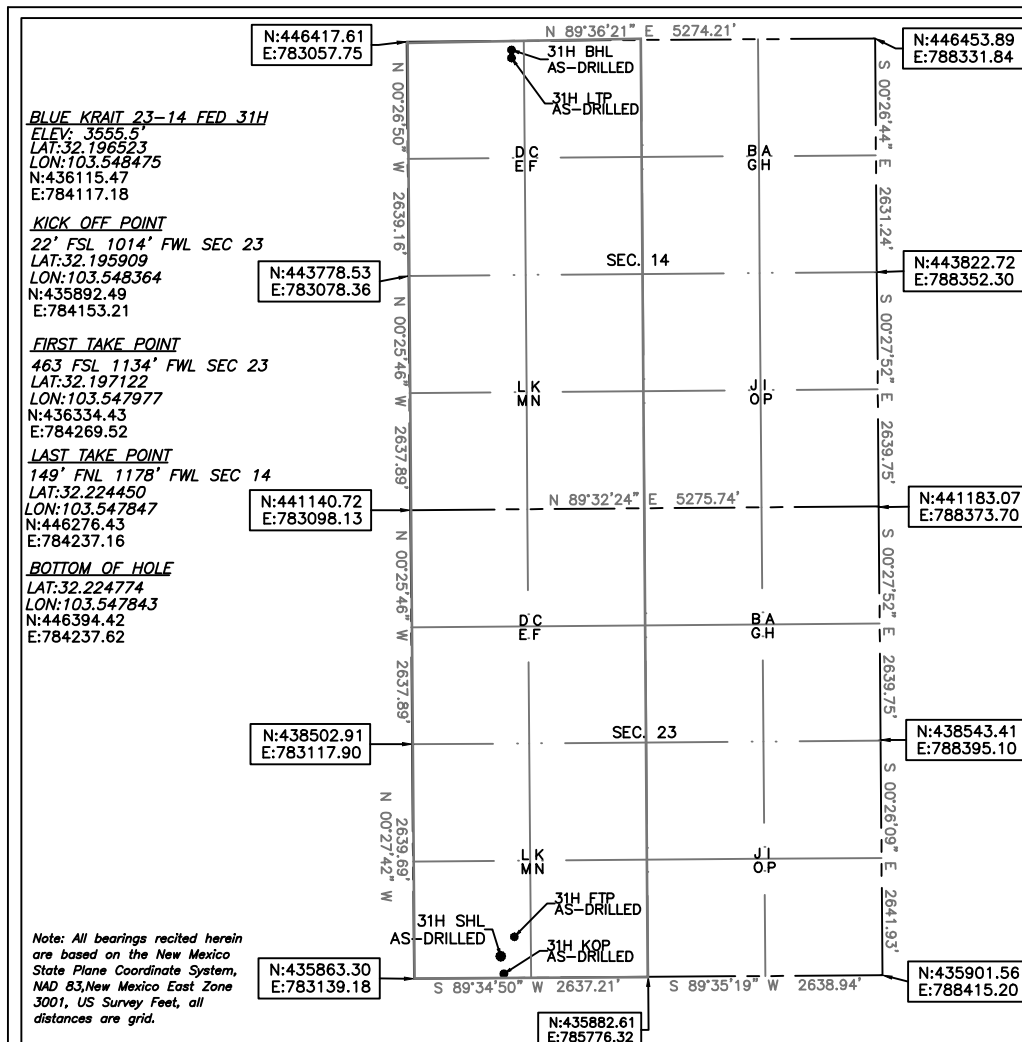
Bottom Hole Location If Different From Surface

SL

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	14	24-S	33-E		101	NORTH	1179	WEST	LEA

Dedicated Acres 640	Joint or Infill	Consolidation Code	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**



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Rebecca Deal 11/17/2020
Signature Date

Rebecca Deal, Regulatory Analyst
Printed Name

rebecca.deal@dm.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.

04/13/2020

Date of Survey

Signature & Seal of Professional Surveyor



11/2/20

Certificate No. 22404 B.L. LAMAN

DRAWN BY: CM

Intent ☐ As Drilled ☒

API # 30-025-46430		
Operator Name: DEVON ENERGY PRODUCTION COMPANY, LP.	Property Name: BLUE KRAIT 23-14 FED	Well Number 31H

Kick Off Point (KOP)

UL M	Section 23	Township 24-S	Range 33-E	Lot	Feet 22	From N/S SOUTH	Feet 1014	From E/W WEST	County LEA
Latitude 32.195909					Longitude 103.548364			NAD 83	

First Take Point (FTP)

UL M	Section 23	Township 24-S	Range 33-E	Lot	Feet 463	From N/S SOUTH	Feet 1134	From E/W WEST	County LEA
Latitude 32.197122					Longitude 103.547977			NAD 83	

Last Take Point (LTP)

UL D	Section 14	Township 24-S	Range 33-E	Lot	Feet 149	From N/S NORTH	Feet 1178	From E/W WEST	County LEA
Latitude 32.224450					Longitude 103.547847			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

Devon

SURVEY REPORT

Blue Krait 23-14 Fed #31H

Patterson 575

I, Deanna Jacobs, certify the surveys supplied on
Blue Krait 23-14 Fed 31H are correct and accurate to the best of my
knowledge and are supported by actual field data.

Deanna Jacobs

Date: 4/13/2020



The **Ultimate Partner** In Wellbore Placement



Devon Energy

Lea County, NM (NAD83 NME)

Blue Krait 23-14 Fed

#31H

OH

Design: As Drilled

Standard Survey Report

13 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site		Blue Krait 23-14 Fed			
Site Position:		Northing:	436,115.47 usft	Latitude:	32.196523
From:	Map	Easting:	784,117.18 usft	Longitude:	-103.548475
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.42 °

Well	#31H					
Well Position	+N/-S	0.00 usft	Northing:	436,115.47 usft	Latitude:	32.196523
	+E/-W	0.00 usft	Easting:	784,117.18 usft	Longitude:	-103.548475
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,556.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	3/26/2020	6.55	59.83	47,792.00000000

Design	As Drilled				
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	0.41	

Survey Program	Date	4/13/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
175.00	1,235.00	Survey #1 MWD Only (OH)	MWD+HDGM	OWSG MWD + HDGM	
1,415.00	22,871.00	Survey #2 SDI MWD (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
175.00	0.47	152.30	175.00	-0.64	0.33	-0.63	0.27	0.27	0.00	
266.00	0.05	129.70	266.00	-0.99	0.54	-0.99	0.47	-0.46	-24.84	
358.00	0.43	141.48	358.00	-1.29	0.78	-1.28	0.41	0.41	12.80	
450.00	0.50	170.90	449.99	-1.95	1.06	-1.95	0.27	0.08	31.98	
542.00	0.51	136.31	541.99	-2.65	1.41	-2.64	0.33	0.01	-37.60	
634.00	0.56	176.46	633.99	-3.39	1.72	-3.38	0.40	0.05	43.64	
724.00	0.46	134.71	723.98	-4.08	2.00	-4.07	0.42	-0.11	-46.39	
815.00	0.24	153.56	814.98	-4.51	2.35	-4.49	0.27	-0.24	20.71	
906.00	0.45	155.54	905.98	-5.01	2.58	-4.99	0.23	0.23	2.18	



