

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 / 9/28/20
⁴ API Number 30-025-46603	⁵ Pool Name WC-025 G-06 S253209L; BONE SPRING	⁶ Pool Code 96715
⁷ Property Code 325998	⁸ Property Name MARWARI 21-16 STATE FED COM	⁹ Well Number 234Y

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	25S	32E		500	South	1510	West	LEA

¹¹ Bottom Hole Location

UL or lot no. C	Section 16	Township 25S	Range 32E	Lot Idn	Feet from the 114	North/South line North	Feet from the 1658	East/West line West	County LEA
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 9/28/20	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

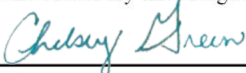
III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
020445	Plains Marketing P.O. Box 4648 Houston, TX 77210	Oil
036785	DCP Midstream P.O. Box 50020 Midland, TX 79710-0020	Gas
371960	Lucid Energy Delaware, LLC 3100 McKinnon St., Ste. 800, Dallas, TX 75201	Gas

IV. Well Completion Data

²¹ Spud Date 12/24/19	²² Ready Date 9/28/20	²³ TD 20540	²⁴ PBTB 20527	²⁵ Perforations 10800 - 20518	²⁶ DHC, MC
²⁷ Hole Size 17-1/2"	²⁸ Casing & Tubing Size 13-3/8"	²⁹ Depth Set 895	³⁰ Sacks Cement 1065		
12-1/4"	9-5/8"	5048	1370		
8-3/4"	5-1/5"	20530	2505		

V. Well Test Data

³¹ Date New Oil 9/28/20	³² Gas Delivery Date 9/28/20	³³ Test Date 10/24/20	³⁴ Test Length 24 hrs	³⁵ Tbg. Pressure 0 psi	³⁶ Csg. Pressure 894 psi
³⁷ Choke Size	³⁸ Oil 3336 bbl	³⁹ Water 3830 bbl	⁴⁰ Gas 7069 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: 			OIL CONSERVATION DIVISION		
Printed name: Chelsey Green			Approved by: KURT SIMMONS		
Title: Regulatory Analyst			Title: NMOCB, SANTA FE		
E-mail Address: Chelsey.Green@dvn.com			Approval Date: 02/18/2021		
Date: 1/25/2021		Phone: 405-228-8595			

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 30-025-46603	² Pool Code 96715	³ Pool Name WC-025 G-06 S253209L; BONE SPRING
⁴ Property Code	⁵ Property Name MARWARI 21-16 STATE FED COM	⁶ Well Number 234Y
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3389.9

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	21	25 S	32 E		500	SOUTH	1510	WEST	LEA

¹¹ 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
C	16	25 S	32 E		114	NORTH	1658	WEST	LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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. 16 LAT. = 32.1376330°N LONG. = 103.686037°W NMSP EAST (FT) N = 414403.87 E = 740898.71 AS-DRILLED LAST TAKE POINT 136° FSL, 1658' FWL LAT. = 32.1372900°N LONG. = 103.6832511°W NMSP EAST (FT) N = 414289.02 E = 742556.27 NW CORNER SEC. 21 LAT. = 32.1231388°N LONG. = 103.6886842°W NMSP EAST (FT) N = 409130.93 E = 740905.34 W/4 CORNER SEC. 21 LAT. = 32.1158978°N LONG. = 103.6886867°W NMSP EAST (FT) N = 406496.74 E = 740920.33 SW CORNER SEC. 21 LAT. = 32.1085668°N LONG. = 103.6886834°W NMSP EAST (FT) N = 403829.87 E = 740937.30 N89°15'43"E 2651.26 FT N89°20'29"E 2664.70 FT N89°31'59"E 2665.28 FT N89°05'49"E 2660.43 FT S88°51'38"W 2661.92 FT S89°21'15"W 2660.68 FT 1658' BHL 114' LTP 114' DNF 1510' SHL 500' KOP FTP 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. N/4 CORNER SEC. 16 LAT. = 32.1376830°N LONG. = 103.6800405°W NMSP EAST (FT) N = 414438.01 E = 743549.18 N/4 CORNER SEC. 21 LAT. = 32.1231544°N LONG. = 103.6800770°W NMSP EAST (FT) N = 409152.64 E = 743569.95 AS-DRILLED BOTTOM OF HOLE LAT. = 32.1373504°N LONG. = 103.6832514°W NMSP EAST (FT) N = 414311.03 E = 742556.06 MARWARI 21-16 STATE FED COM 234Y ELEV. = 3389.9' LAT. = 32.1093983°N (NAD83) LONG. = 103.6838082°W NMSP EAST (FT) N = 404359.67 E = 742443.67 AS-DRILLED FIRST TAKE POINT 718° FSL, 1660' FWL LAT. = 32.1106023°N LONG. = 103.6833246°W NMSP EAST (FT) N = 404580.31 E = 742592.08 S/4 CORNER SEC. 21 LAT. = 32.1086683°N LONG. = 103.6800892°W NMSP EAST (FT) N = 403882.79 E = 743598.11 NE CORNER SEC. 16 LAT. = 32.1377224°N LONG. = 103.6714339°W NMSP EAST (FT) N = 414468.64 E = 746213.13 E/4 CORNER SEC. 16 LAT. = 32.1304888°N LONG. = 103.6714601°W NMSP EAST (FT) N = 411837.10 E = 746221.18 NE CORNER SEC. 21 LAT. = 32.1232250°N LONG. = 103.6714858°W NMSP EAST (FT) N = 409194.57 E = 746229.47 E/4 CORNER SEC. 21 LAT. = 32.1159650°N LONG. = 103.6714961°W NMSP EAST (FT) N = 406553.45 E = 746242.49 AS-DRILLED KOP 315° FSL, 1654' FWL LAT. = 32.1094950°N LONG. = 103.6833422°W NMSP EAST (FT) N = 404177.45 E = 742589.06 SE CORNER SEC. 21 LAT. = 32.1087061°N LONG. = 103.6714983°W NMSP EAST (FT) N = 403912.78 E = 746258.05	¹⁷ 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>Chelsey Green</i> 11/10/20 Signature Date Chelsey Green Printed Name chelsey.green@dvn.com E-mail Address ¹⁸ 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. NOVEMBER 13, 2019 Date of Survey <i>FRANCISCO J. JARAMILLO</i> Signature and Seal of Professional Surveyor Certificate Number: FRANCISCO JARAMILLO PLS 12797 SURVEY NO. 5883F
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Intent ☐ As Drilled ☒

API # 30-025-46603		
Operator Name: DEVON ENERGY PRODUCTION CO., L.P.	Property Name: MARWARI 21-16 STATE FED COM	Well Number 234Y

Kick Off Point (KOP)

UL N	Section 21	Township 25S	Range 32E	Lot	Feet 315	From N/S SOUTH	Feet 1654	From E/W WEST	County LEA
Latitude 32.1094950					Longitude 103.6833422				NAD 83

First Take Point (FTP)

UL N	Section 21	Township 25S	Range 32E	Lot	Feet 718	From N/S SOUTH	Feet 1660	From E/W WEST	County LEA
Latitude 32.1106023					Longitude 103.6833246				NAD 83

Last Take Point (LTP)

UL C	Section 16	Township 25S	Range 32E	Lot	Feet 136	From N/S NORTH	Feet 1658	From E/W WEST	County LEA
Latitude 32.1372900					Longitude 103.6832511				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐ YESIs this well an infill well? ☐ NO

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



Final MWD Survey Certification

Lea County, NM

Client: Devon Energy

Well Name: Marwari 21-16 State Fed Com 234Y

Total Job No: SW-190029

API No: 30-025-46603

Start Date: December 24, 2019

End Date: January 07, 2020

Measured Start Depth: 1000 feet

Measured End Depth: 20540 feet

Vertical Section from well center at PTB: 9954.11 feet

I, Shaun Heck, certify that; I am employed by Total Directional Services, LLC and we conducted or supervised the taking of these open hole MWD surveys at the request of this client. This data is true, correct, complete and within the limitations of the tool as set forth by Total Directional Services, LLC. I am authorized and qualified to make this report and have reviewed this report and find that it conforms to the principals and procedures as set forth by Total Directional Services, LLC.

