

RECEIVED

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

JAN 14 2020

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

☒ AMENDED REPORT
As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-45303	² Pool Code 11520	³ Pool Name CEDAR CANYON; BONE SPRING
⁴ Property Code 320827	⁵ Property Name SPUD MUFFIN 31-30 FED COM	
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁶ Well Number 334H
		⁹ Elevation 2959.7

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
P	31	23 S	29 E		485	SOUTH	250	EAST	EDDY

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
A	30	23 S	29 E		38	NORTH	976	EAST	EDDY

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.

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>Erin Workman</i> 11/27/2019 Signature Date Erin Workman Printed Name Erin.workman@dmn.co 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. SEPTEMBER 12, 2018 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number FILING NO. 12797 JANUARY 12, 2020	
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R153-12-20

Intent ☐ As Drilled ☒

API #
30-015-45303

Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: SPUD MUFFIN 31-30	Well Number 334H
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Kick Off Point (KOP)

UL P	Section 31	Township 23S	Range 29E	Lot	Feet 102	From N/S SOUTH	Feet 894	From E/W EAST	County EDDY
Latitude 32.2544833					Longitude 104.0181359			NAD 83	

First Take Point (FTP)

UL P	Section 31	Township 23S	Range 29E	Lot	Feet 598	From N/S SOUTH	Feet 905	From E/W EAST	County EDDY
Latitude 32.2558456					Longitude 104.0181965			NAD 83	

Last Take Point (LTP)

UL A	Section 30	Township 23S	Range 29E	Lot	Feet 159	From N/S NORTH	Feet 962	From E/W EAST	County EDDY
Latitude 32.2827987					Longitude 104.0186407			NAD 83	

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

☒ YES

Is 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
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KZ 06/29/2018

RECEIVED

JAN 14 2020

EMNRD-OCD ARTESIA

Devon

SURVEY REPORT

Spud Muffin 31-30 334H

Cactus 167

This survey is correct to the best of my knowledge and is supported by actual field data.

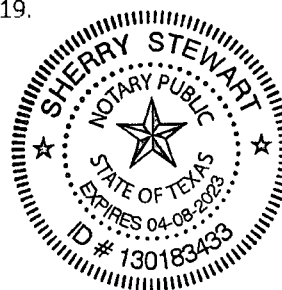
Notarized this data 3rd of December, 2019.

Sherry Stewart

Notary Signature

County of Midland

State of Texas



The Ultimate Partner In Wellbore Placement



Scientific Drilling

Devon Energy

Eddy County, NM (NAD83 NME)

Spud Muffin 31-30

334H

OH

Survey: SDI Survey #1

TRRC Survey Report

09 January, 2020


devon



Scientific Drilling, Intl
TRRC Survey Report



Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Project	Eddy 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	Spud Muffin 31-30		
Site Position:		Northing:	456,686.87 usft
From:	Map	Easting:	639,208.90 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32.25511
		Longitude:	-104.01673
		Grid Convergence:	0.17 °

Well	334H		
Well Position	+N/-S	0.00 usft	Northing:
	+E/-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.25552
		Longitude:	-104.01617
		Ground Level:	2,960.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	12/4/2018	7.10
			60.02
			47,954.70000000

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	
	(usft)	(usft)	
	0.00	0.00	
		+E/-W	
		(usft)	
		Direction	
		(°)	
		358.88	

Survey Program	Date	3/8/2019		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
269.00	19,911.00	SDI Survey #1 (OH)	MWD+HDGM	OWSG MWD + HDGM

Survey							
MD	Inc	Azi (azimuth)	TVD	N/S	E/W	Closure Distance	Closure Azimuth
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
269.00	0.33	355.40	269.00	0.77	-0.06	0.77	355.40
419.00	0.50	24.65	418.99	1.80	0.18	1.81	5.60
509.00	0.29	223.03	508.99	1.99	0.18	2.00	5.30
602.00	0.62	36.59	601.99	2.22	0.32	2.24	8.30
692.00	0.47	44.58	691.99	2.87	0.87	3.00	16.90
783.00	0.79	49.20	782.98	3.55	1.61	3.90	24.40
875.00	0.76	56.22	874.97	4.30	2.60	5.03	31.11
966.00	0.98	56.41	965.96	5.07	3.75	6.30	36.47
1,056.00	1.22	54.68	1,055.95	6.05	5.17	7.96	40.52
1,146.00	1.00	59.50	1,145.93	7.00	6.63	9.64	43.43
1,236.00	1.44	220.43	1,235.92	6.54	6.57	9.27	45.14