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

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)
997.00	0.53	140.16	996.98	-5.66	3.00	-5.63	0.17	0.09	-16.90
1,087.00	0.27	114.56	1,086.97	-6.06	3.46	-6.04	0.34	-0.29	-28.44
1,179.00	0.51	127.14	1,178.97	-6.40	3.98	-6.37	0.28	0.26	13.67
1,235.00	0.34	118.76	1,234.97	-6.63	4.33	-6.60	0.32	-0.30	-14.96
1,415.00	0.50	71.04	1,414.97	-6.63	5.54	-6.59	0.21	0.09	-26.51
1,509.00	0.82	73.29	1,508.96	-6.31	6.57	-6.26	0.34	0.34	2.39
1,603.00	0.79	69.46	1,602.95	-5.89	7.82	-5.83	0.07	-0.03	-4.07
1,698.00	0.48	57.36	1,697.94	-5.44	8.77	-5.38	0.35	-0.33	-12.74
1,792.00	0.41	38.37	1,791.94	-4.97	9.31	-4.90	0.17	-0.07	-20.20
1,886.00	0.27	2.48	1,885.94	-4.48	9.53	-4.41	0.26	-0.15	-38.18
1,981.00	1.06	169.67	1,980.94	-5.12	9.69	-5.05	1.39	0.83	175.99
2,074.00	1.86	181.00	2,073.90	-7.48	9.82	-7.41	0.91	0.86	12.18
2,169.00	3.33	183.29	2,168.80	-11.77	9.64	-11.70	1.55	1.55	2.41
2,263.00	4.70	169.92	2,262.57	-18.29	10.15	-18.22	1.76	1.46	-14.22
2,358.00	5.12	169.62	2,357.22	-26.29	11.60	-26.21	0.44	0.44	-0.32
2,453.00	4.89	170.49	2,451.86	-34.46	13.03	-34.36	0.25	-0.24	0.92
2,546.00	4.71	167.02	2,544.54	-42.09	14.54	-41.98	0.37	-0.19	-3.73
2,640.00	4.60	170.45	2,638.23	-49.56	16.04	-49.45	0.32	-0.12	3.65
2,735.00	4.34	169.60	2,732.94	-56.86	17.32	-56.73	0.28	-0.27	-0.89
2,829.00	3.96	169.50	2,826.69	-63.55	18.55	-63.41	0.40	-0.40	-0.11
2,924.00	3.70	170.98	2,921.48	-69.80	19.63	-69.66	0.29	-0.27	1.56
3,019.00	3.26	165.59	3,016.30	-75.44	20.78	-75.29	0.58	-0.46	-5.67
3,113.00	2.61	168.03	3,110.18	-80.12	21.89	-79.97	0.70	-0.69	2.60
3,207.00	3.18	160.89	3,204.06	-84.68	23.19	-84.51	0.72	0.61	-7.60
3,301.00	3.33	161.97	3,297.91	-89.74	24.89	-89.56	0.17	0.16	1.15
3,395.00	3.49	164.12	3,391.74	-95.09	26.51	-94.90	0.22	0.17	2.29
3,490.00	4.88	168.29	3,486.49	-101.83	28.13	-101.62	1.50	1.46	4.39
3,585.00	4.73	167.34	3,581.15	-109.61	29.80	-109.39	0.18	-0.16	-1.00
3,680.00	4.21	173.51	3,675.86	-116.89	31.06	-116.67	0.74	-0.55	6.49
3,774.00	3.52	180.07	3,769.65	-123.21	31.44	-122.98	0.87	-0.73	6.98
3,869.00	3.14	183.15	3,864.49	-128.72	31.30	-128.49	0.44	-0.40	3.24
3,964.00	4.21	178.38	3,959.29	-134.80	31.25	-134.58	1.17	1.13	-5.02
4,058.00	4.67	168.42	4,053.01	-142.00	32.12	-141.77	0.95	0.49	-10.60
4,153.00	4.94	169.48	4,147.68	-149.81	33.64	-149.57	0.30	0.28	1.12
4,247.00	4.16	169.78	4,241.38	-157.15	34.99	-156.89	0.83	-0.83	0.32
4,341.00	3.42	164.85	4,335.17	-163.21	36.32	-162.94	0.86	-0.79	-5.24
4,436.00	3.94	150.73	4,429.98	-168.79	38.66	-168.51	1.10	0.55	-14.86
4,531.00	4.88	157.87	4,524.70	-175.38	41.78	-175.08	1.14	0.99	7.52
4,626.00	5.02	158.21	4,619.34	-182.98	44.84	-182.66	0.15	0.15	0.36
4,720.00	4.63	149.80	4,713.01	-190.08	48.28	-189.73	0.86	-0.41	-8.95
4,815.00	4.07	150.34	4,807.74	-196.33	51.87	-195.95	0.59	-0.59	0.57
4,910.00	4.16	142.86	4,902.49	-202.00	55.62	-201.60	0.57	0.09	-7.87
5,004.00	2.91	139.68	4,996.31	-206.54	59.23	-206.11	1.35	-1.33	-3.38



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
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Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

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)
5,099.00	1.45	135.09	5,091.24	-209.23	61.64	-208.78	1.55	-1.54	-4.83
5,193.00	1.18	137.20	5,185.22	-210.78	63.13	-210.32	0.29	-0.29	2.24
5,288.00	1.37	125.18	5,280.19	-212.15	64.73	-211.68	0.34	0.20	-12.65
5,383.00	1.49	123.25	5,375.16	-213.48	66.69	-213.00	0.14	0.13	-2.03
5,478.00	1.41	119.58	5,470.13	-214.74	68.74	-214.24	0.13	-0.08	-3.86
5,573.00	1.07	72.46	5,565.11	-215.05	70.60	-214.54	1.09	-0.36	-49.60
5,667.00	1.59	27.31	5,659.09	-213.63	72.03	-213.10	1.20	0.55	-48.03
5,760.00	1.45	17.93	5,752.06	-211.36	72.99	-210.83	0.31	-0.15	-10.09
5,855.00	1.31	12.94	5,847.03	-209.16	73.60	-208.63	0.19	-0.15	-5.25
5,949.00	0.94	12.71	5,941.01	-207.36	74.01	-206.82	0.39	-0.39	-0.24
6,044.00	1.28	309.19	6,036.00	-205.93	73.36	-205.40	1.27	0.36	-66.86
6,138.00	1.47	303.65	6,129.97	-204.60	71.54	-204.08	0.25	0.20	-5.89
6,233.00	1.17	290.02	6,224.95	-203.59	69.62	-203.08	0.46	-0.32	-14.35
6,327.00	1.28	308.28	6,318.92	-202.61	67.89	-202.12	0.43	0.12	19.43
6,422.00	1.33	298.35	6,413.90	-201.43	66.09	-200.95	0.24	0.05	-10.45
6,516.00	0.93	258.79	6,507.88	-201.06	64.38	-200.59	0.91	-0.43	-42.09
6,611.00	1.02	241.42	6,602.87	-201.61	62.88	-201.16	0.32	0.09	-18.28
6,704.00	0.66	247.20	6,695.86	-202.22	61.66	-201.77	0.40	-0.39	6.22
6,799.00	0.43	235.97	6,790.85	-202.63	60.86	-202.19	0.27	-0.24	-11.82
6,893.00	0.47	219.31	6,884.85	-203.12	60.32	-202.69	0.14	0.04	-17.72
6,989.00	0.31	239.65	6,980.85	-203.56	59.85	-203.13	0.22	-0.17	21.19
7,083.00	0.77	242.37	7,074.85	-203.98	59.07	-203.55	0.49	0.49	2.89
7,178.00	0.52	294.75	7,169.84	-204.10	58.11	-203.68	0.64	-0.26	55.14
7,272.00	0.77	253.52	7,263.83	-204.10	57.12	-203.68	0.54	0.27	-43.86
7,366.00	0.60	244.53	7,357.83	-204.49	56.07	-204.08	0.21	-0.18	-9.56
7,461.00	0.54	292.96	7,452.82	-204.53	55.21	-204.13	0.50	-0.06	50.98
7,555.00	0.31	279.38	7,546.82	-204.31	54.55	-203.92	0.27	-0.24	-14.45
7,650.00	0.40	299.79	7,641.82	-204.11	54.01	-203.71	0.16	0.09	21.48
7,745.00	0.77	300.42	7,736.81	-203.62	53.17	-203.23	0.39	0.39	0.66
7,839.00	0.59	288.22	7,830.81	-203.15	52.17	-202.77	0.24	-0.19	-12.98
7,934.00	0.35	280.76	7,925.80	-202.94	51.42	-202.57	0.26	-0.25	-7.85
8,029.00	0.38	281.32	8,020.80	-202.82	50.82	-202.46	0.03	0.03	0.59
8,123.00	0.38	286.42	8,114.80	-202.68	50.22	-202.31	0.04	0.00	5.43
8,218.00	0.28	253.39	8,209.80	-202.65	49.69	-202.29	0.22	-0.11	-34.77
8,313.00	0.57	231.05	8,304.80	-203.02	49.10	-202.66	0.35	0.31	-23.52
8,408.00	0.65	204.77	8,399.79	-203.80	48.51	-203.45	0.30	0.08	-27.66
8,502.00	0.63	204.00	8,493.79	-204.76	48.08	-204.41	0.02	-0.02	-0.82
8,597.00	0.50	209.02	8,588.78	-205.60	47.66	-205.25	0.15	-0.14	5.28
8,692.00	0.52	195.77	8,683.78	-206.38	47.35	-206.03	0.13	0.02	-13.95
8,787.00	0.61	190.65	8,778.77	-207.29	47.14	-206.94	0.11	0.09	-5.39
8,881.00	0.67	198.39	8,872.77	-208.30	46.87	-207.96	0.11	0.06	8.23
8,976.00	0.60	193.85	8,967.76	-209.31	46.57	-208.97	0.09	-0.07	-4.78
9,071.00	0.64	200.83	9,062.75	-210.29	46.27	-209.95	0.09	0.04	7.35