Date: January 07, 2020

Signed: Shaun Heck



Marwari 21-16 State Fed Com 234Y

Directional Survey Report

Start date: December 24, 2019

End date: January 07, 2020

Company Name: Devon Energy

State/Prov: New Mexico

Survey Company: Total Directional

Well Name: Marwari 21-16 State Fed Com 234Y

County: Lea

Job Number: SW-190029

Field:

Country: US

Proposed Azimuth: 0.6

Rig ID: Cactus 135

Location:

Declination: 6.38 KB: 30

API/UWI: 30-025-46603

Latitude/Longitude: 32.109998 / -103.683808

North Reference: Grid

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
TieIn	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	
1	199.00	0.70	141.60	199.00	-0.95	0.76	-0.94	1.22	141.60	0.35	199.00
2	306.00	1.00	150.70	305.98	-2.28	1.62	-2.26	2.80	144.63	0.31	107.00
3	401.00	1.30	185.10	400.97	-4.08	1.93	-4.06	4.51	154.68	0.78	95.00
4	497.00	1.90	203.30	496.93	-6.62	1.20	-6.61	6.73	169.72	0.81	96.00
5	592.00	2.50	205.40	591.86	-9.94	-0.31	-9.94	9.94	181.79	0.64	95.00
6	687.00	3.00	210.30	686.75	-13.96	-2.45	-13.98	14.17	189.97	0.58	95.00
7	783.00	2.80	211.90	782.62	-18.12	-4.96	-18.17	18.78	195.31	0.22	96.00
8	841.00	2.80	215.70	840.56	-20.47	-6.53	-20.54	21.49	197.70	0.32	58.00
9	1,003.00	2.20	230.70	1,002.40	-25.65	-11.25	-25.77	28.01	203.68	0.55	162.00
10	1,099.00	2.00	202.70	1,098.34	-28.37	-13.32	-28.50	31.34	205.16	1.08	96.00
11	1,193.00	1.80	174.90	1,192.29	-31.35	-13.82	-31.49	34.26	203.80	0.99	94.00
12	1,289.00	1.80	136.00	1,288.25	-33.94	-12.64	-34.07	36.21	200.43	1.25	96.00
13	1,384.00	1.60	130.70	1,383.20	-35.87	-10.60	-35.98	37.41	196.46	0.27	95.00
14	1,479.00	1.30	124.20	1,478.17	-37.35	-8.70	-37.43	38.35	193.12	0.36	95.00
15	1,575.00	1.30	131.40	1,574.15	-38.68	-6.99	-38.75	39.30	190.24	0.17	96.00
16	1,670.00	1.30	131.10	1,669.13	-40.10	-5.37	-40.15	40.46	187.62	0.01	95.00
17	1,765.00	1.00	129.90	1,764.11	-41.34	-3.92	-41.38	41.52	185.41	0.32	95.00
18	1,861.00	1.10	131.20	1,860.09	-42.48	-2.58	-42.51	42.56	183.48	0.11	96.00
19	1,956.00	1.00	123.60	1,955.07	-43.54	-1.21	-43.55	43.56	181.59	0.18	95.00
20	2,051.00	0.70	140.70	2,050.06	-44.45	-0.15	-44.45	44.45	180.19	0.41	95.00
21	2,147.00	1.00	139.90	2,146.05	-45.54	0.76	-45.53	45.55	179.04	0.31	96.00
22	2,242.00	1.00	137.00	2,241.04	-46.79	1.86	-46.76	46.82	177.72	0.05	95.00
23	2,337.00	0.80	154.30	2,336.03	-47.99	2.72	-47.96	48.07	176.76	0.35	95.00
24	2,433.00	1.00	136.00	2,432.02	-49.20	3.59	-49.16	49.33	175.83	0.36	96.00
25	2,528.00	0.70	145.90	2,527.00	-50.27	4.49	-50.22	50.47	174.90	0.35	95.00
26	2,623.00	0.80	153.30	2,622.00	-51.35	5.11	-51.29	51.60	174.31	0.15	95.00
27	2,719.00	1.30	157.50	2,717.98	-52.95	5.83	-52.89	53.27	173.72	0.53	96.00
28	2,814.00	1.00	120.30	2,812.96	-54.36	6.96	-54.29	54.81	172.71	0.83	95.00
29	2,909.00	1.00	109.90	2,907.95	-55.06	8.45	-54.97	55.71	171.27	0.19	95.00
30	3,005.00	1.00	100.20	3,003.93	-55.50	10.07	-55.39	56.40	169.72	0.18	96.00
31	3,100.00	1.00	95.10	3,098.92	-55.72	11.71	-55.59	56.94	168.13	0.09	95.00
32	3,195.00	0.90	93.20	3,193.91	-55.83	13.28	-55.69	57.39	166.62	0.11	95.00
33	3,291.00	1.10	84.60	3,289.89	-55.79	14.95	-55.63	57.76	165.00	0.26	96.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
34	3,386.00	1.30	101.70	3,384.87	-55.92	16.91	-55.74	58.42	163.17	0.43	95.00
35	3,481.00	2.40	121.80	3,479.82	-57.19	19.66	-56.98	60.47	161.03	1.33	95.00
36	3,576.00	3.30	129.40	3,574.70	-59.97	23.46	-59.72	64.40	158.63	1.03	95.00
37	3,672.00	4.40	135.40	3,670.48	-64.35	28.18	-64.05	70.25	156.35	1.22	96.00
38	3,767.00	4.40	140.40	3,765.21	-69.75	33.06	-69.40	77.19	154.64	0.40	95.00
39	3,862.00	4.30	135.70	3,859.93	-75.11	37.87	-74.71	84.12	153.24	0.39	95.00
40	3,958.00	4.30	135.90	3,955.66	-80.27	42.89	-79.81	91.01	151.88	0.02	96.00
41	4,053.00	4.10	135.00	4,050.41	-85.23	47.77	-84.72	97.70	150.73	0.22	95.00
42	4,149.00	4.10	138.70	4,146.16	-90.23	52.46	-89.68	104.38	149.82	0.28	96.00
43	4,244.00	4.20	136.80	4,240.91	-95.32	57.09	-94.72	111.11	149.08	0.18	95.00
44	4,339.00	4.30	139.80	4,335.65	-100.58	61.77	-99.92	118.03	148.44	0.26	95.00
45	4,435.00	4.10	139.40	4,431.39	-105.93	66.32	-105.23	124.98	147.95	0.21	96.00
46	4,530.00	3.80	137.80	4,526.17	-110.84	70.65	-110.10	131.44	147.49	0.34	95.00
47	4,626.00	3.40	136.80	4,621.98	-115.27	74.73	-114.48	137.38	147.04	0.42	96.00
48	4,721.00	3.20	137.00	4,716.82	-119.27	78.47	-118.44	142.77	146.66	0.21	95.00
49	4,816.00	3.50	142.20	4,811.66	-123.50	82.06	-122.63	148.27	146.40	0.45	95.00
50	4,912.00	3.30	142.90	4,907.49	-128.02	85.52	-127.11	153.95	146.26	0.21	96.00
51	5,007.00	3.10	143.80	5,002.34	-132.27	88.69	-131.33	159.25	146.16	0.22	95.00
52	5,195.00	2.90	142.70	5,190.08	-140.15	94.57	-139.16	169.08	145.99	0.11	188.00
53	5,291.00	2.80	140.90	5,285.96	-143.91	97.52	-142.88	173.84	145.88	0.14	96.00
54	5,386.00	3.20	135.80	5,380.83	-147.61	100.83	-146.54	178.76	145.66	0.51	95.00
55	5,481.00	3.50	132.50	5,475.67	-151.47	104.82	-150.36	184.20	145.32	0.38	95.00
56	5,576.00	3.50	132.50	5,570.49	-155.39	109.09	-154.23	189.86	144.93	0.00	95.00
57	5,672.00	3.30	129.80	5,666.33	-159.13	113.38	-157.94	195.39	144.53	0.27	96.00
58	5,767.00	3.30	128.00	5,761.17	-162.57	117.63	-161.33	200.66	144.11	0.11	95.00
59	5,862.00	3.30	127.10	5,856.01	-165.90	121.97	-164.61	205.91	143.68	0.05	95.00
60	5,958.00	3.20	126.40	5,951.86	-169.16	126.33	-167.82	211.12	143.25	0.11	96.00
61	6,053.00	3.20	124.60	6,046.71	-172.24	130.65	-170.86	216.18	142.82	0.11	95.00
62	6,149.00	3.40	124.20	6,142.55	-175.36	135.21	-173.93	221.43	142.37	0.21	96.00
63	6,245.00	3.10	121.90	6,238.39	-178.33	139.76	-176.86	226.57	141.91	0.34	96.00
64	6,340.00	3.00	119.80	6,333.26	-180.92	144.10	-179.40	231.30	141.46	0.16	95.00
65	6,436.00	2.90	119.90	6,429.13	-183.38	148.39	-181.82	235.90	141.02	0.10	96.00
66	6,531.00	2.60	139.20	6,524.02	-186.21	151.88	-184.61	240.29	140.80	1.02	95.00
67	6,627.00	2.50	154.50	6,619.93	-189.75	154.20	-188.12	244.51	140.90	0.71	96.00
68	6,722.00	2.50	148.90	6,714.84	-193.39	156.16	-191.75	248.57	141.08	0.26	95.00
69	6,818.00	1.60	189.90	6,810.78	-196.51	157.02	-194.85	251.53	141.37	1.73	96.00
70	6,913.00	1.50	204.40	6,905.75	-198.94	156.27	-197.30	252.98	141.85	0.42	95.00
71	7,009.00	1.20	198.60	7,001.72	-201.04	155.43	-199.40	254.12	142.29	0.34	96.00
72	7,104.00	1.10	198.60	7,096.70	-202.85	154.83	-201.22	255.18	142.65	0.11	95.00
73	7,200.00	0.80	208.60	7,192.69	-204.31	154.21	-202.68	255.98	142.95	0.36	96.00
74	7,295.00	0.80	227.20	7,287.68	-205.34	153.41	-203.73	256.32	143.24	0.27	95.00
75	7,390.00	0.70	243.20	7,382.67	-206.06	152.40	-204.45	256.29	143.51	0.24	95.00
76	7,485.00	0.50	246.70	7,477.67	-206.48	151.50	-204.88	256.10	143.73	0.21	95.00
77	7,581.00	0.60	253.00	7,573.66	-206.79	150.64	-205.21	255.84	143.93	0.12	96.00
78	7,676.00	0.60	260.70	7,668.66	-207.02	149.67	-205.44	255.46	144.13	0.08	95.00
79	7,771.00	0.50	259.00	7,763.65	-207.18	148.77	-205.61	255.06	144.32	0.11	95.00
80	7,867.00	0.30	238.50	7,859.65	-207.39	148.15	-205.83	254.87	144.46	0.25	96.00
81	7,962.00	0.30	238.70	7,954.65	-207.65	147.72	-206.09	254.84	144.57	0.00	95.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
82	8,057.00	0.30	259.20	8,049.65	-207.83	147.27	-206.27	254.71	144.68	0.11	95.00
83	8,153.00	0.30	272.60	8,145.65	-207.86	146.77	-206.31	254.46	144.77	0.07	96.00
84	8,248.00	0.30	295.30	8,240.65	-207.74	146.30	-206.20	254.09	144.85	0.12	95.00
85	8,344.00	0.40	297.30	8,336.64	-207.48	145.77	-205.94	253.57	144.91	0.10	96.00
86	8,439.00	0.50	317.80	8,431.64	-207.02	145.20	-205.49	252.87	144.96	0.20	95.00
87	8,535.00	0.50	319.50	8,527.64	-206.39	144.65	-204.87	252.03	144.98	0.02	96.00
88	8,630.00	0.80	324.60	8,622.63	-205.54	143.99	-204.02	250.96	144.99	0.32	95.00