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
1,325.00	0.90	215.99	1,324.90	5.12	5.44	7.47	46.70
1,416.00	0.89	204.55	1,415.89	3.90	4.72	6.13	50.44
1,507.00	0.74	194.76	1,506.88	2.69	4.28	5.05	57.84
1,600.00	0.57	175.57	1,599.88	1.65	4.16	4.48	68.39
1,691.00	0.38	159.92	1,690.87	0.91	4.30	4.40	78.00
1,782.00	0.63	126.61	1,781.87	0.33	4.81	4.82	86.05
1,876.00	0.32	267.29	1,875.87	0.01	4.96	4.96	89.87
1,971.00	0.84	277.72	1,970.86	0.09	4.00	4.00	88.68
2,066.00	0.41	8.68	2,065.86	0.52	3.36	3.40	81.18
2,161.00	0.90	61.04	2,160.85	1.22	4.07	4.25	73.32
2,257.00	1.90	94.14	2,256.83	1.47	6.32	6.48	76.90
2,352.00	1.72	119.26	2,351.78	0.66	9.13	9.15	85.87
2,448.00	2.24	173.26	2,447.73	-1.91	10.61	10.78	100.20
2,543.00	3.58	206.20	2,542.61	-6.41	9.52	11.48	123.98
2,639.00	4.65	221.42	2,638.37	-12.02	5.62	13.27	154.95
2,734.00	4.88	224.04	2,733.04	-17.81	0.26	17.82	179.16
2,830.00	5.30	240.39	2,828.66	-22.94	-6.43	23.83	195.66
2,925.00	5.89	247.11	2,923.21	-27.00	-14.74	30.76	208.62
3,020.00	6.21	248.21	3,017.68	-30.81	-24.00	39.05	217.92
3,115.00	7.01	255.06	3,112.05	-34.21	-34.37	48.49	225.14
3,211.00	6.51	252.40	3,207.38	-37.37	-45.22	58.66	230.43
3,306.00	6.08	257.32	3,301.81	-40.10	-55.26	68.28	234.03
3,402.00	6.33	259.19	3,397.25	-42.21	-65.42	77.85	237.17
3,497.00	7.56	260.08	3,491.55	-44.27	-76.72	88.57	240.02
3,593.00	9.60	254.62	3,586.47	-47.48	-90.66	102.34	242.36
3,688.00	10.18	249.40	3,680.06	-52.53	-106.16	118.44	243.67
3,783.00	10.05	246.21	3,773.59	-58.83	-121.60	135.08	244.18
3,879.00	10.02	238.42	3,868.12	-66.58	-136.38	151.77	243.98
3,974.00	10.68	233.11	3,961.58	-76.20	-150.46	168.66	243.14
4,070.00	9.96	232.29	4,056.02	-86.61	-164.15	185.60	242.18
4,165.00	9.66	233.98	4,149.64	-96.33	-177.09	201.59	241.46
4,260.00	9.17	232.91	4,243.36	-105.58	-189.58	216.99	240.89
4,356.00	8.80	236.74	4,338.18	-114.22	-201.82	231.90	240.49
4,451.00	10.39	244.57	4,431.85	-121.88	-215.63	247.70	240.52
4,547.00	10.99	244.69	4,526.18	-129.51	-231.72	265.46	240.80
4,642.00	10.88	245.80	4,619.46	-137.06	-248.09	283.43	241.08
4,737.00	10.84	243.24	4,712.76	-144.76	-264.24	301.29	241.29
4,832.00	11.73	234.55	4,805.93	-154.38	-280.09	319.82	241.14
4,928.00	11.46	233.56	4,899.97	-165.71	-295.71	338.97	240.74
5,023.00	10.84	232.49	4,993.17	-176.75	-310.39	357.18	240.34
5,118.00	10.87	232.88	5,086.47	-187.60	-324.62	374.92	239.98
5,213.00	10.12	231.12	5,179.88	-198.24	-338.26	392.07	239.63
5,308.00	8.92	231.59	5,273.57	-208.06	-350.52	407.62	239.31
5,403.00	8.24	229.58	5,367.51	-217.05	-361.48	421.63	239.02