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,166.00	0.56	218.31	9,157.75	-211.15	45.79	-210.82	0.21	-0.08	18.40
9,260.00	0.81	197.89	9,251.74	-212.14	45.30	-211.81	0.37	0.27	-21.72
9,357.00	1.14	209.63	9,348.73	-213.63	44.61	-213.31	0.40	0.34	12.10
9,451.00	0.60	207.93	9,442.72	-214.88	43.92	-214.56	0.58	-0.57	-1.81
9,545.00	0.91	232.34	9,536.71	-215.77	43.10	-215.46	0.47	0.33	25.97
9,640.00	1.28	203.93	9,631.69	-217.20	42.07	-216.90	0.68	0.39	-29.91
9,734.00	1.58	189.59	9,725.66	-219.44	41.43	-219.14	0.49	0.32	-15.26
9,829.00	1.05	189.22	9,820.64	-221.59	41.07	-221.29	0.56	-0.56	-0.39
9,924.00	1.31	195.88	9,915.62	-223.49	40.64	-223.20	0.31	0.27	7.01
10,019.00	0.77	225.57	10,010.60	-224.99	39.88	-224.69	0.79	-0.57	31.25
10,112.00	0.55	175.25	10,103.60	-225.87	39.47	-225.58	0.64	-0.24	-54.11
10,207.00	0.52	188.20	10,198.59	-226.75	39.45	-226.46	0.13	-0.03	13.63
10,302.00	0.20	209.91	10,293.59	-227.32	39.31	-227.03	0.36	-0.34	22.85
10,397.00	0.27	246.30	10,388.59	-227.55	39.02	-227.27	0.17	0.07	38.31
10,492.00	0.47	179.53	10,483.59	-228.03	38.82	-227.75	0.46	0.21	-70.28
10,585.00	0.93	191.37	10,576.58	-229.15	38.67	-228.87	0.52	0.49	12.73
10,680.00	0.84	136.33	10,671.57	-230.41	39.00	-230.13	0.86	-0.09	-57.94
10,774.00	0.98	143.39	10,765.56	-231.56	39.95	-231.27	0.19	0.15	7.51
10,869.00	0.34	58.02	10,860.55	-232.06	40.68	-231.76	1.06	-0.67	-89.86
10,964.00	0.70	24.34	10,955.55	-231.38	41.16	-231.08	0.48	0.38	-35.45
11,058.00	1.19	30.16	11,049.54	-230.02	41.88	-229.71	0.53	0.52	6.19
11,153.00	1.15	358.69	11,144.52	-228.21	42.36	-227.90	0.67	-0.04	-33.13
11,247.00	1.41	340.10	11,238.50	-226.18	41.94	-225.87	0.52	0.28	-19.78
11,341.00	1.01	331.23	11,332.47	-224.37	41.15	-224.07	0.47	-0.43	-9.44
11,435.00	0.51	22.00	11,426.47	-223.25	40.91	-222.95	0.84	-0.53	54.01
11,530.00	0.17	159.21	11,521.47	-222.99	41.12	-222.69	0.68	-0.36	144.43
11,624.00	0.74	258.33	11,615.46	-223.24	40.57	-222.95	0.84	0.61	105.45
11,719.00	0.97	275.12	11,710.45	-223.30	39.17	-223.01	0.36	0.24	17.67
11,813.00	0.94	285.62	11,804.44	-223.02	37.63	-222.74	0.19	-0.03	11.17
11,855.00	1.15	274.83	11,846.43	-222.89	36.88	-222.62	0.68	0.50	-25.69
11,950.00	0.97	249.74	11,941.42	-223.09	35.18	-222.83	0.52	-0.19	-26.41
12,044.00	1.21	242.74	12,035.40	-223.82	33.55	-223.57	0.29	0.26	-7.45
12,139.00	8.21	7.84	12,130.10	-217.55	33.58	-217.30	9.43	7.37	131.68
12,233.00	20.11	15.31	12,221.08	-195.23	38.79	-194.95	12.78	12.66	7.95
12,328.00	32.91	22.04	12,305.94	-155.38	52.84	-155.00	13.82	13.47	7.08
12,422.00	41.88	19.93	12,380.54	-102.10	73.16	-101.58	9.64	9.54	-2.24
12,516.00	54.96	20.30	12,442.79	-36.23	97.31	-35.53	13.92	13.91	0.39
12,610.00	66.57	15.01	12,488.65	41.83	121.93	42.70	13.29	12.35	-5.63
12,704.00	73.58	9.84	12,520.68	128.06	140.84	129.06	9.07	7.46	-5.50
12,799.00	76.00	4.62	12,545.62	218.96	152.35	220.05	5.88	2.55	-5.49
12,894.00	80.72	1.01	12,564.79	311.85	156.89	312.97	6.21	4.97	-3.80
12,989.00	83.58	1.23	12,577.76	405.94	158.73	407.06	3.02	3.01	0.23
13,082.00	88.08	358.50	12,584.52	498.66	158.51	499.78	5.66	4.84	-2.94
13,177.00	90.03	359.72	12,586.09	593.63	157.03	594.74	2.42	2.05	1.28



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

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)
13,271.00	89.93	353.69	12,586.12	687.43	151.63	688.50	6.42	-0.11	-6.41
13,349.00	89.60	350.85	12,586.44	764.71	141.14	765.70	3.67	-0.42	-3.64
13,443.00	94.73	356.79	12,582.89	858.02	131.03	858.94	8.34	5.46	6.32
13,538.00	94.30	358.31	12,575.41	952.64	126.98	953.52	1.66	-0.45	1.60
13,632.00	91.21	0.12	12,570.89	1,046.51	125.69	1,047.38	3.81	-3.29	1.93
13,727.00	91.11	0.64	12,568.97	1,141.48	126.32	1,142.36	0.56	-0.11	0.55
13,821.00	89.30	358.41	12,568.63	1,235.47	125.55	1,236.34	3.06	-1.93	-2.37
13,915.00	90.57	357.00	12,568.74	1,329.39	121.78	1,330.23	2.02	1.35	-1.50
14,009.00	89.53	357.14	12,568.66	1,423.27	116.98	1,424.07	1.12	-1.11	0.15
14,103.00	90.57	358.26	12,568.58	1,517.19	113.20	1,517.96	1.63	1.11	1.19
14,198.00	93.15	0.89	12,565.49	1,612.12	112.50	1,612.88	3.88	2.72	2.77
14,293.00	91.38	0.56	12,561.74	1,707.03	113.70	1,707.80	1.90	-1.86	-0.35
14,388.00	89.80	0.22	12,560.76	1,802.02	114.35	1,802.80	1.70	-1.66	-0.36
14,481.00	90.43	359.57	12,560.57	1,895.02	114.18	1,895.79	0.97	0.68	-0.70
14,576.00	91.64	1.47	12,558.86	1,990.00	115.04	1,990.77	2.37	1.27	2.00
14,670.00	92.65	1.49	12,555.34	2,083.90	117.46	2,084.69	1.07	1.07	0.02
14,764.00	93.09	1.91	12,550.63	2,177.74	120.25	2,178.54	0.65	0.47	0.45
14,859.00	92.31	1.70	12,546.16	2,272.59	123.24	2,273.41	0.85	-0.82	-0.22
14,954.00	92.55	0.57	12,542.13	2,367.48	125.12	2,368.31	1.21	0.25	-1.19
15,048.00	91.68	1.21	12,538.66	2,461.40	126.58	2,462.25	1.15	-0.93	0.68
15,142.00	87.89	359.96	12,539.01	2,555.38	127.54	2,556.23	4.25	-4.03	-1.33
15,237.00	86.89	359.06	12,543.34	2,650.27	126.73	2,651.11	1.42	-1.05	-0.95
15,332.00	90.30	359.12	12,545.67	2,745.22	125.22	2,746.05	3.59	3.59	0.06
15,427.00	89.90	359.17	12,545.50	2,840.21	123.80	2,841.02	0.42	-0.42	0.05
15,521.00	90.27	359.29	12,545.36	2,934.20	122.54	2,935.00	0.41	0.39	0.13
15,616.00	89.93	359.12	12,545.20	3,029.19	121.22	3,029.98	0.40	-0.36	-0.18
15,711.00	89.63	356.60	12,545.56	3,124.12	117.67	3,124.88	2.67	-0.32	-2.65
15,805.00	90.67	357.47	12,545.31	3,217.99	112.81	3,218.71	1.44	1.11	0.93
15,900.00	90.80	359.00	12,544.10	3,312.93	109.88	3,313.63	1.62	0.14	1.61
15,994.00	88.93	357.93	12,544.32	3,406.89	107.37	3,407.57	2.29	-1.99	-1.14
16,089.00	91.94	0.60	12,543.60	3,501.86	106.15	3,502.53	4.24	3.17	2.81
16,184.00	91.24	0.52	12,540.96	3,596.82	107.07	3,597.49	0.74	-0.74	-0.08
16,278.00	92.31	1.58	12,538.05	3,690.76	108.80	3,691.44	1.60	1.14	1.13
16,372.00	93.39	2.07	12,533.37	3,784.59	111.79	3,785.29	1.26	1.15	0.52
16,467.00	91.78	2.02	12,529.09	3,879.43	115.17	3,880.16	1.70	-1.69	-0.05
16,562.00	89.40	0.90	12,528.11	3,974.39	117.59	3,975.13	2.77	-2.51	-1.18
16,656.00	89.13	1.22	12,529.32	4,068.36	119.33	4,069.11	0.45	-0.29	0.34
16,751.00	88.56	1.27	12,531.23	4,163.32	121.39	4,164.08	0.60	-0.60	0.05
16,845.00	88.42	1.36	12,533.71	4,257.26	123.55	4,258.04	0.18	-0.15	0.10
16,939.00	89.43	359.47	12,535.47	4,351.24	124.23	4,352.02	2.28	1.07	-2.01
17,034.00	89.26	358.15	12,536.56	4,446.21	122.26	4,446.97	1.40	-0.18	-1.39
17,128.00	89.30	357.30	12,537.74	4,540.13	118.53	4,540.86	0.91	0.04	-0.90
17,223.00	91.79	358.77	12,536.84	4,635.06	115.27	4,635.76	3.04	2.62	1.55