89	8,725.00	1.00	326.00	8,717.62	-204.31	143.14	-202.80	249.47	144.98	0.21	95.00
90	8,821.00	1.50	338.40	8,813.60	-202.45	142.21	-200.95	247.41	144.91	0.59	96.00
91	8,916.00	1.40	339.20	8,908.57	-200.21	141.34	-198.72	245.07	144.78	0.11	95.00
92	9,011.00	1.20	3.80	9,003.54	-198.13	141.00	-196.64	243.18	144.56	0.62	95.00
93	9,107.00	1.90	3.10	9,099.51	-195.54	141.15	-194.05	241.16	144.18	0.73	96.00
94	9,202.00	1.50	9.20	9,194.46	-192.74	141.43	-191.25	239.06	143.73	0.46	95.00
95	9,297.00	0.10	212.90	9,289.45	-191.58	141.59	-190.09	238.22	143.53	1.68	95.00
96	9,393.00	0.10	318.10	9,385.45	-191.59	141.49	-190.10	238.17	143.55	0.17	96.00
97	9,488.00	0.80	21.20	9,480.45	-190.91	141.67	-189.41	237.73	143.42	0.80	95.00
98	9,583.00	1.50	23.90	9,575.43	-189.15	142.41	-187.65	236.77	143.02	0.74	95.00
99	9,679.00	0.80	29.90	9,671.41	-187.42	143.26	-185.91	235.90	142.61	0.74	96.00
100	9,774.00	0.50	92.80	9,766.41	-186.87	144.00	-185.35	235.92	142.38	0.76	95.00
101	9,870.00	0.40	168.10	9,862.40	-187.22	144.49	-185.69	236.49	142.34	0.58	96.00
102	9,965.00	0.30	125.40	9,957.40	-187.68	144.76	-186.16	237.03	142.36	0.29	95.00
103	10,048.00	0.30	126.00	10,040.40	-187.94	145.11	-186.41	237.44	142.33	0.00	83.00
104	10,158.00	6.10	0.60	10,150.20	-182.26	145.41	-180.73	233.16	141.42	5.71	110.00
105	10,253.00	17.00	358.50	10,243.13	-163.27	145.10	-161.74	218.43	138.37	11.48	95.00
106	10,349.00	26.70	0.80	10,332.13	-127.59	145.03	-126.06	193.17	131.34	10.14	96.00
107	10,444.00	37.50	4.00	10,412.50	-77.25	147.35	-75.70	166.37	117.67	11.50	95.00
108	10,540.00	49.00	1.70	10,482.31	-11.67	150.48	-10.09	150.93	94.43	12.09	96.00
109	10,635.00	60.30	0.50	10,537.18	65.68	151.90	67.26	165.49	66.62	11.94	95.00
110	10,730.00	71.90	358.10	10,575.61	152.37	150.76	153.94	214.35	44.70	12.43	95.00
111	10,826.00	84.30	358.00	10,595.37	246.07	147.57	247.60	286.92	30.95	12.92	96.00
112	10,921.00	92.50	1.10	10,598.02	340.93	146.83	342.45	371.21	23.30	9.23	95.00
113	11,017.00	94.00	359.90	10,592.58	436.77	147.67	438.29	461.06	18.68	2.00	96.00
114	11,112.00	94.30	359.60	10,585.70	531.52	147.25	533.03	551.54	15.49	0.45	95.00
115	11,207.00	92.80	359.80	10,579.82	626.33	146.76	627.84	643.30	13.19	1.59	95.00
116	11,302.00	93.10	359.70	10,574.93	721.21	146.34	722.70	735.91	11.47	0.33	95.00
117	11,397.00	93.50	359.50	10,569.46	816.05	145.68	817.53	828.95	10.12	0.47	95.00
118	11,493.00	93.70	359.40	10,563.43	911.85	144.76	913.32	923.27	9.02	0.23	96.00
119	11,588.00	94.20	359.30	10,556.89	1,006.62	143.69	1,008.07	1,016.82	8.12	0.54	95.00
120	11,683.00	92.80	360.00	10,551.09	1,101.44	143.11	1,102.88	1,110.70	7.40	1.65	95.00
121	11,778.00	93.20	359.70	10,546.12	1,196.31	142.86	1,197.74	1,204.81	6.81	0.53	95.00
122	11,873.00	91.60	0.20	10,542.14	1,291.22	142.78	1,292.65	1,299.09	6.31	1.76	95.00
123	11,969.00	92.30	0.10	10,538.87	1,387.17	143.03	1,388.59	1,394.52	5.89	0.74	96.00
124	12,064.00	93.10	0.10	10,534.40	1,482.06	143.19	1,483.48	1,488.96	5.52	0.84	95.00
125	12,159.00	93.60	360.00	10,528.85	1,576.90	143.28	1,578.31	1,583.39	5.19	0.54	95.00
126	12,255.00	92.10	0.20	10,524.07	1,672.77	143.44	1,674.19	1,678.91	4.90	1.58	96.00
127	12,350.00	92.90	0.70	10,519.93	1,767.68	144.19	1,769.09	1,773.55	4.66	0.99	95.00
128	12,446.00	93.00	1.10	10,514.99	1,863.54	145.70	1,864.96	1,869.23	4.47	0.43	96.00
129	12,541.00	92.00	0.50	10,510.85	1,958.44	147.02	1,959.87	1,963.95	4.29	1.23	95.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
130	12,636.00	90.80	0.60	10,508.52	2,053.41	147.93	2,054.84	2,058.73	4.12	1.27	95.00
131	12,731.00	91.50	0.60	10,506.62	2,148.38	148.93	2,149.82	2,153.54	3.97	0.74	95.00
132	12,827.00	92.30	0.80	10,503.44	2,244.32	150.10	2,245.77	2,249.33	3.83	0.86	96.00
133	12,922.00	93.90	1.20	10,498.30	2,339.16	151.75	2,340.62	2,344.08	3.71	1.74	95.00
134	13,017.00	93.10	0.80	10,492.50	2,433.97	153.41	2,435.44	2,438.80	3.61	0.94	95.00
135	13,112.00	91.30	0.70	10,488.85	2,528.89	154.65	2,530.37	2,533.61	3.50	1.90	95.00
136	13,207.00	90.80	0.10	10,487.11	2,623.87	155.31	2,625.35	2,628.46	3.39	0.82	95.00
137	13,302.00	89.70	360.00	10,486.70	2,718.87	155.40	2,720.34	2,723.30	3.27	1.16	95.00
138	13,397.00	90.90	360.00	10,486.20	2,813.86	155.40	2,815.34	2,818.15	3.16	1.26	95.00
139	13,492.00	89.80	359.90	10,485.62	2,908.86	155.31	2,910.33	2,913.00	3.06	1.16	95.00
140	13,587.00	91.40	359.90	10,484.62	3,003.85	155.15	3,005.31	3,007.86	2.96	1.68	95.00
141	13,683.00	89.50	0.20	10,483.87	3,099.84	155.23	3,101.30	3,103.73	2.87	2.00	96.00
142	13,778.00	88.20	1.20	10,485.78	3,194.81	156.39	3,196.28	3,198.64	2.80	1.73	95.00
143	13,873.00	88.80	1.40	10,488.26	3,289.76	158.55	3,291.24	3,293.58	2.76	0.67	95.00
144	13,968.00	89.10	359.40	10,490.00	3,384.73	159.21	3,386.22	3,388.48	2.69	2.13	95.00
145	14,063.00	89.90	359.30	10,490.83	3,479.72	158.13	3,481.19	3,483.31	2.60	0.85	95.00
146	14,159.00	88.00	359.00	10,492.59	3,575.69	156.71	3,577.14	3,579.12	2.51	2.00	96.00
147	14,254.00	88.20	358.70	10,495.74	3,670.62	154.80	3,672.04	3,673.88	2.41	0.38	95.00
148	14,349.00	88.50	358.70	10,498.48	3,765.56	152.65	3,766.95	3,768.65	2.32	0.32	95.00
149	14,445.00	88.50	358.80	10,500.99	3,861.50	150.56	3,862.87	3,864.44	2.23	0.10	96.00
150	14,540.00	90.50	359.00	10,501.82	3,956.48	148.73	3,957.82	3,959.27	2.15	2.12	95.00
151	14,635.00	91.10	358.90	10,500.49	4,051.45	146.99	4,052.77	4,054.12	2.08	0.64	95.00
152	14,730.00	91.00	358.50	10,498.75	4,146.41	144.84	4,147.70	4,148.94	2.00	0.43	95.00
153	14,826.00	91.30	357.80	10,496.83	4,242.34	141.74	4,243.59	4,244.71	1.91	0.79	96.00
154	14,921.00	91.40	357.50	10,494.59	4,337.23	137.84	4,338.44	4,339.42	1.82	0.33	95.00
155	15,016.00	92.10	357.30	10,491.69	4,432.09	133.54	4,433.25	4,434.10	1.73	0.77	95.00
156	15,112.00	92.80	356.90	10,487.58	4,527.88	128.68	4,528.98	4,529.71	1.63	0.84	96.00
157	15,207.00	92.70	356.50	10,483.02	4,622.61	123.22	4,623.65	4,624.25	1.53	0.43	95.00
158	15,302.00	91.30	357.70	10,479.71	4,717.43	118.42	4,718.41	4,718.91	1.44	1.94	95.00
159	15,398.00	90.70	359.10	10,478.03	4,813.37	115.74	4,814.32	4,814.76	1.38	1.59	96.00
160	15,493.00	90.90	359.40	10,476.71	4,908.36	114.50	4,909.29	4,909.69	1.34	0.38	95.00
161	15,588.00	91.60	359.40	10,474.63	5,003.33	113.50	5,004.24	5,004.61	1.30	0.74	95.00
162	15,683.00	90.00	359.80	10,473.31	5,098.31	112.84	5,099.21	5,099.56	1.27	1.74	95.00
163	15,778.00	90.20	359.80	10,473.14	5,193.31	112.51	5,194.21	5,194.53	1.24	0.21	95.00
164	15,873.00	90.40	359.80	10,472.65	5,288.31	112.17	5,289.19	5,289.50	1.22	0.21	95.00
165	15,969.00	90.80	359.50	10,471.64	5,384.30	111.59	5,385.18	5,385.46	1.19	0.52	96.00
166	16,064.00	90.20	0.10	10,470.81	5,479.30	111.26	5,480.16	5,480.43	1.16	0.89	95.00
167	16,160.00	89.20	359.60	10,471.31	5,575.29	111.01	5,576.15	5,576.40	1.14	1.16	96.00
168	16,255.00	90.20	0.10	10,471.81	5,670.29	110.76	5,671.14	5,671.37	1.12	1.18	95.00
169	16,350.00	88.80	359.50	10,472.64	5,765.28	110.43	5,766.12	5,766.34	1.10	1.60	95.00
170	16,445.00	89.80	359.40	10,473.80	5,860.27	109.51	5,861.10	5,861.29	1.07	1.06	95.00
171	16,541.00	90.00	359.50	10,473.97	5,956.27	108.59	5,957.08	5,957.26	1.04	0.23	96.00
172	16,636.00	90.90	359.40	10,473.22	6,051.26	107.68	6,052.05	6,052.22	1.02	0.95	95.00
173	16,731.00	90.20	358.60	10,472.31	6,146.24	106.02	6,147.01	6,147.15	0.99	1.12	95.00
174	16,826.00	90.30	0.30	10,471.90	6,241.23	105.11	6,241.99	6,242.11	0.96	1.79	95.00
175	16,922.00	89.40	0.80	10,472.15	6,337.22	106.03	6,337.99	6,338.11	0.96	1.07	96.00
176	17,017.00	88.10	0.80	10,474.22	6,432.19	107.36	6,432.96	6,433.09	0.96	1.37	95.00
177	17,113.00	86.90	0.80	10,478.41	6,528.09	108.70	6,528.87	6,528.99	0.95	1.25	96.00