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey:							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
5,498.00	8.76	233.80	5,461.47	-225.73	-372.50	435.56	238.78
5,593.00	9.10	239.22	5,555.32	-233.85	-384.79	450.28	238.71
5,688.00	9.83	240.39	5,649.02	-241.70	-398.30	465.90	238.75
5,783.00	10.48	242.61	5,742.54	-249.68	-413.02	482.62	238.85
5,879.00	10.75	243.93	5,836.89	-257.63	-428.81	500.26	239.00
5,974.00	10.33	244.70	5,930.29	-265.17	-444.47	517.56	239.18
6,070.00	9.45	244.18	6,024.86	-272.28	-459.35	533.98	239.34
6,165.00	9.36	245.85	6,118.59	-278.84	-473.42	549.43	239.50
6,260.00	9.48	244.30	6,212.31	-285.39	-487.52	564.91	239.66
6,355.00	10.24	241.57	6,305.90	-292.80	-501.99	581.14	239.75
6,449.00	10.32	236.67	6,398.39	-301.41	-516.37	597.90	239.73
6,545.00	10.36	235.41	6,492.84	-311.03	-530.67	615.10	239.62
6,640.00	8.92	230.63	6,586.49	-320.55	-543.39	630.90	239.46
6,736.00	7.75	232.50	6,681.48	-329.22	-554.28	644.68	239.29
6,831.00	6.33	238.52	6,775.76	-335.85	-563.83	656.28	239.22
6,926.00	5.69	238.39	6,870.24	-341.05	-572.31	666.22	239.21
7,020.00	4.64	238.07	6,963.85	-345.51	-579.50	674.68	239.20
7,115.00	4.41	241.93	7,058.56	-349.26	-585.99	682.17	239.20
7,210.00	3.73	244.23	7,153.32	-352.32	-591.99	688.90	239.24
7,305.00	3.69	256.35	7,248.12	-354.38	-597.75	694.90	239.34
7,401.00	3.41	257.23	7,343.94	-355.74	-603.53	700.58	239.48
7,496.00	2.71	256.54	7,438.80	-356.89	-608.47	705.41	239.61
7,592.00	2.65	243.68	7,534.70	-358.40	-612.67	709.80	239.67
7,687.00	2.23	239.44	7,629.61	-360.32	-616.23	713.84	239.68
7,783.00	1.29	233.26	7,725.56	-361.91	-618.70	716.78	239.67
7,878.00	0.61	211.23	7,820.55	-362.99	-619.82	718.29	239.65
7,974.00	0.63	214.84	7,916.55	-363.86	-620.39	719.22	239.61
8,069.00	1.22	222.05	8,011.53	-365.04	-621.36	720.66	239.57
8,164.00	1.64	210.25	8,106.50	-366.96	-622.73	722.81	239.49
8,260.00	1.93	210.65	8,202.46	-369.54	-624.24	725.42	239.38
8,355.00	2.32	202.05	8,297.39	-372.70	-625.78	728.36	239.22
8,451.00	2.34	199.10	8,393.31	-376.35	-627.15	731.41	239.03
8,545.00	2.31	197.39	8,487.23	-379.97	-628.34	734.30	238.84
8,641.00	2.26	198.98	8,583.16	-383.61	-629.54	737.21	238.64
8,736.00	2.41	214.49	8,678.08	-387.02	-631.28	740.47	238.49
8,832.00	2.68	213.26	8,773.98	-390.56	-633.65	744.35	238.35
8,927.00	2.25	214.20	8,868.90	-393.96	-635.92	748.06	238.22
9,021.00	2.24	214.23	8,962.82	-397.01	-637.99	751.43	238.11
9,064.00	2.11	215.11	9,005.79	-398.35	-638.92	752.93	238.06
9,215.00	3.49	345.43	9,156.70	-396.18	-641.67	754.12	238.31
9,262.00	10.26	353.02	9,203.34	-390.63	-642.54	751.97	238.70
9,311.00	17.35	354.09	9,250.89	-379.02	-643.83	747.11	239.51
9,358.00	21.75	0.80	9,295.18	-363.33	-644.43	739.79	240.59
9,406.00	27.65	0.41	9,338.77	-343.28	-644.22	729.98	241.95