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

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)
17,317.00	92.15	359.57	12,533.61	4,728.99	113.91	4,729.69	0.93	0.38	0.85
17,411.00	92.66	359.11	12,529.66	4,822.90	112.83	4,823.59	0.73	0.54	-0.49
17,505.00	93.10	358.65	12,524.94	4,916.76	110.99	4,917.43	0.68	0.47	-0.49
17,600.00	90.20	359.37	12,522.20	5,011.70	109.35	5,012.35	3.15	-3.05	0.76
17,694.00	91.54	0.13	12,520.78	5,105.69	108.94	5,106.33	1.64	1.43	0.81
17,789.00	89.73	1.07	12,519.72	5,200.67	109.94	5,201.32	2.15	-1.91	0.99
17,884.00	91.72	1.87	12,518.52	5,295.62	112.37	5,296.29	2.26	2.09	0.84
17,979.00	91.20	0.93	12,516.10	5,390.56	114.69	5,391.25	1.13	-0.55	-0.99
18,073.00	90.44	359.14	12,514.75	5,484.55	114.75	5,485.23	2.07	-0.81	-1.90
18,168.00	90.64	358.98	12,513.86	5,579.53	113.19	5,580.20	0.27	0.21	-0.17
18,262.00	89.97	358.68	12,513.36	5,673.51	111.27	5,674.16	0.78	-0.71	-0.32
18,357.00	88.13	358.99	12,514.93	5,768.47	109.34	5,769.11	1.96	-1.94	0.33
18,451.00	87.62	358.94	12,518.42	5,862.39	107.65	5,863.01	0.55	-0.54	-0.05
18,545.00	86.51	357.72	12,523.23	5,956.23	104.91	5,956.83	1.75	-1.18	-1.30
18,640.00	88.93	358.99	12,527.01	6,051.10	102.19	6,051.68	2.88	2.55	1.34
18,735.00	91.04	359.68	12,527.04	6,146.09	101.08	6,146.66	2.34	2.22	0.73
18,829.00	91.61	0.23	12,524.86	6,240.07	101.01	6,240.63	0.84	0.61	0.59
18,924.00	91.75	359.30	12,522.08	6,335.02	100.62	6,335.58	0.99	0.15	-0.98
19,019.00	90.57	359.23	12,520.16	6,429.99	99.40	6,430.54	1.24	-1.24	-0.07
19,114.00	90.13	359.59	12,519.57	6,524.99	98.42	6,525.52	0.60	-0.46	0.38
19,209.00	89.10	0.25	12,520.21	6,619.98	98.29	6,620.52	1.29	-1.08	0.69
19,304.00	89.03	0.30	12,521.76	6,714.97	98.75	6,715.50	0.09	-0.07	0.05
19,398.00	90.63	358.81	12,522.04	6,808.96	98.02	6,809.49	2.33	1.70	-1.59
19,493.00	90.37	357.23	12,521.21	6,903.90	94.74	6,904.40	1.69	-0.27	-1.66
19,588.00	91.75	355.52	12,519.46	6,998.69	88.73	6,999.14	2.31	1.45	-1.80
19,682.00	90.43	355.71	12,517.67	7,092.39	81.55	7,092.79	1.42	-1.40	0.20
19,777.00	91.85	357.21	12,515.78	7,187.19	75.68	7,187.54	2.17	1.49	1.58
19,872.00	91.75	0.16	12,512.79	7,282.10	73.50	7,282.44	3.11	-0.11	3.11
19,966.00	90.91	359.81	12,510.61	7,376.08	73.48	7,376.41	0.97	-0.89	-0.37
20,061.00	90.07	359.68	12,509.80	7,471.07	73.05	7,471.40	0.89	-0.88	-0.14
20,155.00	89.60	359.36	12,510.07	7,565.07	72.27	7,565.39	0.60	-0.50	-0.34
20,250.00	88.76	358.19	12,511.43	7,660.03	70.24	7,660.34	1.52	-0.88	-1.23
20,344.00	91.14	2.38	12,511.51	7,754.00	70.70	7,754.31	5.13	2.53	4.46
20,439.00	91.24	2.49	12,509.54	7,848.90	74.74	7,849.23	0.16	0.11	0.12
20,533.00	91.41	2.23	12,507.36	7,942.79	78.61	7,943.15	0.33	0.18	-0.28
20,628.00	91.30	2.04	12,505.12	8,037.70	82.15	8,038.08	0.23	-0.12	-0.20
20,722.00	90.98	1.26	12,503.25	8,131.64	84.85	8,132.04	0.90	-0.34	-0.83
20,817.00	89.73	0.38	12,502.66	8,226.63	86.21	8,227.03	1.61	-1.32	-0.93
20,912.00	88.99	0.09	12,503.72	8,321.62	86.60	8,322.03	0.84	-0.78	-0.31
21,005.00	89.87	0.25	12,504.65	8,414.61	86.88	8,415.02	0.96	0.95	0.17
21,100.00	90.03	359.12	12,504.73	8,509.61	86.36	8,510.01	1.20	0.17	-1.19
21,195.00	94.47	1.35	12,501.00	8,604.51	86.74	8,604.91	5.23	4.67	2.35
21,290.00	92.64	0.16	12,495.11	8,699.31	87.99	8,699.72	2.30	-1.93	-1.25



Scientific Drilling, Intl

Survey Report

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

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)
21,385.00	92.73	359.51	12,490.66	8,794.21	87.72	8,794.61	0.69	0.09	-0.68
21,478.00	91.75	358.82	12,487.02	8,887.12	86.36	8,887.51	1.29	-1.05	-0.74
21,573.00	91.27	359.74	12,484.52	8,982.08	85.17	8,982.46	1.09	-0.51	0.97
21,668.00	90.77	359.63	12,482.83	9,077.06	84.65	9,077.44	0.54	-0.53	-0.12
21,762.00	92.05	1.42	12,480.52	9,171.03	85.51	9,171.40	2.34	1.36	1.90
21,857.00	92.25	1.77	12,476.95	9,265.92	88.15	9,266.32	0.42	0.21	0.37
21,951.00	90.94	3.44	12,474.33	9,359.78	92.42	9,360.21	2.26	-1.39	1.78
22,045.00	91.17	3.51	12,472.60	9,453.60	98.12	9,454.06	0.26	0.24	0.07
22,140.00	89.43	1.95	12,472.11	9,548.48	102.64	9,548.97	2.46	-1.83	-1.64
22,234.00	90.13	2.30	12,472.47	9,642.41	106.13	9,642.93	0.83	0.74	0.37
22,328.00	89.53	1.38	12,472.75	9,736.36	109.15	9,736.89	1.17	-0.64	-0.98
22,422.00	89.87	1.34	12,473.24	9,830.34	111.38	9,830.88	0.36	0.36	-0.04
22,517.00	89.60	2.39	12,473.68	9,925.28	114.47	9,925.85	1.14	-0.28	1.11
22,611.00	90.40	1.29	12,473.68	10,019.23	117.49	10,019.82	1.45	0.85	-1.17
22,706.00	90.50	1.16	12,472.93	10,114.21	119.52	10,114.80	0.17	0.11	-0.14
22,801.00	89.26	359.98	12,473.13	10,209.20	120.46	10,209.80	1.80	-1.31	-1.24
Last Svy 22081 MD									
22,871.00	89.26	359.98	12,474.03	10,279.19	120.44	10,279.79	0.00	0.00	0.00
PTB 22871 MD									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
22,801.00	12,473.13	10,209.20	120.46	Last Svy 22081 MD
22,871.00	12,474.03	10,279.19	120.44	PTB 22871 MD

Checked By: _____ Approved By: _____ Date: _____



Devon Energy

Lea County, NM (NAD83 NME)

Blue Krait 23-14 Fed

#31H

OH

Design: As Drilled

Survey Report - Geographic

13 April, 2020



www.scientificdrilling.com





Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	Blue Krait 23-14 Fed		
Site Position:		Northing:	436,115.47 usft
From:	Map	Easting:	784,117.18 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.196523
		Longitude:	-103.548475
		Grid Convergence:	0.42 °