Svy	Depth	Inc	Azm	TVD	NS	EW	VS	CD	CA	DLS	CL
178	17,208.00	88.20	0.30	10,482.47	6,622.99	109.61	6,623.78	6,623.90	0.95	1.47	95.00
179	17,303.00	88.80	0.40	10,484.95	6,717.96	110.19	6,718.74	6,718.86	0.94	0.64	95.00
180	17,399.00	89.40	359.60	10,486.46	6,813.95	110.19	6,814.73	6,814.84	0.93	1.04	96.00
181	17,494.00	88.50	359.40	10,488.20	6,908.92	109.36	6,909.69	6,909.79	0.91	0.97	95.00
182	17,589.00	87.00	359.90	10,491.93	7,003.85	108.78	7,004.60	7,004.69	0.89	1.66	95.00
183	17,685.00	86.90	359.50	10,497.04	7,099.71	108.28	7,100.45	7,100.54	0.87	0.43	96.00
184	17,780.00	88.70	359.80	10,500.69	7,194.63	107.70	7,195.37	7,195.44	0.86	1.92	95.00
185	17,876.00	88.10	358.40	10,503.37	7,290.58	106.19	7,291.29	7,291.35	0.83	1.59	96.00
186	17,971.00	89.90	359.10	10,505.03	7,385.54	104.12	7,386.23	7,386.27	0.81	2.03	95.00
187	18,066.00	90.70	358.70	10,504.53	7,480.52	102.29	7,481.18	7,481.22	0.78	0.94	95.00
188	18,161.00	91.60	359.10	10,502.62	7,575.48	100.47	7,576.12	7,576.15	0.76	1.04	95.00
189	18,257.00	90.10	359.90	10,501.20	7,671.46	99.63	7,672.09	7,672.11	0.74	1.77	96.00
190	18,352.00	89.50	359.00	10,501.53	7,766.46	98.72	7,767.07	7,767.09	0.73	1.14	95.00
191	18,447.00	89.30	357.90	10,502.52	7,861.42	96.15	7,861.99	7,862.00	0.70	1.18	95.00
192	18,543.00	87.90	0.10	10,504.87	7,957.37	94.48	7,957.92	7,957.93	0.68	2.72	96.00
193	18,639.00	87.30	359.40	10,508.89	8,053.28	94.06	8,053.82	8,053.83	0.67	0.96	96.00
194	18,735.00	88.30	359.80	10,512.58	8,149.20	93.39	8,149.74	8,149.74	0.66	1.12	96.00
195	18,830.00	90.00	0.60	10,513.98	8,244.19	93.72	8,244.72	8,244.72	0.65	1.98	95.00
196	18,926.00	89.40	1.80	10,514.49	8,340.16	95.73	8,340.71	8,340.71	0.66	1.40	96.00
197	19,021.00	91.30	1.90	10,513.91	8,435.11	98.80	8,435.68	8,435.69	0.67	2.00	95.00
198	19,117.00	90.50	1.00	10,512.40	8,531.06	101.23	8,531.66	8,531.67	0.68	1.25	96.00
199	19,213.00	88.20	0.50	10,513.49	8,627.04	102.48	8,627.64	8,627.65	0.68	2.45	96.00
200	19,309.00	89.10	0.10	10,515.75	8,723.01	102.99	8,723.61	8,723.62	0.68	1.03	96.00
201	19,405.00	88.20	0.90	10,518.01	8,818.98	103.82	8,819.59	8,819.59	0.67	1.25	96.00
202	19,501.00	89.00	0.40	10,520.36	8,914.95	104.91	8,915.56	8,915.56	0.67	0.98	96.00
203	19,596.00	88.20	1.00	10,522.68	9,009.91	106.07	9,010.53	9,010.53	0.67	1.05	95.00
204	19,692.00	88.90	0.60	10,525.11	9,105.87	107.41	9,106.49	9,106.50	0.68	0.84	96.00
205	19,788.00	88.00	1.20	10,527.70	9,201.82	108.92	9,202.46	9,202.47	0.68	1.13	96.00
206	19,884.00	88.80	0.80	10,530.38	9,297.77	110.59	9,298.42	9,298.43	0.68	0.93	96.00
207	19,979.00	87.80	1.00	10,533.20	9,392.71	112.08	9,393.37	9,393.38	0.68	1.07	95.00
208	20,075.00	88.70	0.30	10,536.13	9,488.66	113.17	9,489.33	9,489.34	0.68	1.19	96.00
209	20,170.00	87.30	0.60	10,539.45	9,583.60	113.92	9,584.26	9,584.27	0.68	1.51	95.00
210	20,266.00	88.20	359.90	10,543.22	9,679.52	114.34	9,680.19	9,680.20	0.68	1.19	96.00
211	20,362.00	89.20	359.70	10,545.40	9,775.49	114.00	9,776.15	9,776.16	0.67	1.06	96.00
212	20,457.00	90.20	359.40	10,545.89	9,870.49	113.26	9,871.13	9,871.14	0.66	1.10	95.00
213	20,492.00	90.40	359.40	10,545.71	9,905.49	112.89	9,906.12	9,906.13	0.65	0.57	35.00
PTB	20,540.00	90.40	359.40	10,545.38	9,953.48	112.39	9,954.11	9,954.12	0.65	0.00	48.00