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
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Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
9,453.00	33.96	357.39	9,379.12	-319.24	-644.74	719.45	243.66
9,502.00	40.22	354.39	9,418.19	-289.79	-646.92	708.86	245.87
9,549.00	44.65	356.36	9,452.87	-258.19	-649.45	698.89	248.32
9,596.00	48.38	357.95	9,485.21	-224.14	-651.13	688.62	251.01
9,643.00	50.58	358.58	9,515.74	-188.43	-652.21	678.88	253.89
9,692.00	52.34	359.11	9,546.27	-150.11	-652.98	670.01	257.05
9,739.00	54.11	359.58	9,574.41	-112.47	-653.40	663.01	260.23
9,787.00	56.89	358.37	9,601.59	-72.92	-654.12	658.17	263.64
9,834.00	59.10	356.44	9,626.50	-33.11	-655.93	656.77	267.11
9,882.00	63.50	357.19	9,649.55	8.92	-658.26	658.33	270.78
9,929.00	68.81	358.96	9,668.54	51.86	-659.69	661.73	274.50
9,978.00	73.03	359.73	9,684.56	98.16	-660.22	667.48	278.46
10,025.00	75.91	359.31	9,697.14	143.44	-660.60	675.99	282.25
10,072.00	79.79	359.02	9,707.03	189.37	-661.27	687.85	285.98
10,098.85	82.42	358.43	9,711.18	215.88	-661.86	696.18	288.07
FTP[SM\334H]							
10,119.00	84.39	358.00	9,713.50	235.89	-662.48	703.23	289.60
10,167.00	86.48	357.94	9,717.32	283.71	-664.18	722.23	293.13
10,214.00	89.67	358.28	9,718.90	330.65	-665.73	743.32	296.41
10,263.00	90.10	357.24	9,719.00	379.61	-667.64	768.02	299.62
10,310.00	90.23	357.77	9,718.86	426.57	-669.69	794.00	302.50
10,358.00	90.57	357.54	9,718.52	474.52	-671.65	822.37	305.24
10,453.00	87.59	358.08	9,720.05	569.43	-675.28	883.32	310.14
10,549.00	87.22	357.50	9,724.40	665.26	-678.98	950.57	314.42
10,644.00	87.52	358.45	9,728.76	760.10	-682.33	1,021.44	318.09
10,740.00	88.25	357.58	9,732.30	855.98	-685.66	1,096.73	321.30
10,835.00	89.40	357.66	9,734.25	950.87	-689.60	1,174.61	324.05
10,930.00	91.47	358.35	9,733.53	1,045.81	-692.91	1,254.52	326.47
11,025.00	90.97	358.25	9,731.50	1,140.74	-695.72	1,336.16	328.62
11,121.00	90.10	356.72	9,730.61	1,236.64	-699.94	1,420.98	330.49
11,214.00	92.55	359.57	9,728.46	1,329.55	-702.95	1,503.94	332.13
11,309.00	93.15	359.92	9,723.73	1,424.43	-703.37	1,588.63	333.72
11,404.00	92.21	0.44	9,719.29	1,519.33	-703.07	1,674.12	335.17
11,499.00	89.93	0.75	9,717.52	1,614.30	-702.08	1,760.37	336.50
11,594.00	89.63	359.81	9,717.88	1,709.30	-701.62	1,847.69	337.68
11,689.00	86.85	0.23	9,720.80	1,804.24	-701.59	1,935.85	338.75
11,785.00	86.55	0.64	9,726.32	1,900.08	-700.86	2,025.22	339.75
11,880.00	88.69	0.96	9,730.27	1,994.98	-699.53	2,114.07	340.68
11,975.00	90.57	0.81	9,730.88	2,089.97	-698.07	2,203.46	341.53
12,071.00	89.83	1.42	9,730.55	2,185.95	-696.20	2,294.13	342.33
12,167.00	90.60	2.71	9,730.19	2,281.88	-692.74	2,384.71	343.11
12,262.00	90.20	3.02	9,729.52	2,376.76	-687.99	2,474.33	343.86
12,358.00	87.52	2.60	9,731.43	2,472.62	-683.29	2,565.29	344.55
12,452.00	88.39	0.40	9,734.79	2,566.52	-680.83	2,655.28	345.14
12,548.00	90.23	0.10	9,735.94	2,662.50	-680.41	2,748.07	345.66