Well	#31H		
Well Position	+N/-S	0.00 usft	Northing: 436,115.47 usft
	+E/-W	0.00 usft	Easting: 784,117.18 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32.196523
		Longitude:	-103.548475
		Ground Level:	3,556.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	HDGM_FILE	3/26/2020	6.55
			59.83
			47,792.00000000

Design	As Drilled		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			0.41

Survey Program	Date 4/13/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name
175.00	1,235.00	Survey #1 MWD Only (OH)	MWD+HDGM
1,415.00	22,871.00	Survey #2 SDI MWD (OH)	MWD+HDGM
			Description
			OWSG MWD + HDGM
			OWSG MWD + HDGM

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	436,115.47	784,117.18	32.196523	-103.548475
175.00	0.47	152.30	175.00	-0.64	0.33	436,114.83	784,117.51	32.196521	-103.548474
266.00	0.05	129.70	266.00	-0.99	0.54	436,114.48	784,117.72	32.196520	-103.548473
358.00	0.43	141.48	358.00	-1.29	0.78	436,114.18	784,117.96	32.196520	-103.548473
450.00	0.50	170.90	449.99	-1.95	1.06	436,113.52	784,118.24	32.196518	-103.548472
542.00	0.51	136.31	541.99	-2.65	1.41	436,112.82	784,118.59	32.196516	-103.548471
634.00	0.56	176.46	633.99	-3.39	1.72	436,112.08	784,118.90	32.196514	-103.548470
724.00	0.46	134.71	723.98	-4.08	2.00	436,111.39	784,119.18	32.196512	-103.548469
815.00	0.24	153.56	814.98	-4.51	2.35	436,110.96	784,119.52	32.196511	-103.548468
906.00	0.45	155.54	905.98	-5.01	2.58	436,110.46	784,119.76	32.196509	-103.548467
997.00	0.53	140.16	996.98	-5.66	3.00	436,109.81	784,120.18	32.196507	-103.548466



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,087.00	0.27	114.56	1,086.97	-6.06	3.46	436,109.41	784,120.63	32.196506	-103.548464
1,179.00	0.51	127.14	1,178.97	-6.40	3.98	436,109.07	784,121.16	32.196505	-103.548462
1,235.00	0.34	118.76	1,234.97	-6.63	4.33	436,108.84	784,121.50	32.196505	-103.548461
1,415.00	0.50	71.04	1,414.97	-6.63	5.54	436,108.84	784,122.71	32.196505	-103.548457
1,509.00	0.82	73.29	1,508.96	-6.31	6.57	436,109.16	784,123.75	32.196506	-103.548454
1,603.00	0.79	69.46	1,602.95	-5.89	7.82	436,109.58	784,125.00	32.196507	-103.548450
1,698.00	0.48	57.36	1,697.94	-5.44	8.77	436,110.03	784,125.95	32.196508	-103.548447
1,792.00	0.41	38.37	1,791.94	-4.97	9.31	436,110.50	784,126.49	32.196509	-103.548445
1,886.00	0.27	2.48	1,885.94	-4.48	9.53	436,110.99	784,126.70	32.196511	-103.548444
1,981.00	1.06	169.67	1,980.94	-5.12	9.69	436,110.35	784,126.87	32.196509	-103.548444
2,074.00	1.86	181.00	2,073.90	-7.48	9.82	436,107.99	784,127.00	32.196502	-103.548444
2,169.00	3.33	183.29	2,168.80	-11.77	9.64	436,103.70	784,126.81	32.196491	-103.548444
2,263.00	4.70	169.92	2,262.57	-18.29	10.15	436,097.18	784,127.33	32.196473	-103.548443
2,358.00	5.12	169.62	2,357.22	-26.29	11.60	436,089.18	784,128.78	32.196451	-103.548438
2,453.00	4.89	170.49	2,451.86	-34.46	13.03	436,081.02	784,130.21	32.196428	-103.548434
2,546.00	4.71	167.02	2,544.54	-42.09	14.54	436,073.39	784,131.72	32.196407	-103.548429
2,640.00	4.60	170.45	2,638.23	-49.56	16.04	436,065.91	784,133.21	32.196387	-103.548425
2,735.00	4.34	169.60	2,732.94	-56.86	17.32	436,058.62	784,134.49	32.196366	-103.548421
2,829.00	3.96	169.50	2,826.69	-63.55	18.55	436,051.93	784,135.73	32.196348	-103.548417
2,924.00	3.70	170.98	2,921.48	-69.80	19.63	436,045.67	784,136.81	32.196331	-103.548413
3,019.00	3.26	165.59	3,016.30	-75.44	20.78	436,040.03	784,137.96	32.196315	-103.548410
3,113.00	2.61	168.03	3,110.18	-80.12	21.89	436,035.35	784,139.07	32.196302	-103.548406
3,207.00	3.18	160.89	3,204.06	-84.68	23.19	436,030.79	784,140.37	32.196290	-103.548402
3,301.00	3.33	161.97	3,297.91	-89.74	24.89	436,025.73	784,142.06	32.196276	-103.548397
3,395.00	3.49	164.12	3,391.74	-95.09	26.51	436,020.38	784,143.69	32.196261	-103.548392
3,490.00	4.88	168.29	3,486.49	-101.83	28.13	436,013.65	784,145.30	32.196243	-103.548387
3,585.00	4.73	167.34	3,581.15	-109.61	29.80	436,005.87	784,146.98	32.196221	-103.548381
3,680.00	4.21	173.51	3,675.86	-116.89	31.06	435,998.58	784,148.23	32.196201	-103.548378
3,774.00	3.52	180.07	3,769.65	-123.21	31.44	435,992.27	784,148.62	32.196184	-103.548376
3,869.00	3.14	183.15	3,864.49	-128.72	31.30	435,986.75	784,148.47	32.196169	-103.548377
3,964.00	4.21	178.38	3,959.29	-134.80	31.25	435,980.67	784,148.43	32.196152	-103.548377
4,058.00	4.67	168.42	4,053.01	-142.00	32.12	435,973.47	784,149.30	32.196132	-103.548375
4,153.00	4.94	169.48	4,147.68	-149.81	33.64	435,965.66	784,150.82	32.196111	-103.548370
4,247.00	4.16	169.78	4,241.38	-157.15	34.99	435,958.33	784,152.16	32.196090	-103.548366
4,341.00	3.42	164.85	4,335.17	-163.21	36.32	435,952.27	784,153.50	32.196074	-103.548362
4,436.00	3.94	150.73	4,429.98	-168.79	38.66	435,946.68	784,155.84	32.196058	-103.548354
4,531.00	4.88	157.87	4,524.70	-175.38	41.78	435,940.09	784,158.95	32.196040	-103.548344
4,626.00	5.02	158.21	4,619.34	-182.98	44.84	435,932.49	784,162.02	32.196019	-103.548335
4,720.00	4.63	149.80	4,713.01	-190.08	48.28	435,925.39	784,165.45	32.196000	-103.548324
4,815.00	4.07	150.34	4,807.74	-196.33	51.87	435,919.15	784,169.05	32.195982	-103.548312
4,910.00	4.16	142.86	4,902.49	-202.00	55.62	435,913.47	784,172.80	32.195967	-103.548300
5,004.00	2.91	139.68	4,996.31	-206.54	59.23	435,908.94	784,176.40	32.195954	-103.548289
5,099.00	1.45	135.09	5,091.24	-209.23	61.64	435,906.25	784,178.81	32.195947	-103.548281
5,193.00	1.18	137.20	5,185.22	-210.78	63.13	435,904.69	784,180.31	32.195942	-103.548276
5,288.00	1.37	125.18	5,280.19	-212.15	64.73	435,903.32	784,181.90	32.195939	-103.548271
5,383.00	1.49	123.25	5,375.16	-213.48	66.69	435,901.99	784,183.86	32.195935	-103.548265
5,478.00	1.41	119.58	5,470.13	-214.74	68.74	435,900.74	784,185.91	32.195931	-103.548258
5,573.00	1.07	72.46	5,565.11	-215.05	70.60	435,900.43	784,187.77	32.195931	-103.548252
5,667.00	1.59	27.31	5,659.09	-213.63	72.03	435,901.85	784,189.21	32.195934	-103.548247
5,760.00	1.45	17.93	5,752.06	-211.36	72.99	435,904.12	784,190.16	32.195941	-103.548244
5,855.00	1.31	12.94	5,847.03	-209.16	73.60	435,906.32	784,190.78	32.195947	-103.548242
5,949.00	0.94	12.71	5,941.01	-207.36	74.01	435,908.12	784,191.19	32.195952	-103.548241
6,044.00	1.28	309.19	6,036.00	-205.93	73.36	435,909.55	784,190.54	32.195956	-103.548243
6,138.00	1.47	303.65	6,129.97	-204.60	71.54	435,910.88	784,188.72	32.195959	-103.548249
6,233.00	1.17	290.02	6,224.95	-203.59	69.62	435,911.89	784,186.79	32.195962	-103.548255