Devon Energy

Lea County, NM (NAD83)

Van Doo Dah 21-33 / Marwari 21-16

Marwari 21-16 State Fed Com 234Y

OH

Design: OH

Standard Survey Report

14 January, 2020





Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

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

Site						Van Doo Dah 21-33 / Marwari 21-16											
Site Position:			Northing:			404,359.07 usft			Latitude:			32.109997					
From:			Map			Easting:			742,413.69 usft			Longitude:			-103.683905		
Position Uncertainty:			0.00 usft			Slot Radius:			13-3/16 "			Grid Convergence:			0.35 °		

Well	Marwari 21-16 State Fed Com 234Y					
Well Position	+N/-S	0.00 usft	Northing:	404,359.67 usft	Latitude:	32.109998
	+E/-W	0.00 usft	Easting:	742,443.67 usft	Longitude:	-103.683808
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,389.90 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/9/2019	6.73	59.91	47,604.41411912

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	0.65	

Survey Program	Date	1/14/2020			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
199.00	20,492.00	Survey #1 (OH)	OWSG (Rev2) MWD	OWSG MWD - Standard	
20,540.00	20,540.00	Survey #2 - Proj to TD (OH)	BLIND	OWSG BLIND	

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	
SHL (M 21-16 State Fed Com 234Y)										
199.00	0.70	141.60	199.00	-0.95	0.76	-0.94	0.35	0.35	0.00	
306.00	1.00	150.70	305.98	-2.28	1.62	-2.26	0.31	0.28	8.50	
401.00	1.30	185.10	400.97	-4.08	1.93	-4.05	0.78	0.32	36.21	
497.00	1.90	203.30	496.93	-6.62	1.20	-6.61	0.81	0.63	18.96	
592.00	2.50	205.40	591.86	-9.94	-0.31	-9.94	0.64	0.63	2.21	
687.00	3.00	210.30	686.75	-13.96	-2.45	-13.98	0.58	0.53	5.16	
783.00	2.80	211.90	782.62	-18.12	-4.96	-18.17	0.22	-0.21	1.67	
841.00	2.80	215.70	840.56	-20.47	-6.53	-20.54	0.32	0.00	6.55	



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single 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)	
1,003.00	2.20	230.70	1,002.40	-25.65	-11.25	-25.78	0.55	-0.37	9.26	
1,099.00	2.00	202.70	1,098.34	-28.37	-13.32	-28.51	1.08	-0.21	-29.17	
1,193.00	1.80	174.90	1,192.29	-31.35	-13.82	-31.50	0.99	-0.21	-29.57	
1,289.00	1.80	136.00	1,288.25	-33.94	-12.64	-34.08	1.25	0.00	-40.52	
1,384.00	1.60	130.70	1,383.20	-35.87	-10.60	-35.99	0.27	-0.21	-5.58	
1,479.00	1.30	124.20	1,478.17	-37.35	-8.70	-37.44	0.36	-0.32	-6.84	
1,575.00	1.30	131.40	1,574.15	-38.68	-6.99	-38.75	0.17	0.00	7.50	
1,670.00	1.30	131.10	1,669.13	-40.10	-5.37	-40.16	0.01	0.00	-0.32	
1,765.00	1.00	129.90	1,764.11	-41.34	-3.92	-41.38	0.32	-0.32	-1.26	
1,861.00	1.10	131.20	1,860.09	-42.48	-2.58	-42.51	0.11	0.10	1.35	
1,956.00	1.00	123.60	1,955.07	-43.54	-1.21	-43.55	0.18	-0.11	-8.00	
2,051.00	0.70	140.70	2,050.06	-44.45	-0.15	-44.45	0.41	-0.32	18.00	
2,147.00	1.00	139.90	2,146.05	-45.54	0.76	-45.53	0.31	0.31	-0.83	
2,242.00	1.00	137.00	2,241.04	-46.79	1.86	-46.76	0.05	0.00	-3.05	
2,337.00	0.80	154.30	2,336.03	-47.99	2.72	-47.96	0.35	-0.21	18.21	
2,433.00	1.00	136.00	2,432.02	-49.20	3.59	-49.15	0.36	0.21	-19.06	
2,528.00	0.70	145.90	2,527.00	-50.27	4.49	-50.22	0.35	-0.32	10.42	
2,623.00	0.80	153.30	2,622.00	-51.35	5.11	-51.28	0.15	0.11	7.79	
2,719.00	1.30	157.50	2,717.98	-52.95	5.83	-52.88	0.53	0.52	4.38	
2,814.00	1.00	120.30	2,812.96	-54.36	6.96	-54.28	0.83	-0.32	-39.16	
2,909.00	1.00	109.90	2,907.95	-55.06	8.45	-54.97	0.19	0.00	-10.95	
3,005.00	1.00	100.20	3,003.93	-55.50	10.07	-55.38	0.18	0.00	-10.10	
3,100.00	1.00	95.10	3,098.92	-55.72	11.71	-55.58	0.09	0.00	-5.37	
3,195.00	0.90	93.20	3,193.91	-55.83	13.28	-55.68	0.11	-0.11	-2.00	
3,291.00	1.10	84.60	3,289.89	-55.79	14.95	-55.62	0.26	0.21	-8.96	
3,386.00	1.30	101.70	3,384.87	-55.92	16.91	-55.73	0.43	0.21	18.00	
3,481.00	2.40	121.80	3,479.82	-57.19	19.66	-56.96	1.33	1.16	21.16	
3,576.00	3.30	129.40	3,574.70	-59.97	23.46	-59.70	1.03	0.95	8.00	
3,672.00	4.40	135.40	3,670.48	-64.35	28.18	-64.03	1.22	1.15	6.25	
3,767.00	4.40	140.40	3,765.21	-69.75	33.06	-69.37	0.40	0.00	5.26	
3,862.00	4.30	135.70	3,859.93	-75.11	37.87	-74.68	0.39	-0.11	-4.95	
3,958.00	4.30	135.90	3,955.66	-80.27	42.89	-79.78	0.02	0.00	0.21	
4,053.00	4.10	135.00	4,050.41	-85.23	47.77	-84.68	0.22	-0.21	-0.95	
4,149.00	4.10	138.70	4,146.16	-90.23	52.46	-89.63	0.28	0.00	3.85	
4,244.00	4.20	136.80	4,240.91	-95.32	57.09	-94.67	0.18	0.11	-2.00	
4,339.00	4.30	139.80	4,335.65	-100.58	61.77	-99.87	0.26	0.11	3.16	
4,435.00	4.10	139.40	4,431.39	-105.93	66.32	-105.17	0.21	-0.21	-0.42	
4,530.00	3.80	137.80	4,526.17	-110.84	70.65	-110.04	0.34	-0.32	-1.68	
4,626.00	3.40	136.80	4,621.98	-115.27	74.73	-114.42	0.42	-0.42	-1.04	
4,721.00	3.20	137.00	4,716.82	-119.27	78.47	-118.37	0.21	-0.21	0.21	
4,816.00	3.50	142.20	4,811.66	-123.50	82.06	-122.56	0.45	0.32	5.47	
4,912.00	3.30	142.90	4,907.49	-128.02	85.52	-127.04	0.21	-0.21	0.73	
5,007.00	3.10	143.80	5,002.34	-132.27	88.69	-131.26	0.22	-0.21	0.95	