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
12,643.00	90.60	359.76	9,735.26	2,757.50	-680.53	2,840.23	346.14
12,739.00	86.95	356.09	9,737.31	2,853.38	-684.00	2,934.22	346.52
12,833.00	86.15	354.02	9,742.97	2,946.86	-692.08	3,027.04	346.78
12,838.56	86.15	354.06	9,743.34	2,952.37	-692.66	3,032.54	346.80
AP1[SM334H]							
12,874.46	86.16	354.29	9,745.75	2,988.01	-696.30	3,068.06	346.88
T1[SM334H]							
12,928.00	86.18	354.65	9,749.32	3,041.18	-701.44	3,121.03	347.01
13,023.00	86.92	356.46	9,755.04	3,135.72	-708.79	3,214.83	347.26
13,119.00	88.96	356.74	9,758.49	3,231.48	-714.48	3,309.53	347.53
13,214.00	88.96	358.99	9,760.21	3,326.40	-718.02	3,403.01	347.82
13,310.00	89.60	359.05	9,761.42	3,422.37	-719.66	3,497.22	348.12
13,405.00	91.68	358.31	9,760.36	3,517.34	-721.85	3,590.64	348.40
13,501.00	90.97	358.14	9,758.14	3,613.27	-724.82	3,685.25	348.66
13,596.00	90.70	357.98	9,756.75	3,708.20	-728.04	3,778.99	348.89
13,691.00	91.54	357.92	9,754.90	3,803.12	-731.43	3,872.82	349.11
13,781.00	89.13	356.94	9,754.37	3,893.02	-735.47	3,961.88	349.30
13,886.00	89.50	357.09	9,755.63	3,997.87	-740.94	4,065.95	349.50
13,977.00	90.91	357.23	9,755.30	4,088.76	-745.44	4,156.15	349.67
14,072.00	92.08	359.47	9,752.82	4,183.68	-748.18	4,250.05	349.86
14,167.00	90.17	359.96	9,750.96	4,278.65	-748.65	4,343.66	350.08
14,263.00	90.20	359.72	9,750.65	4,374.65	-748.92	4,438.29	350.29
14,358.00	90.27	359.68	9,750.26	4,469.65	-749.42	4,532.04	350.48
14,453.00	90.37	359.79	9,749.73	4,564.65	-749.86	4,625.83	350.67
14,548.00	89.66	359.52	9,749.70	4,659.64	-750.43	4,719.69	350.85
14,643.00	89.16	358.93	9,750.68	4,754.63	-751.71	4,813.69	351.02
14,739.00	90.00	359.44	9,751.38	4,850.62	-753.08	4,908.73	351.18
14,835.00	88.22	357.66	9,752.87	4,946.57	-755.51	5,003.93	351.32
14,930.00	88.26	357.75	9,755.79	5,041.45	-759.31	5,098.31	351.43
15,024.00	91.27	2.01	9,756.18	5,135.41	-759.51	5,191.27	351.59
15,118.00	87.82	0.93	9,756.92	5,229.36	-757.09	5,283.88	351.76
15,211.00	89.03	359.67	9,759.48	5,322.32	-756.61	5,375.83	351.91
15,303.00	90.94	359.28	9,759.50	5,414.31	-757.45	5,467.04	352.04
15,397.00	88.16	358.52	9,760.24	5,508.28	-759.26	5,560.37	352.15
15,492.00	89.20	358.08	9,762.43	5,603.22	-762.07	5,654.80	352.25
15,585.00	90.34	358.70	9,762.80	5,696.18	-764.69	5,747.27	352.35
15,679.00	92.02	357.70	9,760.87	5,790.11	-767.64	5,840.77	352.45
15,774.00	92.99	359.47	9,756.72	5,884.98	-769.98	5,935.14	352.55
15,868.00	92.89	358.81	9,751.90	5,978.85	-771.39	6,028.40	352.65
15,963.00	89.73	1.23	9,749.72	6,073.80	-771.36	6,122.59	352.76
16,057.00	89.46	0.41	9,750.39	6,167.79	-770.01	6,215.67	352.88
16,152.00	89.60	359.44	9,751.17	6,262.78	-770.14	6,309.96	352.99
16,248.00	88.49	359.19	9,752.77	6,358.76	-771.28	6,405.37	353.08
16,343.00	88.46	359.26	9,755.30	6,453.72	-772.57	6,499.80	353.17