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,327.00	1.28	308.28	6,318.92	-202.61	67.89	435,912.86	784,185.07	32.195965	-103.548261
6,422.00	1.33	298.35	6,413.90	-201.43	66.09	435,914.05	784,183.26	32.195968	-103.548266
6,516.00	0.93	258.79	6,507.88	-201.06	64.38	435,914.42	784,181.56	32.195969	-103.548272
6,611.00	1.02	241.42	6,602.87	-201.61	62.88	435,913.86	784,180.06	32.195968	-103.548277
6,704.00	0.66	247.20	6,695.86	-202.22	61.66	435,913.26	784,178.84	32.195966	-103.548281
6,799.00	0.43	235.97	6,790.85	-202.63	60.86	435,912.85	784,178.04	32.195965	-103.548283
6,893.00	0.47	219.31	6,884.85	-203.12	60.32	435,912.35	784,177.50	32.195964	-103.548285
6,989.00	0.31	239.65	6,980.85	-203.56	59.85	435,911.91	784,177.03	32.195962	-103.548287
7,083.00	0.77	242.37	7,074.85	-203.98	59.07	435,911.49	784,176.25	32.195961	-103.548289
7,178.00	0.52	294.75	7,169.84	-204.10	58.11	435,911.38	784,175.29	32.195961	-103.548292
7,272.00	0.77	253.52	7,263.83	-204.10	57.12	435,911.38	784,174.30	32.195961	-103.548295
7,366.00	0.60	244.53	7,357.83	-204.49	56.07	435,910.99	784,173.25	32.195960	-103.548299
7,461.00	0.54	292.96	7,452.82	-204.53	55.21	435,910.95	784,172.39	32.195960	-103.548302
7,555.00	0.31	279.38	7,546.82	-204.31	54.55	435,911.16	784,171.73	32.195960	-103.548304
7,650.00	0.40	299.79	7,641.82	-204.11	54.01	435,911.37	784,171.19	32.195961	-103.548305
7,745.00	0.77	300.42	7,736.81	-203.62	53.17	435,911.86	784,170.35	32.195962	-103.548308
7,839.00	0.59	288.22	7,830.81	-203.15	52.17	435,912.33	784,169.34	32.195964	-103.548311
7,934.00	0.35	280.76	7,925.80	-202.94	51.42	435,912.53	784,168.59	32.195964	-103.548314
8,029.00	0.38	281.32	8,020.80	-202.82	50.82	435,912.65	784,168.00	32.195965	-103.548316
8,123.00	0.38	286.42	8,114.80	-202.68	50.22	435,912.80	784,167.40	32.195965	-103.548318
8,218.00	0.28	253.39	8,209.80	-202.65	49.69	435,912.82	784,166.87	32.195965	-103.548319
8,313.00	0.57	231.05	8,304.80	-203.02	49.10	435,912.46	784,166.28	32.195964	-103.548321
8,408.00	0.65	204.77	8,399.79	-203.80	48.51	435,911.67	784,165.69	32.195962	-103.548323
8,502.00	0.63	204.00	8,493.79	-204.76	48.08	435,910.72	784,165.25	32.195959	-103.548325
8,597.00	0.50	209.02	8,588.78	-205.60	47.66	435,909.88	784,164.84	32.195957	-103.548326
8,692.00	0.52	195.77	8,683.78	-206.38	47.35	435,909.10	784,164.52	32.195955	-103.548327
8,787.00	0.61	190.65	8,778.77	-207.29	47.14	435,908.19	784,164.31	32.195952	-103.548328
8,881.00	0.67	198.39	8,872.77	-208.30	46.87	435,907.17	784,164.05	32.195950	-103.548329
8,976.00	0.60	193.85	8,967.76	-209.31	46.57	435,906.16	784,163.75	32.195947	-103.548330
9,071.00	0.64	200.83	9,062.75	-210.29	46.27	435,905.18	784,163.44	32.195944	-103.548331
9,166.00	0.56	218.31	9,157.75	-211.15	45.79	435,904.32	784,162.97	32.195942	-103.548332
9,260.00	0.81	197.89	9,251.74	-212.14	45.30	435,903.33	784,162.48	32.195939	-103.548334
9,357.00	1.14	209.63	9,348.73	-213.63	44.61	435,901.84	784,161.79	32.195935	-103.548336
9,451.00	0.60	207.93	9,442.72	-214.88	43.92	435,900.59	784,161.10	32.195932	-103.548338
9,545.00	0.91	232.34	9,536.71	-215.77	43.10	435,899.70	784,160.28	32.195929	-103.548341
9,640.00	1.28	203.93	9,631.69	-217.20	42.07	435,898.27	784,159.25	32.195925	-103.548344
9,734.00	1.58	189.59	9,725.66	-219.44	41.43	435,896.03	784,158.61	32.195919	-103.548346
9,829.00	1.05	189.22	9,820.64	-221.59	41.07	435,893.88	784,158.25	32.195913	-103.548348
9,924.00	1.31	195.88	9,915.62	-223.49	40.64	435,891.98	784,157.81	32.195908	-103.548349
10,019.00	0.77	225.57	10,010.60	-224.99	39.88	435,890.49	784,157.06	32.195904	-103.548352
10,112.00	0.55	175.25	10,103.60	-225.87	39.47	435,889.61	784,156.65	32.195901	-103.548353
10,207.00	0.52	188.20	10,198.59	-226.75	39.45	435,888.73	784,156.63	32.195899	-103.548353
10,302.00	0.20	209.91	10,293.59	-227.32	39.31	435,888.15	784,156.48	32.195897	-103.548353
10,397.00	0.27	246.30	10,388.59	-227.55	39.02	435,887.92	784,156.19	32.195897	-103.548354
10,492.00	0.47	179.53	10,483.59	-228.03	38.82	435,887.44	784,155.99	32.195896	-103.548355
10,585.00	0.93	191.37	10,576.58	-229.15	38.67	435,886.32	784,155.85	32.195892	-103.548356
10,680.00	0.84	136.33	10,671.57	-230.41	39.00	435,885.06	784,156.18	32.195889	-103.548355
10,774.00	0.98	143.39	10,765.56	-231.56	39.95	435,883.92	784,157.13	32.195886	-103.548351
10,869.00	0.34	58.02	10,860.55	-232.06	40.68	435,883.41	784,157.86	32.195884	-103.548349
10,964.00	0.70	24.34	10,955.55	-231.38	41.16	435,884.09	784,158.33	32.195886	-103.548348
11,058.00	1.19	30.16	11,049.54	-230.02	41.88	435,885.46	784,159.06	32.195890	-103.548345
11,153.00	1.15	358.69	11,144.52	-228.21	42.36	435,887.27	784,159.53	32.195895	-103.548344
11,247.00	1.41	340.10	11,238.50	-226.18	41.94	435,889.30	784,159.12	32.195901	-103.548345
11,341.00	1.01	331.23	11,332.47	-224.37	41.15	435,891.11	784,158.33	32.195906	-103.548347
11,435.00	0.51	22.00	11,426.47	-223.25	40.91	435,892.22	784,158.08	32.195909	-103.548348