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single 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)	
5,195.00	2.90	142.70	5,190.08	-140.15	94.57	-139.08	0.11	-0.11	-0.59	
5,291.00	2.80	140.90	5,285.96	-143.91	97.52	-142.80	0.14	-0.10	-1.88	
5,386.00	3.20	135.80	5,380.83	-147.61	100.83	-146.46	0.51	0.42	-5.37	
5,481.00	3.50	132.50	5,475.67	-151.47	104.82	-150.27	0.38	0.32	-3.47	
5,576.00	3.50	132.50	5,570.49	-155.39	109.09	-154.14	0.00	0.00	0.00	
5,672.00	3.30	129.80	5,666.33	-159.13	113.38	-157.84	0.27	-0.21	-2.81	
5,767.00	3.30	128.00	5,761.17	-162.57	117.63	-161.23	0.11	0.00	-1.89	
5,862.00	3.30	127.10	5,856.01	-165.90	121.97	-164.51	0.05	0.00	-0.95	
5,958.00	3.20	126.40	5,951.86	-169.16	126.33	-167.72	0.11	-0.10	-0.73	
6,053.00	3.20	124.60	6,046.71	-172.24	130.65	-170.75	0.11	0.00	-1.89	
6,149.00	3.40	124.20	6,142.55	-175.36	135.21	-173.82	0.21	0.21	-0.42	
6,245.00	3.10	121.90	6,238.39	-178.33	139.76	-176.74	0.34	-0.31	-2.40	
6,340.00	3.00	119.80	6,333.26	-180.92	144.10	-179.28	0.16	-0.11	-2.21	
6,436.00	2.90	119.90	6,429.13	-183.38	148.39	-181.69	0.10	-0.10	0.10	
6,531.00	2.60	139.20	6,524.02	-186.21	151.88	-184.48	1.02	-0.32	20.32	
6,627.00	2.50	154.50	6,619.93	-189.75	154.20	-188.00	0.71	-0.10	15.94	
6,722.00	2.50	148.90	6,714.84	-193.39	156.16	-191.62	0.26	0.00	-5.89	
6,818.00	1.60	189.90	6,810.78	-196.51	157.02	-194.72	1.73	-0.94	42.71	
6,913.00	1.50	204.40	6,905.75	-198.94	156.27	-197.17	0.42	-0.11	15.26	
7,009.00	1.20	198.60	7,001.72	-201.04	155.43	-199.27	0.34	-0.31	-6.04	
7,104.00	1.10	198.60	7,096.70	-202.85	154.83	-201.09	0.11	-0.11	0.00	
7,200.00	0.80	208.60	7,192.69	-204.31	154.21	-202.56	0.36	-0.31	10.42	
7,295.00	0.80	227.20	7,287.68	-205.34	153.41	-203.60	0.27	0.00	19.58	
7,390.00	0.70	243.20	7,382.67	-206.06	152.40	-204.32	0.24	-0.11	16.84	
7,485.00	0.50	246.70	7,477.67	-206.48	151.50	-204.76	0.21	-0.21	3.68	
7,581.00	0.60	253.00	7,573.66	-206.79	150.64	-205.08	0.12	0.10	6.56	
7,676.00	0.60	260.70	7,668.66	-207.02	149.67	-205.32	0.08	0.00	8.11	
7,771.00	0.50	259.00	7,763.65	-207.18	148.77	-205.49	0.11	-0.11	-1.79	
7,867.00	0.30	238.50	7,859.65	-207.39	148.15	-205.70	0.25	-0.21	-21.35	
7,962.00	0.30	238.70	7,954.65	-207.65	147.72	-205.97	0.00	0.00	0.21	
8,057.00	0.30	259.20	8,049.65	-207.83	147.27	-206.15	0.11	0.00	21.58	
8,153.00	0.30	272.60	8,145.65	-207.86	146.77	-206.19	0.07	0.00	13.96	
8,248.00	0.30	295.30	8,240.65	-207.74	146.30	-206.08	0.12	0.00	23.89	
8,344.00	0.40	297.30	8,336.64	-207.48	145.77	-205.82	0.10	0.10	2.08	
8,439.00	0.50	317.80	8,431.64	-207.02	145.20	-205.37	0.20	0.11	21.58	
8,535.00	0.50	319.50	8,527.64	-206.39	144.65	-204.75	0.02	0.00	1.77	
8,630.00	0.80	324.60	8,622.63	-205.54	143.99	-203.90	0.32	0.32	5.37	
8,725.00	1.00	326.00	8,717.62	-204.31	143.14	-202.68	0.21	0.21	1.47	
8,821.00	1.50	338.40	8,813.60	-202.45	142.21	-200.83	0.59	0.52	12.92	
8,916.00	1.40	339.20	8,908.57	-200.21	141.34	-198.60	0.11	-0.11	0.84	
9,011.00	1.20	3.80	9,003.54	-198.13	141.00	-196.53	0.62	-0.21	25.89	
9,107.00	1.90	3.10	9,099.51	-195.54	141.15	-193.93	0.73	0.73	-0.73	
9,202.00	1.50	9.20	9,194.46	-192.74	141.43	-191.13	0.46	-0.42	6.42	