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
16,438.00	89.23	359.57	9,757.21	6,548.70	-773.54	6,594.22	353.26
16,532.00	89.70	358.12	9,758.09	6,642.67	-775.43	6,687.78	353.34
16,627.00	89.19	359.00	9,759.01	6,737.63	-777.82	6,782.38	353.41
16,721.00	90.67	359.73	9,759.12	6,831.62	-778.86	6,875.88	353.50
16,816.00	91.04	358.81	9,757.71	6,926.61	-780.07	6,970.39	353.57
16,910.00	90.94	358.74	9,756.08	7,020.57	-782.08	7,064.00	353.64
17,004.00	90.77	359.02	9,754.68	7,114.54	-783.92	7,157.60	353.71
17,098.00	90.67	357.95	9,753.50	7,208.50	-786.40	7,251.27	353.77
17,193.00	90.40	359.95	9,752.61	7,303.47	-788.14	7,345.88	353.84
17,287.00	89.13	0.35	9,753.00	7,397.47	-787.90	7,439.31	353.92
17,382.00	90.34	0.19	9,753.44	7,492.47	-787.45	7,533.73	354.00
17,477.00	90.27	0.18	9,752.93	7,587.47	-787.14	7,628.19	354.08
17,571.00	89.33	358.77	9,753.26	7,681.46	-788.00	7,721.77	354.14
17,666.00	88.72	358.27	9,754.87	7,776.41	-790.46	7,816.48	354.20
17,761.00	89.80	358.77	9,756.10	7,871.37	-792.91	7,911.21	354.25
17,856.00	89.33	358.01	9,756.82	7,966.33	-795.58	8,005.96	354.30
17,951.00	90.00	358.58	9,757.38	8,061.28	-798.41	8,100.73	354.34
18,046.00	90.23	358.44	9,757.19	8,156.25	-800.88	8,195.48	354.39
18,142.00	91.88	0.21	9,755.42	8,252.22	-802.01	8,291.10	354.45
18,237.00	91.74	0.11	9,752.42	8,347.17	-801.74	8,385.59	354.51
18,332.00	90.44	358.27	9,750.61	8,442.14	-803.08	8,480.25	354.57
18,428.00	89.87	357.35	9,750.35	8,538.07	-806.75	8,576.10	354.60
18,523.00	89.36	358.17	9,750.99	8,632.99	-810.47	8,670.95	354.64
18,619.00	89.36	358.61	9,752.06	8,728.95	-813.16	8,766.74	354.68
18,714.00	89.00	359.83	9,753.42	8,823.93	-814.46	8,861.44	354.73
18,807.00	89.03	358.99	9,755.02	8,916.91	-815.41	8,954.11	354.78
18,903.00	90.17	359.85	9,755.69	9,012.90	-816.39	9,049.80	354.82
18,998.00	90.47	0.24	9,755.16	9,107.90	-816.31	9,144.41	354.88
19,093.00	91.28	1.22	9,753.71	9,202.88	-815.10	9,238.90	354.94
19,188.00	91.34	1.72	9,751.54	9,297.82	-812.66	9,333.27	355.00
19,282.00	90.94	1.70	9,749.67	9,391.76	-809.86	9,426.61	355.07
19,376.00	91.01	1.03	9,748.07	9,485.72	-807.62	9,520.04	355.13
19,470.00	90.03	359.96	9,747.22	9,579.71	-806.81	9,613.62	355.19
19,565.00	89.93	357.88	9,747.25	9,674.69	-808.60	9,708.42	355.22
19,659.00	90.77	356.56	9,746.67	9,768.57	-813.16	9,802.36	355.24
19,753.00	91.44	355.22	9,744.86	9,862.31	-819.89	9,896.33	355.25
19,848.00	91.88	353.12	9,742.11	9,956.77	-829.54	9,991.27	355.24
19,911.00	91.95	352.21	9,740.00	10,019.22	-837.58	10,054.17	355.22
MWD Survey (19911.00' MD)							
19,949.15	91.95	352.21	9,738.71	10,056.99	-842.75	10,092.24	355.21
BHL[SM334H]							
19,970.00	91.95	352.21	9,738.00	10,077.64	-845.57	10,113.06	355.20
Proj. to Bit (19970.00' MD)							

Company:	Devon Energy	Local Co-ordinate Reference:	Well 334H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Site:	Spud Muffin 31-30	MD Reference:	KB = 24' @ 2984.00usft (Cactus 167)
Well:	334H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
19,911.00	9,740.00	10,019.22	-837.58	MWD Survey (19911.00' MD)
19,970.00	9,738.00	10,077.64	-845.57	Proj. to Bit (19970.00' MD)

Checked By: _____	Approved By: _____	Date: _____
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