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,530.00	0.17	159.21	11,521.47	-222.99	41.12	435,892.48	784,158.29	32.195909	-103.548348
11,624.00	0.74	258.33	11,615.46	-223.24	40.57	435,892.23	784,157.75	32.195909	-103.548349
11,719.00	0.97	275.12	11,710.45	-223.30	39.17	435,892.18	784,156.35	32.195909	-103.548354
11,813.00	0.94	285.62	11,804.44	-223.02	37.63	435,892.46	784,154.81	32.195909	-103.548359
11,855.00	1.15	274.83	11,846.43	-222.89	36.88	435,892.59	784,154.06	32.195910	-103.548361
11,950.00	0.97	249.74	11,941.42	-223.09	35.18	435,892.39	784,152.36	32.195909	-103.548367
12,044.00	1.21	242.74	12,035.40	-223.82	33.55	435,891.66	784,150.73	32.195907	-103.548372
12,139.00	8.21	7.84	12,130.10	-217.55	33.58	435,897.93	784,150.76	32.195924	-103.548372
12,233.00	20.11	15.31	12,221.08	-195.23	38.79	435,920.25	784,155.96	32.195986	-103.548354
12,328.00	32.91	22.04	12,305.94	-155.38	52.84	435,960.09	784,170.02	32.196095	-103.548308
12,422.00	41.88	19.93	12,380.54	-102.10	73.16	436,013.37	784,190.34	32.196241	-103.548241
12,516.00	54.96	20.30	12,442.79	-36.23	97.31	436,079.24	784,214.49	32.196422	-103.548161
12,610.00	66.57	15.01	12,488.65	41.83	121.93	436,157.30	784,239.11	32.196636	-103.548080
12,704.00	73.58	9.84	12,520.68	128.06	140.84	436,243.53	784,258.01	32.196872	-103.548017
12,799.00	76.00	4.62	12,545.62	218.96	152.35	436,334.43	784,269.52	32.197122	-103.547978
12,894.00	80.72	1.01	12,564.79	311.85	156.89	436,427.32	784,274.06	32.197377	-103.547961
12,989.00	83.58	1.23	12,577.76	405.94	158.73	436,521.40	784,275.90	32.197636	-103.547953
13,082.00	88.08	358.50	12,584.52	498.66	158.51	436,614.12	784,275.68	32.197891	-103.547951
13,177.00	90.03	359.72	12,586.09	593.63	157.03	436,709.08	784,274.20	32.198152	-103.547954
13,271.00	89.93	353.69	12,586.12	687.43	151.63	436,802.88	784,268.80	32.198409	-103.547969
13,349.00	89.60	350.85	12,586.44	764.71	141.14	436,880.16	784,258.31	32.198622	-103.548001
13,443.00	94.73	356.79	12,582.89	858.02	131.03	436,973.47	784,248.20	32.198879	-103.548031
13,538.00	94.30	358.31	12,575.41	952.64	126.98	437,068.09	784,244.15	32.199139	-103.548042
13,632.00	91.21	0.12	12,570.89	1,046.51	125.69	437,161.95	784,242.87	32.199397	-103.548044
13,727.00	91.11	0.64	12,568.97	1,141.48	126.32	437,256.93	784,243.50	32.199658	-103.548040
13,821.00	89.30	358.41	12,568.63	1,235.47	125.55	437,350.91	784,242.72	32.199916	-103.548040
13,915.00	90.57	357.00	12,568.74	1,329.39	121.78	437,444.83	784,238.96	32.200175	-103.548050
14,009.00	89.53	357.14	12,568.66	1,423.27	116.98	437,538.70	784,234.15	32.200433	-103.548063
14,103.00	90.57	358.26	12,568.58	1,517.19	113.20	437,632.62	784,230.38	32.200691	-103.548073
14,198.00	93.15	0.89	12,565.49	1,612.12	112.50	437,727.55	784,229.67	32.200952	-103.548073
14,293.00	91.38	0.56	12,561.74	1,707.03	113.70	437,822.46	784,230.87	32.201213	-103.548067
14,388.00	89.80	0.22	12,560.76	1,802.02	114.35	437,917.45	784,231.52	32.201474	-103.548063
14,481.00	90.43	359.57	12,560.57	1,895.02	114.18	438,010.45	784,231.35	32.201729	-103.548061
14,576.00	91.64	1.47	12,558.86	1,990.00	115.04	438,105.42	784,232.21	32.201990	-103.548056
14,670.00	92.65	1.49	12,555.34	2,083.90	117.46	438,199.32	784,234.64	32.202249	-103.548046
14,764.00	93.09	1.91	12,550.63	2,177.74	120.25	438,293.16	784,237.42	32.202506	-103.548035
14,859.00	92.31	1.70	12,546.16	2,272.59	123.24	438,388.00	784,240.41	32.202767	-103.548023
14,954.00	92.55	0.57	12,542.13	2,367.48	125.12	438,482.89	784,242.29	32.203028	-103.548015
15,048.00	91.68	1.21	12,538.66	2,461.40	126.58	438,576.81	784,243.75	32.203286	-103.548008
15,142.00	87.89	359.96	12,539.01	2,555.38	127.54	438,670.79	784,244.71	32.203544	-103.548003
15,237.00	86.89	359.06	12,543.34	2,650.27	126.73	438,765.68	784,243.90	32.203805	-103.548003
15,332.00	90.30	359.12	12,545.67	2,745.22	125.22	438,860.62	784,242.39	32.204066	-103.548006
15,427.00	89.90	359.17	12,545.50	2,840.21	123.80	438,955.61	784,240.97	32.204327	-103.548008
15,521.00	90.27	359.29	12,545.36	2,934.20	122.54	439,049.60	784,239.71	32.204586	-103.548010
15,616.00	89.93	359.12	12,545.20	3,029.19	121.22	439,144.59	784,238.39	32.204847	-103.548012
15,711.00	89.63	356.60	12,545.56	3,124.12	117.67	439,239.51	784,234.85	32.205108	-103.548021
15,805.00	90.67	357.47	12,545.31	3,217.99	112.81	439,333.38	784,229.98	32.205366	-103.548035
15,900.00	90.80	359.00	12,544.10	3,312.93	109.88	439,428.32	784,227.06	32.205627	-103.548042
15,994.00	88.93	357.93	12,544.32	3,406.89	107.37	439,522.28	784,224.54	32.205885	-103.548048
16,089.00	91.94	0.60	12,543.60	3,501.86	106.15	439,617.25	784,223.32	32.206146	-103.548049
16,184.00	91.24	0.52	12,540.96	3,596.82	107.07	439,712.21	784,224.25	32.206407	-103.548044
16,278.00	92.31	1.58	12,538.05	3,690.76	108.80	439,806.14	784,225.97	32.206665	-103.548036
16,372.00	93.39	2.07	12,533.37	3,784.59	111.79	439,899.97	784,228.96	32.206923	-103.548024
16,467.00	91.78	2.02	12,529.09	3,879.43	115.17	439,994.81	784,232.35	32.207184	-103.548011
16,562.00	89.40	0.90	12,528.11	3,974.39	117.59	440,089.76	784,234.77	32.207445	-103.548001