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single 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)
9,297.00	0.10	212.90	9,289.45	-191.58	141.59	-189.97	1.68	-1.47	-164.53
9,393.00	0.10	318.10	9,385.45	-191.59	141.49	-189.98	0.17	0.00	109.58
9,488.00	0.80	21.20	9,480.45	-190.91	141.67	-189.30	0.80	0.74	66.42
9,583.00	1.50	23.90	9,575.43	-189.15	142.41	-187.53	0.74	0.74	2.84
9,679.00	0.80	29.90	9,671.41	-187.42	143.26	-185.79	0.74	-0.73	6.25
9,774.00	0.50	92.80	9,766.41	-186.87	144.00	-185.23	0.76	-0.32	66.21
9,870.00	0.40	168.10	9,862.40	-187.22	144.49	-185.57	0.58	-0.10	78.44
9,965.00	0.30	125.40	9,957.40	-187.68	144.76	-186.04	0.29	-0.11	-44.95
10,048.00	0.30	126.00	10,040.40	-187.94	145.11	-186.29	0.00	0.00	0.72
KOP									
10,122.36	4.07	1.72	10,114.70	-185.42	145.35	-183.76	5.71	5.07	-167.13
KOP (M 21-16 State Fed Com 234Y)									
10,158.00	6.10	0.60	10,150.20	-182.26	145.41	-180.60	5.71	5.70	-3.14
10,253.00	17.00	358.50	10,243.14	-163.27	145.10	-161.62	11.48	11.47	-2.21
10,349.00	26.70	0.80	10,332.13	-127.59	145.03	-125.94	10.14	10.10	2.40
10,444.00	37.50	4.00	10,412.50	-77.25	147.35	-75.58	11.50	11.37	3.37
10,540.00	49.00	1.70	10,482.31	-11.67	150.48	-9.97	12.09	11.98	-2.40
10,635.00	60.30	0.50	10,537.18	65.68	151.90	67.39	11.94	11.89	-1.26
10,730.00	71.90	358.10	10,575.61	152.37	150.76	154.06	12.43	12.21	-2.53
10,826.00	84.30	358.00	10,595.37	246.07	147.57	247.72	12.92	12.92	-0.10
10,883.22	89.24	359.87	10,598.59	303.17	146.51	304.80	9.23	8.63	3.27
LP (M 21-16 State Fed Com 234Y)									
10,921.00	92.50	1.10	10,598.02	340.93	146.83	342.57	9.23	8.63	3.26
11,017.00	94.00	359.90	10,592.58	436.77	147.67	438.41	2.00	1.56	-1.25
11,112.00	94.30	359.60	10,585.70	531.52	147.25	533.15	0.45	0.32	-0.32
11,207.00	92.80	359.80	10,579.82	626.33	146.76	627.95	1.59	-1.58	0.21
11,302.00	93.10	359.70	10,574.93	721.21	146.34	722.81	0.33	0.32	-0.11
11,397.00	93.50	359.50	10,569.46	816.05	145.68	817.64	0.47	0.42	-0.21
11,493.00	93.70	359.40	10,563.43	911.85	144.76	913.43	0.23	0.21	-0.10
11,588.00	94.20	359.30	10,556.89	1,006.62	143.69	1,008.18	0.54	0.53	-0.11
11,683.00	92.80	0.00	10,551.09	1,101.44	143.11	1,102.99	1.65	-1.47	0.74
11,778.00	93.20	359.70	10,546.12	1,196.31	142.86	1,197.85	0.53	0.42	-0.32
11,873.00	91.60	0.20	10,542.14	1,291.22	142.78	1,292.75	1.76	-1.68	0.53
11,969.00	92.30	0.10	10,538.87	1,387.17	143.03	1,388.69	0.74	0.73	-0.10
12,064.00	93.10	0.10	10,534.40	1,482.06	143.19	1,483.58	0.84	0.84	0.00
12,159.00	93.60	0.00	10,528.85	1,576.90	143.28	1,578.41	0.54	0.53	-0.11
12,255.00	92.10	0.20	10,524.07	1,672.77	143.44	1,674.29	1.58	-1.56	0.21
12,350.00	92.90	0.70	10,519.93	1,767.68	144.19	1,769.20	0.99	0.84	0.53
12,446.00	93.00	1.10	10,514.99	1,863.54	145.70	1,865.07	0.43	0.10	0.42
12,541.00	92.00	0.50	10,510.85	1,958.44	147.02	1,959.97	1.23	-1.05	-0.63
12,636.00	90.80	0.60	10,508.53	2,053.41	147.93	2,054.94	1.27	-1.26	0.11
12,731.00	91.50	0.60	10,506.62	2,148.38	148.93	2,149.92	0.74	0.74	0.00
12,827.00	92.30	0.80	10,503.44	2,244.32	150.10	2,245.87	0.86	0.83	0.21
12,922.00	93.90	1.20	10,498.30	2,339.16	151.75	2,340.73	1.74	1.68	0.42



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single 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)	
13,017.00	93.10	0.80	10,492.50	2,433.97	153.41	2,435.55	0.94	-0.84	-0.42	
13,112.00	91.30	0.70	10,488.85	2,528.89	154.65	2,530.47	1.90	-1.89	-0.11	
13,207.00	90.80	0.10	10,487.11	2,623.87	155.31	2,625.46	0.82	-0.53	-0.63	
13,302.00	89.70	0.00	10,486.70	2,718.87	155.40	2,720.45	1.16	-1.16	-0.11	
13,397.00	90.90	0.00	10,486.20	2,813.86	155.40	2,815.44	1.26	1.26	0.00	
13,492.00	89.80	359.90	10,485.62	2,908.86	155.31	2,910.43	1.16	-1.16	-0.11	
13,587.00	91.40	359.90	10,484.62	3,003.85	155.15	3,005.41	1.68	1.68	0.00	
13,683.00	89.50	0.20	10,483.87	3,099.84	155.23	3,101.40	2.00	-1.98	0.31	
13,778.00	88.20	1.20	10,485.78	3,194.81	156.39	3,196.38	1.73	-1.37	1.05	
13,873.00	88.80	1.40	10,488.26	3,289.76	158.55	3,291.34	0.67	0.63	0.21	
13,968.00	89.10	359.40	10,490.00	3,384.73	159.21	3,386.32	2.13	0.32	-2.11	
14,063.00	89.90	359.30	10,490.83	3,479.72	158.13	3,481.29	0.85	0.84	-0.11	
14,159.00	88.00	359.00	10,492.59	3,575.69	156.71	3,577.23	2.00	-1.98	-0.31	
14,254.00	88.20	358.70	10,495.74	3,670.62	154.80	3,672.13	0.38	0.21	-0.32	
14,349.00	88.50	358.70	10,498.48	3,765.56	152.65	3,767.04	0.32	0.32	0.00	
14,445.00	88.50	358.80	10,500.99	3,861.50	150.56	3,862.96	0.10	0.00	0.10	
14,540.00	90.50	359.00	10,501.82	3,956.48	148.73	3,957.90	2.12	2.11	0.21	
14,635.00	91.10	358.90	10,500.49	4,051.45	146.99	4,052.85	0.64	0.63	-0.11	
14,730.00	91.00	358.50	10,498.75	4,146.41	144.84	4,147.78	0.43	-0.11	-0.42	
14,826.00	91.30	357.80	10,496.83	4,242.34	141.74	4,243.67	0.79	0.31	-0.73	
14,921.00	91.40	357.50	10,494.59	4,337.23	137.84	4,338.51	0.33	0.11	-0.32	
15,016.00	92.10	357.30	10,491.69	4,432.09	133.54	4,433.32	0.77	0.74	-0.21	
15,112.00	92.80	356.90	10,487.58	4,527.88	128.68	4,529.04	0.84	0.73	-0.42	
15,207.00	92.70	356.50	10,483.02	4,622.61	123.22	4,623.71	0.43	-0.11	-0.42	
15,302.00	91.30	357.70	10,479.71	4,717.43	118.42	4,718.46	1.94	-1.47	1.26	
15,369.36	90.88	358.68	10,478.43	4,784.74	116.29	4,785.75	1.59	-0.62	1.46	
S21/16 Crossing										
15,398.00	90.70	359.10	10,478.03	4,813.37	115.74	4,814.37	1.59	-0.63	1.46	
15,493.00	90.90	359.40	10,476.71	4,908.36	114.50	4,909.34	0.38	0.21	0.32	
15,588.00	91.60	359.40	10,474.64	5,003.33	113.50	5,004.29	0.74	0.74	0.00	
15,683.00	90.00	359.80	10,473.31	5,098.31	112.84	5,099.26	1.74	-1.68	0.42	
15,778.00	90.20	359.80	10,473.14	5,193.31	112.51	5,194.25	0.21	0.21	0.00	
15,873.00	90.40	359.80	10,472.65	5,288.31	112.17	5,289.24	0.21	0.21	0.00	
15,969.00	90.80	359.50	10,471.64	5,384.30	111.59	5,385.22	0.52	0.42	-0.31	
16,064.00	90.20	0.10	10,470.81	5,479.30	111.26	5,480.20	0.89	-0.63	0.63	
16,160.00	89.20	359.60	10,471.31	5,575.29	111.01	5,576.19	1.16	-1.04	-0.52	
16,255.00	90.20	0.10	10,471.81	5,670.29	110.76	5,671.18	1.18	1.05	0.53	
16,350.00	88.80	359.50	10,472.64	5,765.28	110.43	5,766.16	1.60	-1.47	-0.63	
16,445.00	89.80	359.40	10,473.80	5,860.27	109.51	5,861.13	1.06	1.05	-0.11	
16,541.00	90.00	359.50	10,473.97	5,956.27	108.59	5,957.11	0.23	0.21	0.10	
16,636.00	90.90	359.40	10,473.22	6,051.26	107.68	6,052.09	0.95	0.95	-0.11	
16,731.00	90.20	358.60	10,472.31	6,146.24	106.02	6,147.04	1.12	-0.74	-0.84	
16,826.00	90.30	0.30	10,471.90	6,241.23	105.11	6,242.02	1.79	0.11	1.79	
16,922.00	89.40	0.80	10,472.15	6,337.22	106.03	6,338.02	1.07	-0.94	0.52	