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,656.00	89.13	1.22	12,529.32	4,068.36	119.33	440,183.74	784,236.51	32.207703	-103.547993
16,751.00	88.56	1.27	12,531.23	4,163.32	121.39	440,278.69	784,238.57	32.207964	-103.547984
16,845.00	88.42	1.36	12,533.71	4,257.26	123.55	440,372.63	784,240.73	32.208222	-103.547975
16,939.00	89.43	359.47	12,535.47	4,351.24	124.23	440,466.61	784,241.41	32.208480	-103.547971
17,034.00	89.26	358.15	12,536.56	4,446.21	122.26	440,561.58	784,239.43	32.208741	-103.547975
17,128.00	89.30	357.30	12,537.74	4,540.13	118.53	440,655.49	784,235.70	32.209000	-103.547985
17,223.00	91.79	358.77	12,536.84	4,635.06	115.27	440,750.42	784,232.45	32.209261	-103.547993
17,317.00	92.15	359.57	12,533.61	4,728.99	113.91	440,844.35	784,231.08	32.209519	-103.547995
17,411.00	92.66	359.11	12,529.66	4,822.90	112.83	440,938.26	784,230.00	32.209777	-103.547997
17,505.00	93.10	358.65	12,524.94	4,916.76	110.99	441,032.12	784,228.17	32.210035	-103.548000
17,600.00	90.20	359.37	12,522.20	5,011.70	109.35	441,127.05	784,226.53	32.210296	-103.548003
17,694.00	91.54	0.13	12,520.78	5,105.69	108.94	441,221.04	784,226.12	32.210554	-103.548002
17,789.00	89.73	1.07	12,519.72	5,200.67	109.94	441,316.02	784,227.11	32.210815	-103.547997
17,884.00	91.72	1.87	12,518.52	5,295.62	112.37	441,410.97	784,229.55	32.211076	-103.547987
17,979.00	91.20	0.93	12,516.10	5,390.56	114.69	441,505.91	784,231.87	32.211337	-103.547977
18,073.00	90.44	359.14	12,514.75	5,484.55	114.75	441,599.89	784,231.93	32.211596	-103.547975
18,168.00	90.64	358.98	12,513.86	5,579.53	113.19	441,694.87	784,230.37	32.211857	-103.547978
18,262.00	89.97	358.68	12,513.36	5,673.51	111.27	441,788.85	784,228.45	32.212115	-103.547982
18,357.00	88.13	358.99	12,514.93	5,768.47	109.34	441,883.81	784,226.52	32.212376	-103.547986
18,451.00	87.62	358.94	12,518.42	5,862.39	107.65	441,977.73	784,224.82	32.212634	-103.547989
18,545.00	86.51	357.72	12,523.23	5,956.23	104.91	442,071.56	784,222.09	32.212892	-103.547995
18,640.00	88.93	358.99	12,527.01	6,051.10	102.19	442,166.43	784,219.36	32.213153	-103.548002
18,735.00	91.04	359.68	12,527.04	6,146.09	101.08	442,261.42	784,218.26	32.213414	-103.548003
18,829.00	91.61	0.23	12,524.86	6,240.07	101.01	442,355.39	784,218.19	32.213672	-103.548001
18,924.00	91.75	359.30	12,522.08	6,335.02	100.62	442,450.35	784,217.80	32.213933	-103.548000
19,019.00	90.57	359.23	12,520.16	6,429.99	99.40	442,545.31	784,216.58	32.214195	-103.548002
19,114.00	90.13	359.59	12,519.57	6,524.99	98.42	442,640.30	784,215.60	32.214456	-103.548003
19,209.00	89.10	0.25	12,520.21	6,619.98	98.29	442,735.30	784,215.47	32.214717	-103.548001
19,304.00	89.03	0.30	12,521.76	6,714.97	98.75	442,830.28	784,215.92	32.214978	-103.547997
19,398.00	90.63	358.81	12,522.04	6,808.96	98.02	442,924.27	784,215.19	32.215236	-103.547998
19,493.00	90.37	357.23	12,521.21	6,903.90	94.74	443,019.21	784,211.91	32.215497	-103.548006
19,588.00	91.75	355.52	12,519.46	6,998.69	88.73	443,113.99	784,205.91	32.215758	-103.548023
19,682.00	90.43	355.71	12,517.67	7,092.39	81.55	443,207.69	784,198.72	32.216016	-103.548044
19,777.00	91.85	357.21	12,515.78	7,187.19	75.68	443,302.49	784,192.86	32.216276	-103.548061
19,872.00	91.75	0.16	12,512.79	7,282.10	73.50	443,397.40	784,190.68	32.216537	-103.548066
19,966.00	90.91	359.81	12,510.61	7,376.08	73.48	443,491.37	784,190.65	32.216795	-103.548063
20,061.00	90.07	359.68	12,509.80	7,471.07	73.05	443,586.37	784,190.23	32.217057	-103.548063
20,155.00	89.60	359.36	12,510.07	7,565.07	72.27	443,680.36	784,189.44	32.217315	-103.548063
20,250.00	88.76	358.19	12,511.43	7,660.03	70.24	443,775.32	784,187.41	32.217576	-103.548067
20,344.00	91.14	2.38	12,511.51	7,754.00	70.70	443,869.29	784,187.88	32.217834	-103.548064
20,439.00	91.24	2.49	12,509.54	7,848.90	74.74	443,964.18	784,191.91	32.218095	-103.548048
20,533.00	91.41	2.23	12,507.36	7,942.79	78.61	444,058.08	784,195.78	32.218353	-103.548034
20,628.00	91.30	2.04	12,505.12	8,037.70	82.15	444,152.98	784,199.32	32.218614	-103.548020
20,722.00	90.98	1.26	12,503.25	8,131.64	84.85	444,246.92	784,202.03	32.218872	-103.548009
20,817.00	89.73	0.38	12,502.66	8,226.63	86.21	444,341.91	784,203.39	32.219133	-103.548002
20,912.00	88.99	0.09	12,503.72	8,321.62	86.60	444,436.90	784,203.78	32.219394	-103.547999
21,005.00	89.87	0.25	12,504.65	8,414.61	86.88	444,529.89	784,204.05	32.219650	-103.547996
21,100.00	90.03	359.12	12,504.73	8,509.61	86.36	444,624.88	784,203.53	32.219911	-103.547995
21,195.00	94.47	1.35	12,501.00	8,604.51	86.74	444,719.78	784,203.92	32.220172	-103.547992
21,290.00	92.64	0.16	12,495.11	8,699.31	87.99	444,814.58	784,205.17	32.220432	-103.547985
21,385.00	92.73	359.51	12,490.66	8,794.21	87.72	444,909.47	784,204.89	32.220693	-103.547984
21,478.00	91.75	358.82	12,487.02	8,887.12	86.36	445,002.39	784,203.54	32.220948	-103.547986
21,573.00	91.27	359.74	12,484.52	8,982.08	85.17	445,097.34	784,202.34	32.221209	-103.547988
21,668.00	90.77	359.63	12,482.83	9,077.06	84.65	445,192.32	784,201.82	32.221471	-103.547987
21,762.00	92.05	1.42	12,480.52	9,171.03	85.51	445,286.28	784,202.68	32.221729	-103.547982



Scientific Drilling, Intl

Survey Report - Geographic

Company:	Devon Energy	Local Co-ordinate Reference:	Well #31H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Site:	Blue Krait 23-14 Fed	MD Reference:	KB = 25' @ 3581.00usft (Patterson 595)
Well:	#31H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Midland

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
21,857.00	92.25	1.77	12,476.95	9,265.92	88.15	445,381.18	784,205.33	32.221990	-103.547971
21,951.00	90.94	3.44	12,474.33	9,359.78	92.42	445,475.03	784,209.60	32.222247	-103.547955
22,045.00	91.17	3.51	12,472.60	9,453.60	98.12	445,568.84	784,215.29	32.222505	-103.547935
22,140.00	89.43	1.95	12,472.11	9,548.48	102.64	445,663.73	784,219.82	32.222766	-103.547918
22,234.00	90.13	2.30	12,472.47	9,642.41	106.13	445,757.66	784,223.30	32.223024	-103.547904
22,328.00	89.53	1.38	12,472.75	9,736.36	109.15	445,851.60	784,226.32	32.223282	-103.547892
22,422.00	89.87	1.34	12,473.24	9,830.34	111.38	445,945.57	784,228.55	32.223540	-103.547883
22,517.00	89.60	2.39	12,473.68	9,925.28	114.47	446,040.52	784,231.64	32.223801	-103.547871
22,611.00	90.40	1.29	12,473.68	10,019.23	117.49	446,134.47	784,234.66	32.224059	-103.547859
22,706.00	90.50	1.16	12,472.93	10,114.21	119.52	446,229.44	784,236.69	32.224320	-103.547850
22,801.00	89.26	359.98	12,473.13	10,209.20	120.46	446,324.43	784,237.64	32.224582	-103.547845
Last Svy 22081 MD									
22,871.00	89.26	359.98	12,474.03	10,279.19	120.44	446,394.42	784,237.61	32.224774	-103.547843
PTB 22871 MD									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
22,801.00	12,473.13	10,209.20	120.46	Last Svy 22081 MD	
22,871.00	12,474.03	10,279.19	120.44	PTB 22871 MD	

Checked By: _____ Approved By: _____ Date: _____

Form 3160-4
(August 2007)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.
NMLC0063798

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other				6. If Indian, Allottee or Tribe Name	
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____				7. Unit or CA Agreement Name and No.	
2. Name of Operator DEVON ENERGY PRODUCTION CO., LLC				8. Lease Name and Well No. BLUE KRAIT 23-14 FED 31H	
3. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102				9. API Well No. 30-025-46430	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface Sec 23 T24S R33E Mer SWSW 245FSL 980FWL At top prod interval reported below Sec 23 T24S R33E Mer SWSW 93FSL 1030FWL At total depth Sec 14 T24S R33E Mer NWNW 101FNL 1179FWL				10. Field and Pool, or Exploratory WC-025 G-09 S243310P; UWC	
14. Date Spudded 01/17/2020				15. Date T.D. Reached 04/12/2020	
16. Date Completed ☐ D & A ☒ Ready to Prod. 11/04/2020				17. Elevations (DF, KB, RT, GL)* 3556 GL	
18. Total Depth: MD 22871 TVD 12474		19. Plug Back T.D.: MD 22810 TVD		20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) CBL				22. 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	0	1307		955		0	472
9.875	8.625 P-110	32.0	0	11907		790		5885	0
7.875	5.500 P-110	20.0	0	22854		3025		0	506

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	12244							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	12800	22753	12800 TO 22753		1004	OPEN
B)						
C)						
D)						

26. Perforation Record

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

Depth Interval	Amount and Type of Material
12800 TO 22753	24,843,315# PROP, 633 BBL ACID

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
11/04/2020	11/29/2020	24	→	2023.0	4004.0	3246.0			FLows FROM WELL
Choke Size	Tbg. Press. Flwg. 1712 SI	Csg. Press. 3154.0	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio 1979	Well Status	

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
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

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

ELECTRONIC SUBMISSION #538868 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

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	1221	1708	BARREN	RUSTLER	1221
SALADO	1708	5209	BARREN	SALADO	1708
B/SALT	5209	5209	BARREN	B/SALT	5209
DELAWARE	5209	9201	OIL/GAS	DELAWARE	5209
BONE SPRING	9201	12306	OIL/GAS	BONE SPRING	9201
WOLFCAMP	12306			WOLFCAMP	12306

32. Additional remarks (include plugging procedure):

See attached as-drilled C-102 and Directional Plan

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 #538868 Verified by the BLM Well Information System.
For DEVON ENERGY PRODUCTION CO, LP, sent to the Hobbs**

Name (*please print*) REBECCA DEAL Title REGULATORY ANALYST

Signature _____ (Electronic Submission) Date 12/01/2020

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 21411

CONDITIONS OF APPROVAL

Operator:	DEVON ENERGY PRODUCTION COMPAN	333 West Sheridan Ave.	Oklahoma City, OK73102	OGRID:	6137	Action Number:	21411	Action Type:	C-104C
OCD Reviewer	Condition								
plmartinez	None								