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single 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)
17,017.00	88.10	0.80	10,474.22	6,432.19	107.36	6,432.99	1.37	-1.37	0.00
17,113.00	86.90	0.80	10,478.41	6,528.09	108.70	6,528.90	1.25	-1.25	0.00
17,208.00	88.20	0.30	10,482.47	6,622.99	109.61	6,623.81	1.47	1.37	-0.53
17,303.00	88.80	0.40	10,484.95	6,717.96	110.19	6,718.77	0.64	0.63	0.11
17,399.00	89.40	359.60	10,486.46	6,813.95	110.19	6,814.76	1.04	0.63	-0.83
17,494.00	88.50	359.40	10,488.20	6,908.93	109.36	6,909.72	0.97	-0.95	-0.21
17,589.00	87.00	359.90	10,491.93	7,003.85	108.78	7,004.63	1.66	-1.58	0.53
17,685.00	86.90	359.50	10,497.04	7,099.71	108.28	7,100.48	0.43	-0.10	-0.42
17,780.00	88.70	359.80	10,500.69	7,194.63	107.70	7,195.39	1.92	1.89	0.32
17,876.00	88.10	358.40	10,503.37	7,290.58	106.19	7,291.32	1.59	-0.63	-1.46
17,971.00	89.90	359.10	10,505.03	7,385.54	104.12	7,386.24	2.03	1.89	0.74
18,066.00	90.70	358.70	10,504.53	7,480.52	102.29	7,481.20	0.94	0.84	-0.42
18,161.00	91.60	359.10	10,502.62	7,575.48	100.47	7,576.13	1.04	0.95	0.42
18,257.00	90.10	359.90	10,501.20	7,671.46	99.63	7,672.10	1.77	-1.56	0.83
18,352.00	89.50	359.00	10,501.53	7,766.46	98.72	7,767.08	1.14	-0.63	-0.95
18,447.00	89.30	357.90	10,502.52	7,861.42	96.15	7,862.00	1.18	-0.21	-1.16
18,543.00	87.90	0.10	10,504.87	7,957.37	94.48	7,957.92	2.72	-1.46	2.29
18,639.00	87.30	359.40	10,508.89	8,053.28	94.06	8,053.83	0.96	-0.63	-0.73
18,735.00	88.30	359.80	10,512.58	8,149.20	93.39	8,149.74	1.12	1.04	0.42
18,830.00	90.00	0.60	10,513.98	8,244.19	93.72	8,244.72	1.98	1.79	0.84
18,926.00	89.40	1.80	10,514.49	8,340.16	95.73	8,340.71	1.40	-0.63	1.25
19,021.00	91.30	1.90	10,513.91	8,435.11	98.80	8,435.69	2.00	2.00	0.11
19,117.00	90.50	1.00	10,512.40	8,531.06	101.23	8,531.66	1.25	-0.83	-0.94
19,213.00	88.20	0.50	10,513.49	8,627.04	102.48	8,627.65	2.45	-2.40	-0.52
19,309.00	89.10	0.10	10,515.75	8,723.01	102.99	8,723.62	1.03	0.94	-0.42
19,405.00	88.20	0.90	10,518.01	8,818.98	103.82	8,819.59	1.25	-0.94	0.83
19,501.00	89.00	0.40	10,520.36	8,914.95	104.91	8,915.56	0.98	0.83	-0.52
19,596.00	88.20	1.00	10,522.68	9,009.91	106.07	9,010.53	1.05	-0.84	0.63
19,692.00	88.90	0.60	10,525.11	9,105.87	107.41	9,106.50	0.84	0.73	-0.42
19,788.00	88.00	1.20	10,527.70	9,201.82	108.92	9,202.46	1.13	-0.94	0.63
19,884.00	88.80	0.80	10,530.38	9,297.77	110.59	9,298.42	0.93	0.83	-0.42
19,979.00	87.80	1.00	10,533.20	9,392.71	112.08	9,393.38	1.07	-1.05	0.21
20,075.00	88.70	0.30	10,536.13	9,488.66	113.17	9,489.33	1.19	0.94	-0.73
20,170.00	87.30	0.60	10,539.45	9,583.60	113.92	9,584.27	1.51	-1.47	0.32
20,266.00	88.20	359.90	10,543.22	9,679.52	114.34	9,680.19	1.19	0.94	-0.73
20,362.00	89.20	359.70	10,545.40	9,775.49	114.00	9,776.16	1.06	1.04	-0.21
20,457.00	90.20	359.40	10,545.89	9,870.49	113.26	9,871.14	1.10	1.05	-0.32
20,492.00	90.40	359.40	10,545.71	9,905.49	112.89	9,906.13	0.57	0.57	0.00
20,540.00	90.40	359.40	10,545.38	9,953.48	112.39	9,954.12	0.00	0.00	0.00
BHL - PBHL (M 21-16 State Fed Com 234Y)									



Total Directional Services

Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well Marwari 21-16 State Fed Com 234Y
Project:	Lea County, NM (NAD83)	TVD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Site:	Van Doo Dah 21-33 / Marwari 21-16	MD Reference:	3389.9' GE + 30' KB @ 3419.90usft
Well:	Marwari 21-16 State Fed Com 234Y	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,048.00	10,040.40	-187.94	145.11	KOP
15,369.36	10,478.43	4,784.74	116.29	S21/16 Crossing
20,540.00	10,545.38	9,953.48	112.39	BHL

Checked By: _____ Approved By: _____ Date: _____

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

Form C-103
 Revised August 1, 2011

OIL CONSERVATION DIVISION
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

WELL API NO.	30-025-46603
5. Indicate Type of Lease STATE ☐ FEE ☐	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name MARWARI 21-16 STATE FED COM	
8. Well Number	234Y
9. OGRID Number	6137
10. Pool name or Wildcat WC-025 G-06 S253209L; BONE SPRING	

SUNDRY NOTICES AND REPORTS ON WELLS
 (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
Devon Energy Production Company, L.P.

3. Address of Operator
333 West Sheridan, Oklahoma City, OK 73102

4. Well Location
 Unit Letter N : 500 feet from the South line and 1510 feet from the West line
 Section 21 Township 25S Range 32E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL: 3389

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐

OTHER: Completion ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Devon Energy Production Co., L.P. (Devon) respectfully requests for OCD extension of time to file BLM- approved Form 3160-4. 8/21/20 – 8/30/20: MIRU WL & PT. TIH PT csg 9500 psi for 30min, OK. TIH w/pump through frac plug and guns. Perf Bone Spring, 10,800'-20,518'. Frac totals 19648084# prop, 76 bbl acid. ND frac, MIRU PU, NU BOP, DO plugs & CO to PBDT 20,527'. CHC, FWB, ND BOP. Tbg will be ran at later date. TOP.

Request for OCD extension of time to file BLM- approved Form 3160-4.

RUSTLER	871
SALADO	1161
DELAWARE	4572
BONE SPRING	8567

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Chelsey Green TITLE Regulatory Analyst DATE 2/1/2021

Type or print name Chelsey Green E-mail address: Chelsey.Green@dvn.com PHONE: 405-228-8595

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

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 16552

CONDITIONS OF APPROVAL

Operator: DEVON ENERGY PRODUCTION COMPAN 333 West Sheridan Ave. Oklahoma City, OK73102			OGRID: 6137	Action Number: 16552	Action Type: C-104C
OCD Reviewer			Condition		
ksimmons			None		